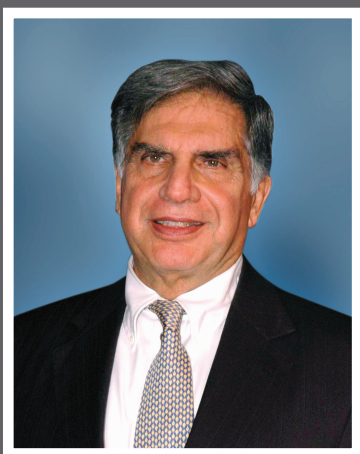


# **TATASTEEL LIMITED**

## Corporate Sustainability Report 2005-06





"I do believe that we in the (Tata) Group have held a view and held a sense of purpose that our companies are not in existence just to run our business and to make profit and that we are responsible and good corporate citizens over and above our normal operations. By that, I mean, that we play a part in the community and we shoulder community responsibility as part of social responsibility of our nation. And, these responsibilities are not to be confused with employee welfare, (because) they go beyond our own employees and in fact concentrate on contribution to the community and to the nation"

*Ratan N. Tata*

## Tata Group Purpose

At the Tata Group our purpose is to improve life of the communities we serve. We do this through leadership in sectors of economic significance, to which the Group brings a unique set of capabilities. This requires us to grow aggressively in focused areas of business.

Our heritage of returning to society what we earn evokes trust among consumers, employees, shareholders and the community, formalizing the high standards of behavior expected from employees and companies.

The Tata name is a unique asset representing leadership with trust. Leveraging this asset to enhance Group Synergy and become globally competitive is the route to sustained growth and long-term success.

## VISION 2007

To seize the opportunities of tomorrow and create a future that will make us an EVA positive company.

To continue to improve the quality of life of our employees and the communities we serve.





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To,  
The Board of Directors,  
Tata Steel Limited  
Bombay House, 24 Homi Mody Street,  
Mumbai – 400 001  
India.

## Objective of Review

PricewaterhouseCoopers Private Limited ("PwC") was engaged by Tata Steel Limited ("Tata Steel") to review its Corporate Sustainability Report 2005-06 ("Report").

The review was carried out in line with current and emerging expectations for sustainability reporting as outlined in GRI 2002 Guidelines (GRI) and embodied in the eleven Reporting Principles of Part B of GRI ("Reporting Principles").

## Responsibilities during Review

The Management of Tata Steel is responsible for defining stakeholders and for the collection and presentation of the financial and non-financial information in the Report. Our responsibility, as agreed with the Management, is to express conclusions with limited assurance on select data and information contained in the Report in accordance with the International Standard on Assurance Engagements 3000 ("ISAE 3000").

The Report of Tata Steel has been produced both electronically and in print. The Corporate Sustainability Report 2005-06 and its contents are the responsibility of the management of Tata Steel, while the observations made under Independent Review Report is the outcome of the professional work undertaken by PricewaterhouseCoopers Private Limited.

## Limitation of our review

Our review comprised limited assurance on data and information provided reported against the indicators delineated under *Scope of Review*, below. The data and graphs on financial performance, as specified in the Report under Economic indicators, are derived from the audited 2005 financial statements of Tata Steel Limited and were not within the scope of our review. A review of Tata Steel's performance against the UN Global Compact Principles was also not included in our scope of work.

## Scope of Review

Our assessment involved providing limited assurance on select data, graphs and statements of Tata Steel contained in the Report for the period 1st April 2005 to 31st March 2006. Scope of the review covered:

- a) Review of certain statements and data relating to the Tata Steel's operations and to provision of limited assurance in respect of these statements and data;
- b) Review of on-site data collection process, data management and collation process and the assimilation of this data into the tables, graphs and statements presented in this Report; Checking of the internal control system, including monitoring and reporting procedures and whether it supports reliable disclosure in the Report;
- c) Visit to 2 sites namely, Main Works, Jamshedpur (Jharkhand) and West Bokaro Colliery (Jharkhand)
- d) Checking of the data stated provided against the indicators
  - n Suppliers breakdown (EC11)
  - n Direct and Indirect Energy use (EN 3 & 4)
  - n Total amount of waste by type and destination ( EN 11)
  - n Incidents and fines for non-compliance associated with environmental issues (EN 16)
  - n Breakdown of workforce (LA 1)
  - n Equal opportunity policies, programs and monitoring systems (LA 10)
  - n Employee benefits beyond those legally mandated (LA 12)
  - n Human rights training for security personnel (HR 11)

## Basis for Review

We planned and performed our work in accordance with the ISAE 3000 to obtain limited assurance. Based on an assessment of completeness, reliability, materiality and risk, relevant information was collected and triangulated to verify its completeness and reliability. We considered an omission, error or misrepresentation of information from the report to be material if it could influence the decisions or actions of the Company's key stakeholders, or result in Tata Steel inappropriately reporting on progress against targets.

We sought all information and explanations that we considered necessary to provide sufficient evidence for us to ascertain that the above indicators were consistent with the activities in the plant areas for the financial period; and were documented and stated in accordance with the guidelines stated under their environmental and social policies.

## Review procedures carried out

Based on an assessment of materiality and risk, our work included a review of management systems, reporting structures and boundaries as well as interviews and testing of registration and communication systems, data and underlying documentation. We tested whether data and the underlying components are accounted for in such a way as to fulfill the assertions of completeness, reliability and materiality made by Tata Steel.

## Parties responsible for Review Engagement

Our engagement was carried out by a multi-disciplinary team of requisite skills and experience. The assurance engagement was led by Mr. Devinder Chawla and was executed by Dr. Muna Ali.

## Opinion

On the basis of the work undertaken, nothing has come to our attention that would cause us not to believe that:

- a) The information for the indicators stated above [at (d) under *Scope of Review*] in the Report has been fairly stated.
- b) The Report includes information on targets and indicators in respect of sustainability that are used in strategic and operational decision-making;
- c) The Report presents a fair and balanced account of Tata Steel's material sustainability performance, risks and impact.



Mr. Devinder Chawla

Place: Mumbai, India

Date: 30/01/2007



## SECTION - I

### VISION & STRATEGY

GRI INDICATOR	DESCRIPTION	PAGE NO.
1.2	MD's Statement	07
1.1	Approach to Sustainable Development	10

## MD's STATEMENT

Dear Stakeholders,

I am pleased to present the Corporate Sustainability Report of Tata Steel for the year 2005-06. This is our sixth consecutive report prepared in accordance with GRI 2002 guidelines. Tata Steel was one of the first Indian companies to adopt the stringent guidelines under the Global Reporting Initiatives and our report for the year 04-05 was adjudged as "one of the strongest reports filed by any corporate from the emerging economies".

### Business outlook

Globally, steel consumption and production continued to grow and economic conditions around the world have been encouraging. The US saw sustained GDP growth of over 2% while Japan moved out of deflationary conditions and Europe has showed signs of industrial growth and consumption by the end of the last financial year. China, along with other developing economies like India, is likely to continue to drive demand growth in steel, while Europe and US demand is also likely to remain robust. The outlook for the industry remains positive though rising costs on account of raw materials, freight and energy will keep the margins under pressure.

The Indian economy grew at an estimated 8.1% in FY06. This includes a strong performance in steel consuming sectors like automobiles, engineering, constructions and white goods. Increasing foreign exchange reserves and robust industrial growth indicate that India is at the inflexion point of development, which bode well for the domestic steel industry in the future.

### Growth

Tata Steel has developed a long term strategy of developing a strong base in India, pursuing the de-integrated production capability of making intermediate steel in low cost geographies and finishing in growing and developed markets.

In pursuing this strategy, the Company is planning to increase the production capacity at Jamshedpur and build several Greenfield Projects. The Greenfield projects in India include setting up integrated steel plants of 6.0 mtpa; 5.0 mtpa and 12.0 mtpa capacity in Kalinganagar (Orissa), Jagdalpur (Chhattisgarh) and Saraikela (Jharkhand) respectively. The Company is also exploring to set up a 2.4 mtpa steel plant in Bangladesh and 2.0 mtpa steel plant in Iran. These are in addition to increasing the capacity of the existing plant at Jamshedpur to 10 million tonnes.

The Company has signed a Joint Venture Agreement with BlueScope Steel Limited, Australia in November 2005, for manufacture of color coated coils and pre-engineered buildings to be used in the building solution business. The manufacturing facility to be set up at Jamshedpur will have a production capacity of 0.25 mtpa of zinc and aluminium coated and 0.15 mtpa of color coated coils. The building solution business would have manufacturing facilities at Delhi, Pune and Chennai.

A subsidiary company in the name of 'Tata Steel KZN Pty. Ltd.' has been established in South Africa for setting up a Ferro Chrome Project at Richards Bay, South Africa to produce 0.12 mtpa of high carbon ferro-chrome. The Company is also working towards ownership and development of additional raw material sources in India and overseas for its enhanced and sustainable operations. The Company has entered into an agreement with AMCI (CQ) Pty. Ltd., Australia to secure up to 20% of its coal production.

In line with the plans of creating a global presence in existing business lines through a de-integrated production strategy, the Company acquired 67.11% of equity stake in Millennium Steel, Thailand at a cost of approximately Rs.7800 Million during the year. Millennium Steel is one of the largest steel companies in Thailand with a capacity of 1.7 mtpa, producing long products for construction and engineering steel for auto industry. Tata Steel has also forayed into organized steel retailing by opening "STEELJUNCTION" in Kolkata, a one-stop shop for steel products like pipe, tube, wire, sheet, builders hardware, architectural items, lifestyle products, kitchen products, etc. This will enable architects, interior decorators and builders in and around Kolkata to easily access steel products for their use. In future, similar hubs may also be set up in other locations. Over the next decade, Tata Steel has committed itself to attaining global scale with output of 100 million tonnes and a strong global presence.

### Performance

Tata Steel was ranked as the Best Steel Making Company by World Steel Dynamics Inc. USA for the second consecutive time, based on a study of twenty-two world-class steel makers. During the year under review, several initiatives were taken to enhance its global competitiveness and improve the economic, environment and social performance as reflected below.

## Finance

During the year under review the Company posted a strong financial result with total earnings at Rs.153941.5 Million and Net Profit after taxes at Rs.35,063.8 Million compared to previous year's total income of Rs.146469.8 Million and Net Profit after taxes of Rs.34,741.6 Million.

International Credit Rating Agency Standards & Poor's (S&P) upgraded foreign currency rating of the Company to "BBB" with stable outlook, which is two notches above India's sovereign rating. With this rating, the Company is in the investment grade for any foreign currency debt issuance. According to S&P, the Company is considered well insulated from direct and indirect sovereign risks since it demonstrates moderate leverage, strong free cash flow generation and a competitive business profile. In the recent past, the Company has been strengthening its balance sheet by increasing cash flows, reducing interest cost and improving working capital management. With these efforts, the Company is in a position to take advantage of growth opportunities in the global steel market.

## Safety & Environment

In line with our Corporate Vision to improve the safety and quality of life of employees, Tata Steel has initiated a safety excellence journey under the guidance of DuPont Safety Resources since 2004, world-class leader in safety. The safety program, which began at the Steel Works, has been rolled across all locations including mines. These initiatives have shown perceptible change in the behavior of employees at and outside the place of work. The Company aspires to become world-class in safety.

The Company assesses the impact of its activities, products and services on the environment and takes improvement measures through well-established systems including the Environmental Management System (ISO-14001), Occupational Health & Safety Management System (OHSAS-18001) and Social Accountability Standard (SA-8000). Concerns of various stakeholders are identified, prioritized and addressed through the organization's leadership system.

Initiatives undertaken for improvement resulted in reduction of specific energy consumption to 6.959GCal/tcs in FY06 from 6.965GCal/tcs in FY05 and total water pollutant discharge to 0.181kg/tcs in FY06 from 0.205kg/tcs in FY05. Tata Steel has shown its commitment to address climate change issues by continuously reducing Carbon Dioxide (CO<sub>2</sub>) emissions in the last decade. The CO<sub>2</sub> emissions were brought down to a level of 2.28t/tcs in FY06, a reduction of 1.7% over FY05. Tata Steel has taken up several projects to improve its energy efficiency and avail carbon credits under Clean Development Mechanism (CDM) under Kyoto Protocol. The Designated National Authority of India has already approved two projects having potential to reduce 1.1 million tonnes of CO<sub>2</sub> per annum. Several other projects are in the pipeline for CO<sub>2</sub> reduction to the tune of 2 million tonnes per annum.

## Improving Quality of Life

In line with the Company's vision to continue to improve the quality of life of employees and the communities we serve, Tata Steel has been actively involved in a number of initiatives to support community development.

Tata Steel continues its commitment to develop and maintain the city of Jamshedpur where presently more than 75% of the populations are not employees of the Company. The most critical civic amenity, water, was addressed by setting up a mega water supply project to provide filtered water to the residents of Ullyan and Bhatia Bustee. This 32 km pipeline network is a unique concept in Citizen-Private Partnership model, benefiting more than 20,000 residents. Tata Steel also set up 116 tube wells benefiting 1800 households in the nearby rural communities and has conducted extensive awareness campaigns for efficient water management. The Sukinda Chromite Mines, in Orissa, completed 'Operation BJLI', a special project which has facilitated the supply of electricity to 20 villages, under four Gram Panchayats, by the construction of an electrical sub station. In other areas Tata Steel continues its commitment to invest in the communities surrounding its projects and fundamental to this ethic is ensuring that comprehensive rehabilitation and resettlement projects are carried out where necessary.

To support training and education in the community, the Tata Steel Rural Development Society (TSRDS) ran Adult Literacy Programs for 6500 illiterate adults in peri-urban areas of Jamshedpur and educated nearly 2000 children in bustees through the Bal Vikas Classes run in association with the Jharkhand Education Project. Tata Steel was also involved in establishing the JN Tata Education Centre for technical skills development and the Institute of Mathematics and Applications, both in Orissa as well as providing skills training in bustees in Jamshedpur.

Tata Steel has continued to invest strongly in sports development as a means to achieve wider social and economic outcomes. In FY 05-06, several cadets of Tata Football Academy, Tata Archery Academy and Tata Athletics Academy made successful international representations and came out winners in events like Asian Indoor Championship, Athletics Championship and the Senior National Archery Championship. Some of the

major events hosted by Tata Steel to promote sports were Senior Women National Boxing Championship, Tata Steel National Ranking Archery Championship, 5th JRD Tata Half Marathon, Special Olympics and Tata Steel AFI Athletics Meet.

A number of health programs are run by Tata Steel through TSRDS and Tata Steel Family Initiatives Foundation (TSFIF). Tata Steel has consolidated its association with Lifeline Express, India's first hospital on rails. The tenth Tata Steel sponsored Lifeline Express tour, at Sini Railway Station in FY '05-06, enabled more than 2500 patients with optical problems as well as orthopedic, ENT and congenital deformities from West Bengal, Orissa, Bihar and Jharkhand to avail free medical treatment.

Tata Steel, through TSFIF, organized a mega AIDS Awareness campaign during the Trucker's Utsav 2005, which touched over 3000 truckers. Counseling sessions at Sneha Kendras (counseling centers), targeted intervention projects and awareness building programs were held in rural as well as urban areas. 100% high-risk population across 22 villages and 100% high school children in 72 villages were covered under awareness programs on HIV/AIDS. In addition programs on sterilization, spacing and reproductive health awareness were carried out by TSFIF with 12,000 permanent family planning operations having been conducted. Tata Steel, through TSRDS, also ensured treatment of one lakh patients through mobile clinics and immunization of 81.2% children in 197 villages in the period under review. In addition, Tata Steel has constructed an Intensive Care Unit (ICU) at the Government hospital at Bolangir, Orissa at a cost of Rs. 20 Lakhs, to provide immediate emergency services. It has set up a unit in Ranchi to address the health care needs of the villages in Arki block near Ranchi and in Jharkhand State, Tata Steel is committed to contribute Rs. 25 Crores every year, for the next 30 years, to a government run Health Insurance Scheme for the State's Below Poverty Line (BPL) families who would avail a medical insurance umbrella at zero cost.

Since 1934, Tata Steel has worked to respond to natural disasters. In the year gone by, it has rendered service to victims of the Tsunami and the devastating floods in Orissa. Through the Tata Relief Committee, the Company provided relief to over 10, 000 families by setting up relief camps and undertaking rehabilitation and reconstruction projects including building 100 'in-situ' houses in the fishermen's colony and 800 housing units in Nagapattinam. Tata Steel in coordination with the District Administration responded with immediate relief services in four blocks in the Jajpur District of Orissa when 2400 families were affected by heavy rainfall in the area.

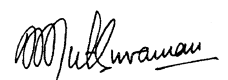
#### Tribal Culture

Tribal Cultural Society (TCS) of Tata Steel continued to support and inculcate the culture and heritage of various tribes of the region among the tribal youth and urbanized tribal communities. It organized all important tribal festivals with their traditional aspects and tribal dance, drama, music and song competitions which were conducted by the tribal communities, thereby giving them an opportunity to develop and sustain the unique richness of their culture.

#### Business Ethics

As a tribute to late Mr. J R D Tata, July is celebrated as Ethics Month. This has helped reinforce employee involvement and passion in the Management of Business Ethics (MBE). A significant milestone in MBE process was the decision of the Board of Directors to adopt and implement the 'Whistle Blower Policy' in the Company. The policy encourages the employees to raise their concerns, without fear to the Ethics Counselor and/or the Chairman of the Audit Committee. The policy also provides for protection of the Whistle Blower by a 'Whistle Blower Protection Committee' headed by Dy. Managing Director (Corporate Services). In order to effectively deploy the Tata Code of Conduct, a 'Gift Policy' was adopted by the Company, to create uniform understanding by employees regarding gifts. The salient features of the Policy were also communicated to other stakeholders like vendors, contractors etc. for making this more effective.

The report represents a balanced and reasonable presentation of our organization's economic, environmental and social performance for evaluation by our esteemed stakeholders. We solicit feedback from all our stakeholders on this report.



B Muthuraman  
Managing Director  
Date: 27.12.2006  
Place: Jamshedpur



## APPROACH TO SUSTAINABLE DEVELOPMENT

Vision 2007 statement of Tata Steel has sustainability elements built into it. The vision statement is depicted on the inside of the front cover page. This is further clarified in the various Policies of the Company.

The stakeholder engagement process deployed by Tata Steel identifies various issues related to sustainable performance of the Company. Elements of the stakeholder engagement process are described in detail in Section-III on Page 25.

**Table 1.1 : Key Enterprise Process & Owners**

S. N.	Enterprise Processes	Process Owner
1	Leadership	MD
2	Strategic Planning & Risk Management	MD
3	Market Development	DMD (S)
4	Investment Management	VP (F)
5	Human Resources	VP (HRM)
6	Improvement & Change Management	MD
7	Order Generation	DMD (S)
8	Operation and Fulfillment	DMD (S)
9	Inbound Supply Management	Chief (P)
10	Research & Development	Chief (R&D)
11	Information Management	CIO
12	Social Responsibility & Corporate Services	DMD (CS)

To achieve the sustainability performance, the organization has identified twelve (12) key enterprise processes critical to the growth and success of the organization. A member of the senior management team manages each enterprise process. Key enterprise processes and respective process owners are given in Table-1.1. The process owner and the owners of various sub-processes under a particular key enterprise process have mapped the stakeholders and identified the stakeholder concerns through a structured engagement and feedback process. These stakeholder concerns are analyzed, prioritized and form inputs to the strategic goals under that particular process as part of Corporate Sustainability Management.

Issues related to various stakeholders and its integration in the Company's business process is given in Table-1.2. Actions on various issues are deployed through Strategic Objectives and tracked through various Key Performance Indicators.

**Table 1.2 : Stakeholders Issues and Strategic Objectives**

Stakeholders	Issues	Strategic Objectives
Shareholders	<ul style="list-style-type: none"> <li>§ Corporate Governance</li> <li>§ Sweating of assets</li> <li>§ Economies of scale</li> <li>§ Innovation as a substitute for investment</li> <li>§ Forward &amp; backward integration</li> <li>§ WTO impacts and exchange rate impacts</li> <li>§ Outsourcing</li> </ul>	<ul style="list-style-type: none"> <li>§ Upholding the spirit of Tatas &amp; listing agreements</li> <li>§ EVA Positive Core Business</li> <li>§ Revitalize core business for sustainable future</li> <li>§ Continue to be the lowest cost producer of steel.</li> <li>§ Outsource strategically</li> <li>§ Divest, merge, acquire</li> <li>§ Venture into new business</li> </ul>
Customers	<ul style="list-style-type: none"> <li>§ Increasing service level expectations</li> <li>§ Commodity nature of steel</li> <li>§ Ethical standards in business</li> </ul>	<ul style="list-style-type: none"> <li>§ Value creating partnership with customers</li> <li>§ Move from commodities to brands</li> <li>§ Uphold the spirit of Tatas</li> </ul>
Employees	<ul style="list-style-type: none"> <li>§ Attracting and retaining talent</li> <li>§ Employee satisfaction &amp; commitment</li> <li>§ Right sizing and employee cost</li> <li>§ World-class developing environment</li> <li>§ Ethical standards in business</li> </ul>	<ul style="list-style-type: none"> <li>§ Enthused &amp; happy employees</li> <li>§ Unleash people's potential and create leaders</li> <li>§ Encourage innovation and allow freedom to fail</li> <li>§ Manage knowledge</li> <li>§ Uphold the spirit of Tatas</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>§ Increasing expectations</li> <li>§ Outsourcing</li> <li>§ Ethical standards</li> <li>§ WTO issues</li> </ul>	<ul style="list-style-type: none"> <li>§ Value creating partnership with suppliers</li> <li>§ Strategic outsourcing</li> <li>§ Uphold the spirit of Tatas</li> <li>§ Continue to be the lowest cost producer of steel</li> </ul>
Community	<ul style="list-style-type: none"> <li>§ Lack of understanding of business &amp; industry</li> <li>§ Law &amp; Order situation</li> <li>§ Increasing expectation</li> <li>§ Environment</li> </ul>	<ul style="list-style-type: none"> <li>§ Uphold the spirit and values of Tatas</li> <li>§ Improve quality of life of the community</li> <li>§ Ensure safety &amp; environmental sustainability</li> <li>§ Sustainable growth</li> </ul>
All Stakeholders	<ul style="list-style-type: none"> <li>§ Balancing the needs of all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>§ EVA positive business</li> <li>§ Value creating partnership</li> </ul>



## SECTION - II

### PROFILE OF ORGANISATION

GRI INDICATOR	DESCRIPTION	PAGE NO.
<b>Organization Profile</b>		
2.1	Reporting Organization	13
2.2	Major Products & Services, including Brands	13
2.3	Operational Structure	13
2.4	Major Divisions/Operating Companies/Subsidiaries & Joint Ventures	14
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## ORGANIZATION PROFILE

Reporting Organization (2.1): Tata Steel Limited

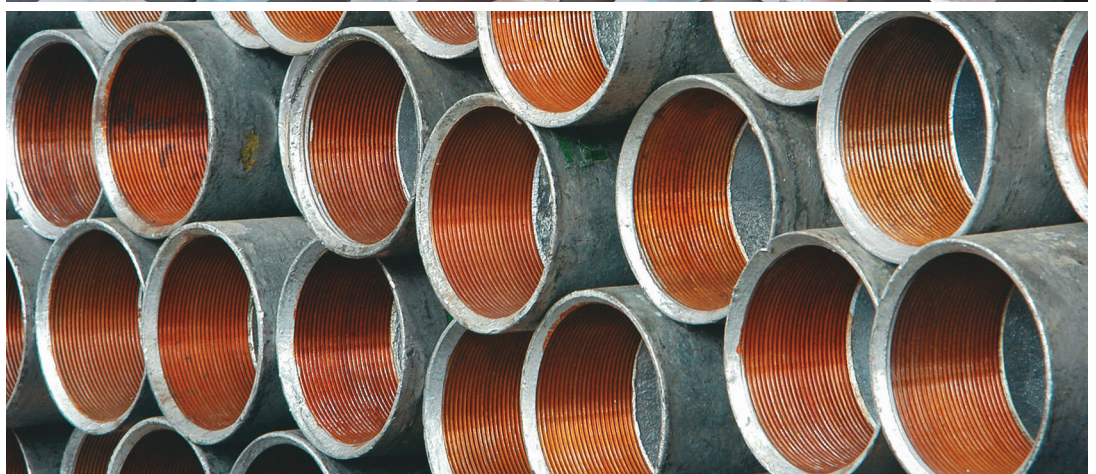
Major Products & Services, including Brands (2.2)

The Major Products & Services offered by Tata Steel are presented in Table 2.1

**Table 2.1 : Products & Services**

**Products Description**

Long Products	Wire Rods, Rebars
Flat Products	Hot & Cold Rolled Sheets, Hot & Cold Rolled Coils, Galvanized Coils & Sheets, Hot Rolled Plates
Semi Finished Steel Products	Billets, Slabs
Tubes	Standard Pipes, ERW Precision Tubes, Closed Structural,
Bearings Wires	Rolled Rings, Forged Rings, Machines Rings, Bearings, Plain and Coated Steel Wires
Minerals	Coal & Coke, Iron Ore, Dolomite, Chrome Ore & Chrome Concentrate
Others	Ferro Alloys, Agriculture Implements, Services like project studies, design & engineering, personnel and technical training, automation, Information Technology, power and water
Branded Products	Branded products include Tata Shaktee GC Sheets, Tata Steelium Cold Rolled Steel, Tata Tiscon construction rods, Tata Pipes, Tata Bearings, Tata Wiron and Tata Agrico.





## Operational Structure (2.3)

### Board of Directors

During 05-06	As on Date (06.10.2006)
Mr. R N Tata (Chairman)	Mr. R N Tata (Chairman)
Mr. Keshub Mahindra	
Mr. Nusli N Wadia	Mr. Nusli N Wadia
Mr. S M Palia	Mr. S M Palia
Mr. P K Kaul (Financial Institutions' nominee)	Mr. P K Kaul (Financial Institutions' nominee)
Mr. Suresh Krishna	Mr. Suresh Krishna
Mr. Kumar Mangalam Birla	
Mr. Ishaat Hussain	Mr. Ishaat Hussain
Dr. Jamshed J. Irani	Dr. Jamshed J. Irani
Mr. B Jitender (Financial Institutions' nominee)	
Mr. B Muthuraman (Managing Director)	Mr. Subodh Bhargava Mr. B Muthuraman (Managing Director)
Dr. T Mukherjee (Deputy Managing Director - Steel)	Dr. T Mukherjee (Deputy Managing Director - Steel)
Mr. A N Singh (Deputy Managing Director - Corporate Services)	Mr. A N Singh (Deputy Managing Director - Corporate Services)

The operational structure of the Company is shown in Figure 2.1.

### Major Divisions / Operating Companies / Subsidiaries & Joint Ventures (2.4) [Table 2.2]

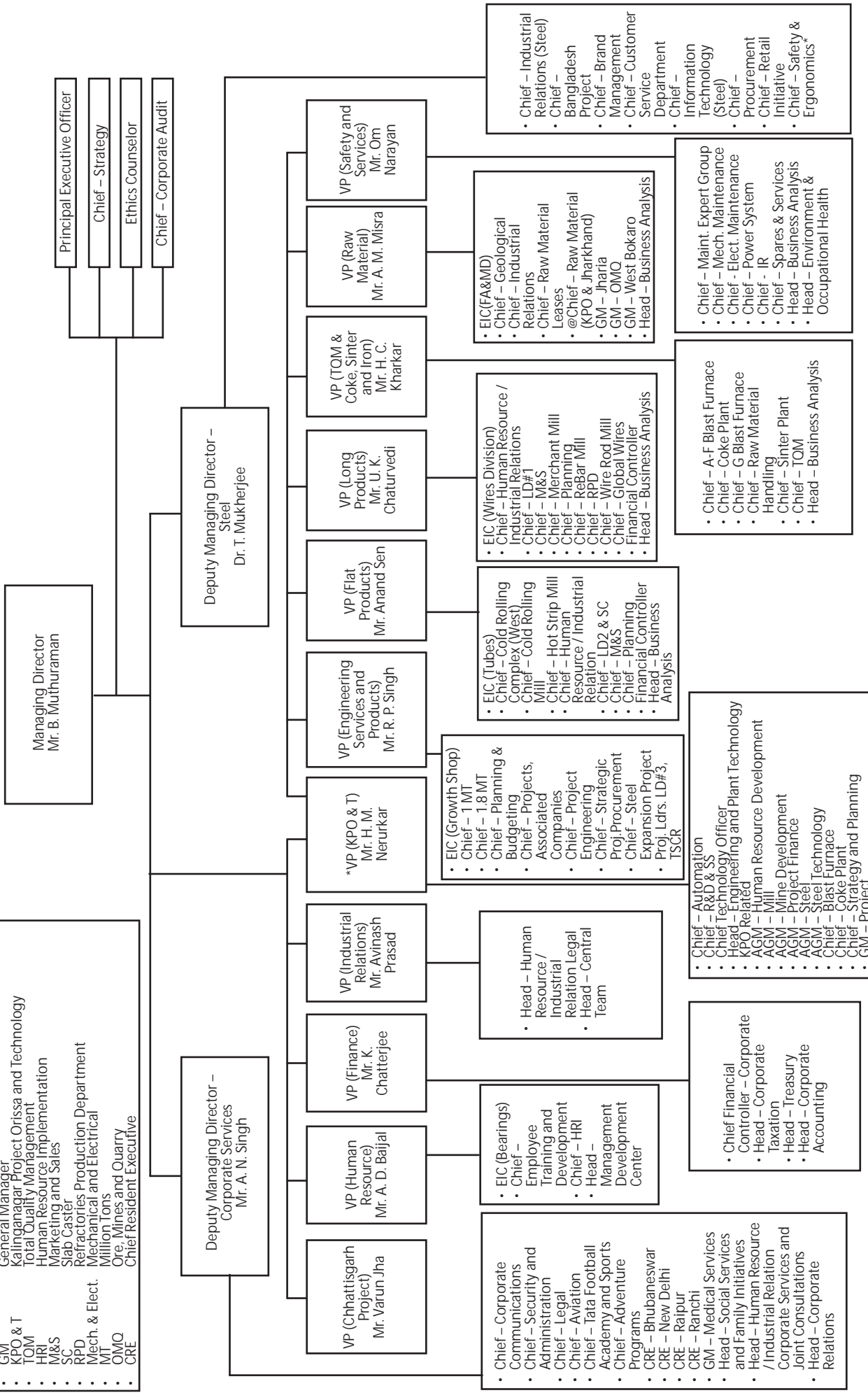
Table 2.2 : Major Divisions, Operating, Subsidiaries & Joint Ventures Companies

Divisions	Locations
Company's Steel Works	Jamshedpur (Jharkhand)
Tubes Division & Growth Shop	Jamshedpur (Jharkhand)
Ferro Alloys Plant	Joda (Orissa)
Ferro Chrome Plant	Bamnipal (Orissa)
CRC (West) Bearings Division	Tarapur (Maharashtra)
Kharagpur,	West Bengal
Noamundi Mines	Jharkhand
Joda & Sukinda Mines	Orissa
West Bokaro & Jharia Collieries	Jharkhand
Wires Division	Sisodra, Gujarat; Tarapore, Borivilli, Maharashtra & Jamshedpur
Marketing offices and Stock Yards	New Delhi, Ghaziabad, Kanpur, Patna, Kolkata, Mumbai, Nagpur, Bangalore, Kochin, Guwahati and Chennai
CRE Offices	New Delhi, Ranchi, Bhubaneshwar
Subsidiary Companies	Tata Refractories, Tata Pigments, Kalimati Investment Company, Tata Incorporated New York, TM International Logistics Ltd, ISWP, Lanka Special Steels Limited, JUSCO, Hooghly Met-Coke & Power Ltd., Nat Steel Asia Limited, Tata Steel KZN Pty. Ltd., Millennium Steel
Associated Companies	Tinplate Co. of India, TRF Ltd., TAYO Rolls, Tata Ryerson, Tata Metallica, Tata Limited London, Tata Sponge, Sila Eastern, Jamipol
Joint Ventures	Metal Junction, Tata Bluescope, Dhamra Port Company Limited



- Abbreviations Used:
- VP - Vice President
  - GM - General Manager
  - KPO & T - Kalinganagar Project Orissa and Technology Total Quality Management
  - TQM - Total Quality Management
  - HRI - Human Resource Implementation
  - M&S - Marketing and Sales
  - SC - Slab Caster
  - RPD - Refractories Production Department
  - Mech. & Elect. - Mechanical and Electrical
  - MT - Million Tons
  - OMQ - Ore, Mines and Quarry
  - CRE - Chief Resident Executive

# Organization Chart of Tata Steel (December 2006)



• Note

- \*: VP (KPO and T) reports to Managing Director for the Kalinganagar Project Orissa & to Deputy Managing Director (Steel) for matters pertaining to Technology.
- @Chief - Raw Material (KPO & Jharkhand) also reports to VP (KPO and T) as well as VP (Chhattisgarh Project)
- In case a person has multiple reporting to superiors then only main reporting has been shown (dotted line reporting has not been shown)
- All designations of Chiefs, GMs, Heads are given alphabetically and not as per seniority

## Countries in which we operate (2.5)

India, USA, Sri Lanka, Thailand, Vietnam, Singapore, China, Australia, Malaysia, Indonesia, Philippines, Vietnam and Iran.

## Nature of Ownership (Legal Form) (2.6)

Tata Steel is a Public Limited Company, headquartered at Mumbai, Maharashtra, India. Its stock is listed and traded on stock exchanges located at Mumbai and Kolkata. Global Depository Receipts (GDR) issued by the Company in the international market have been listed on the Luxembourg Stock Exchange. The details of shareholding are given in Tables 2.3, 2.4 & 2.5.

Table 2.3 : Details of Shareholding

Number of Ordinary Shares Held	Number of Shareholders	
	31.03.2006 (%)	31.03.2005 (%)
1 to 100	52.30	50.22
101 to 500	38.14	39.79
501 to 1000	5.18	5.34
1001 to 10000	4.13	4.35
Over 10000	0.25	0.30
	100.00	100.00

Table 2.4 : Category of Shareholders

Category	Number of Shareholders		Voting Strength (%)		Number of Ordinary Shares Held	
	31.03.06	31.03.05	31.03.06	31.03.05	31.03.06	31.03.05
Individuals	5,34,053	567,214	25.19	28.30	139,441,726	156,627,404
Unit Trust of India	1	1	0.01	0.35	41,333	1,912,384
Life Insurance Corporation of India	1	1	11.88	11.59	65,753,593	64,139,375
Govt. & Other Public Financial Institutions	14	63	5.65	6.39	31,297,858	35,401,473
Tata Group Companies	15	14	26.81	26.56	148,391,636	147,009,416
Companies	5711	6535	4.84	6.48	26,796,068	35,881,412
Nationalized Banks, Mutual Funds & Trusts	377	331	3.17	4.97	17,518,404	27,503,656
Foreign Institutional Investors	264	210	22.45	15.36	124,232,238	84,997,736
TOTAL	5,40,436	574,369	100.00	100.00	553,472,856	553,472,856

Table 2.5 : Top Ten Shareholders

S.N.	Name of the Shareholder	No. of shares held	% of holding
1	Tata Sons Limited	110893040	20.04
2	Life Insurance Corporation of India	65753593	11.88
3	Tata Motors Limited	25806729	4.66
4	HSBC Global Investment Funds A/c HSBC Global Investment Funds Mauritius Ltd.	18872545	3.41
5	Janus Overseas Fund	12191285	2.20
6	Genesis India Investment Company Limited A/c General Sub Fund	11191500	2.02
7	The New India Assurance Company Limited	10166937	1.84
8	Janus Contrarian Fund	7661452	1.38
9	National Insurance Company Limited	7253450	1.31
10	The Oriental Insurance Company Limited	6463967	1.17

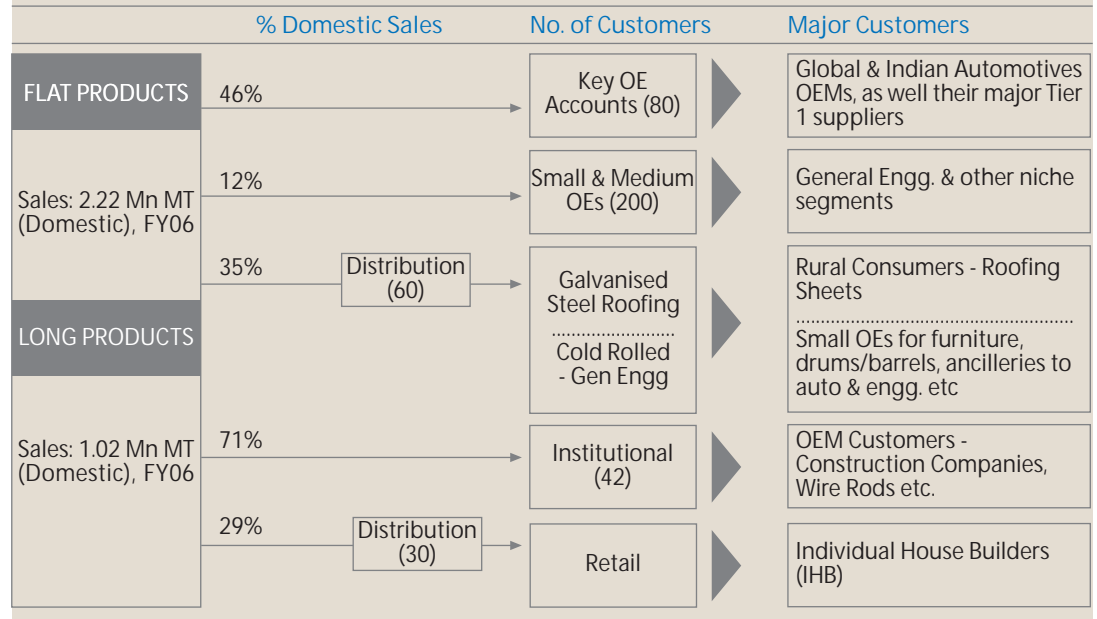




## Markets Served (2.7)

Tata Steel's products are categorized into Flats and Longs. The flat products cater mainly to the automotive market in OE (Original Equipment) category and a sizeable 35% is sold through an organized distribution network to small fragmented OE customers for CRCA and to the rural consumers for Galvanized Steel roofing application. The Long Products Profit Center in contrast has majority of the sales for Institutional Buyers in the Construction Industry. Approximately one-third of its sales are made to Individual House Builders through an organized channel network shown in Figure-2.2.

Figure-2.2- Tata Steel's Business - Sales & Customers



## Focus Segments

The focus segments in Flat Products and Long Products are outlined in Figure-2.3. Tata Steel has very strong presence in Cold Rolled, Re Bars and Wire Rods.

Figure-2.3

PLANT	HSM	CRM	CGL	MM/NBM	WRM
Product Name	Hot Rolled Coil & Sheet	Cold Rolled Coil & Sheet	Galvanized Coil & Sheet	Re Bars	Wire Rod
% of DOMESTIC SALES	25	29	9	20	16
MARKET SHARE %	9	32	22	8	50
END USE	- Automotive - Pipes & Tubes - Colled Rolling	- Automotive - Furniture - Packaging - Appliance	- Automotive - Appliance - General Engg. - Construction	- Construction	- Electrodes - Tyre Bead - PC Sleepers - Spring



## Scale of Reporting Organization (2.8)

No. of Employees (as on 31.03.06) – 38,182

No. of Contractors Employees – 5,558

Region-wise break-up of employees is furnished in Section-VI (Social Performance), Table 6.1.

The details of installed capacity and production are given in Table 2.6.

**Table-2.6 : Installed Capacity & Production**

Class of Products	Installed Capacity <sup>(1)</sup> (Tonnes)		Production <sup>(2)</sup> (Tonnes)	
	05-06	04-05	05-06	04-05
Saleable Steel	4,808,000	3,320,000	4,552,136	4,109,002
Cold Rolled Coils	100,000	100,000	128,157	121,275
Wire Rods	265,000	265,000	278,647	269,858
Wires	205,700	199,700	184,349	187,550
Cold Rolled Coils	46,000	46,000	29,211	30,449
Ferro Manganese & Silico Manganese	30,500	30,500	41,240	44,201
Charge Chrome	50,000	50,000	50,030	41,405
Welded Steel Tubes	212,000	212,000	225,062	179,190
Carbon and Alloy Steel Bearing Rings, Annular Forgings & Flanges	5,250	5,250	3,413	2,756
Metallurgical Machinery	-	-	10,722	19,546
Alloy Steel Ball Bearing Rings	20,500,000	20,500,000	12,430,223	10,313,576
Bearings	25,000,000	25,000,000	28,000,444	25,011,887

(1) The installed capacity for FY 2005-2006 represents the capacity as at the end of the year. Capacity additions have been made throughout the year.

(2) Including production for works use and for conversion by the third parties into finished goods for sale. The financial parameters indicating the scale of the operation of the Company are given in Table 2.7. Detailed financial information is provided in "Section-IV – Economic Performance".

**Table 2.7 : Financial Performance**

Item	2005-2006 (Rupees Million)	2004-2005 (Rupees Million)
Gross revenue	173989.8	160534.8
Profit before taxes	52399.6	52972.8
Profit after taxes	35063.8	34741.6
Capital employed	143638.9	119284.8
Net worth	95020.3	68451.0
Borrowings	25161.5	27397.0



## List of Stakeholders, key attributes of each and relationship (2.9)

Details of key products, services, their suppliers, key requirements of the products and the relationship with the suppliers are furnished in Table 2.8.

**Table-2.8 : Products/Services, Suppliers and their Relationships**

Type	Key Products/Services	Some Key Suppliers	Key requirements	Relationship
Raw Material	Coal	Westfarmers Curragh Pty Ltd (Australia)	Consistent quality with regular flow of supplies	Long term contract partner
	Lime Stone	Sila Eastern(Thailand)	Total cost of ownership	Subsidiary company
		Rajasthan State Mines & Minerals Limited	Consistent quality with regular flow of supplies	Long term contract partner
		N M Dubash	Consistent quality with regular flow of supplies	Long term contract partner
Semi-finished raw material	Sponge Iron	Tata Sponge Iron Limited	Consistent quality with regular flow of supplies	Long term contract partner
	Pig Iron	Anjaneya Ispat	Consistent quality with regular flow of supplies	Long term contract partner
Consumables	Oxygen	BOC Praxair	Consistent quality and uninterrupted supply	Long term contract partner
	De-Sulphurising Compound	JAMIPOL	Total cost of ownership	Associate Company partner
	Aluminum	Minex	Compliance	
	Zinc	Hindustan Zinc Limited	Consistent quality with regular flow of supplies	Long term contract partner
	Rolls	Tayo Rolls Limited	Consistent quality with regular flow of supplies	Associate Company partner
	Refractory	Tata Refractories Limited	Total cost of ownership	Associate Company partner
Service Provider	Transportation	Saizer Enterprises	Timely placement of vehicles, adherence to contractual transit time, proper care of material in transit	Long term contract-partner
	Packaging	ITW Signode	Total cost of ownership	Long term contract partner
	External processing of products	Tata Ryerson Limited	Timely processing of material, quality of packaging	Joint Venture
	IT-Infrastructure Support	IBM, HP	Response time, complaint resolution time, uptime of equipment	Long term contract partner



### Nature and location of outsourced operations:

The Procurement Division of Tata Steel deals with all inbound and outbound supplies of goods and services. The service providers include both indigenous and overseas organizations including government / semi-government agencies. The details pertaining to nature and location of inflow and outflow of goods and services are as per Table 2.9 given hereunder:

**Table 2.9 : Outsourced Operations**

Nature of outsourced operations	Location (not exhaustive list)
Inbound supplies of goods like mechanical and electrical spares	Jamshedpur & Kolkata (majority), Mumbai.
Process, operating and general consumables	Bangalore, New Delhi, Chennai, Jamshedpur, etc.
Inbound supplies of services	Jamshedpur (majority)
Outbound supplies of goods and services	Jamshedpur & Kolkata (majority)
Procurement of raw materials	Within country & Australia, Bhutan, Thailand
External Processing Agents	Jamshedpur and various parts of the country

Tata Steel has launched several outsourcing initiatives in line with its VISION-2007. Some of these initiatives are listed in Table 2.10.

**Table 2.10 : Outsourcing Initiatives**

Company	Products	Tata Steel's Stake (%)
Tata Refractories Ltd. (TRL)	Refractories including high alumina & dolomite	51
Sila Eastern Limited	Limestone	49
Metaljunction Pvt. Ltd.	Reverse auction	50
Jamshedpur Injection Powder Ltd. (JAMIPOL)	De-sulphurising compounds, both carbide & magnesia based	30
TAYO Rolls	Rolls	37
TRF Ltd.	Bulk material handling equipment	36
Tata Sponge Iron Ltd. (TSIL)	Sponge iron	40
Tata Ryerson Ltd. (TRYL)	Steel processing	50
Tata Martade International Logistics Ltd. (TMILL)	Export & import cargo handling, chartering & customs clearance	51
Jamshedpur Utility & Services Company Limited (JUSCO)	Services activities	100

### Strategic Partnership

As a result of improvements in both the costs and product fronts Tata Steel has consistently outperformed its competition in the domestic market and maintained a leadership position at the global level. It is recognized as a world leader in steel making and the intrinsic strength of the Company has been widely appreciated, leading to strategic partnership with many leading international players. The details are provided in Table 2.11.

**Table 2.11 : Strategic Partners and Area**

Strategic Partner	Area of Partnership
Nippon Steel, Japan	Advise Tata Steel on the entire process from steel making, hot rolling to cold rolling for developing cold roll products to match international standards (i.e. developing process line from LD#2 to CRM for auto-grade cold rolling material/steel) and technical assistance on improvement of maintenance practices
Arcelor	Hot Drip Galvanized (HDG) Technology License Agreement. Trademark License Agreement.
Ryerson	Steel processing & distribution in India.
Paul Wurth, Luxembourg	Blast Furnace Up-gradation.



## REPORT SCOPE

### Contact Persons (2.10)

Mr. S B Prasad  
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Tata Steel Limited  
Jamshedpur, INDIA  
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Mr. Sanjay Choudhry  
Chief, Corporate Communications  
Tata Steel Limited  
Jamshedpur, INDIA  
Telephone : +91 657 2431142  
Fax : +91 657 2425182  
email: sanjay.choudhry@tatasteel.com

### Reporting Period (2.11)

1st April 2005 – 31st March 2006 (Fiscal Year)

### Most recent previous report (2.12)

1st April '04– 31st March '05

(report was made available on the Tata Steel Website in December 2005)

### Boundary of report (2.13)

- § Entities included in scope of report are all units of Tata Steel in India. Economic performance of TIS Group Companies is furnished on page EC-4 under Economic Performance.
- § Divisions included in scope of report include Steel Division, Mines Division, Agrico, Tubes, and Bearings Division, Collieries at West Bokaro & Jharia, Town Division (JUSCO), CRC West & Wire Division
- § All products and services have been included.
- § All associated companies, subsidiaries, ancillary industries, have been excluded.
- § Scope of report includes economic, environment and social performance.
- § Any limitation on reporting scope has been delineated at appropriate locations.

The environmental impact for Head Office, Marketing Offices, Service Centers, and Retail Outlets have been found to be negligible after detailed analysis and hence not included in the report.

### Significant changes since the previous report (2.14)

#### Capital Projects

Planning for a 1.8 million tonne expansion at Jamshedpur has been completed. Major equipment has been ordered. Planning for further expansion at Jamshedpur is in progress. The new projects at Orissa for a 6 million tonnes steel plant, at Chhattisgarh for 5 million tonnes and at Jharkhand for 12 million tonnes are at various stages of planning.

#### Mergers, Acquisitions, Alliances, Joint Ventures, Spin Offs and Divestments

##### Millennium Steel Public Company Limited

The Company acquired 67.11% of equity stake in Millennium Steel, Thailand at a cost of approximately Rs.7800 Million during the year. Millennium Steel is one of the largest steel companies in Thailand with a capacity of 1.7 mtpa, producing long products for construction and engineering steel for auto industry.

##### BlueScope Steel Limited, Australia

The Company has signed a Joint Venture Agreement with BlueScope Steel Limited, Australia in November 2005, for the manufacture of color coated coils and pre-engineered buildings to be used in the building solution business. The manufacturing facility to be set up at Jamshedpur will have a production capacity of 0.25 mtpa of zinc and aluminum coated and 0.15 mtpa of color coated coils. The building solution business would have manufacturing facilities at Delhi, Pune and Chennai.

##### Tata Steel KZN Pty Ltd., South Africa

A subsidiary company in the name of 'Tata Steel KZN Pty. Ltd.' has been established in South Africa for setting up a Ferro Chrome Project at Richards Bay, South Africa to produce 0.12 mtpa of high carbon ferro-chrome.

### Reporting on joint ventures, partially owned subsidiaries (2.15)

This report does not include these entities in its scope except for JUSCO the erstwhile Town Division of Tata Steel that is a fully owned subsidiary of Tata Steel Limited.

### Nature and effect of any re-statements of information (2.16)

There is no restatement of any information provided earlier in this report.

## REPORT PROFILE

### Decision not to apply GRI principles (2.17)

This is our sixth consecutive Corporate Sustainability Report that highlights our performance for the year 2005-2006. This report has been prepared in accordance with GRI - 2002 guidelines. It represents a balanced and reasonable presentation of our organization's economic, environmental and social performance. The deviations if any, have been explained adequately at appropriate places.

### Criteria/Definitions / Guidelines Used (2.18)

Green House Gas (GHG) protocol guidelines of World Business Council for Sustainable Development are used for GHG emission reporting. Financial & Economic data are reported as per the guidelines provided in the Company Law of India and Indian GAAP Standards.

Monitoring, measurement and calibration is carried out as per relevant Indian standards. Documentation and communication are done as per the requirement of ISO-9001 & ISO-14001, OHSAS-18001 & SA-8000. The norms and procedures prescribed for workplace Safety and Environment by Ministry of Environment, Ministry of Labour & Welfare (Factories Act) is followed in conducting business at Tata Steel. These Acts include Water Act, Air Act, Environment Protection Act, Factories Act, Explosive Act, Petroleum Act, Electricity Rules, Workmen Compensation Act, Public Liability Insurance Act, Hazardous Waste Management & Handling Rules and Hazardous Chemicals Manufacturing & Handling Rules.

### Significant changes in the measurement methods (2.19)

None.

### Policies and internal practices to enhance and provide assurance (2.20)

#### Sustainability Performance Assurance

Tata Steel has adopted the Tata Business Excellence Model (TBEM) based on the Malcolm Baldrige criteria. Sustainability Performance of Tata Steel is embedded in this model. TBEM requires, besides institution of systems and processes, performance monitoring and reporting as per the criteria delineated in the Model. The approach and extent of deployment, maturity of the system deployed and the consequent business results are required to be assessed by external assessors. The application is assessed by a group of experts appointed by TQMS. The tabletop assessment of the application is followed by (a) site visit and (b) discussions with concerned senior executives and shop floor employees about the issues covered in the application.

#### Economic Performance Assurance

Tata Steel's financial performance and risk management assurance is provided by an in-house Internal Audit function. The Internal Audit function has chartered accountant and professionals headed by Chief (Internal Audit) who reports to the Managing Director and the Audit Committee of the Board.

The Quarterly, Half Yearly and Annual books of account are audited by internal and external auditors. The external auditors appointed by the Audit Committee and approved by the shareholder are M/s. A F Ferguson & Co. and S B Billimoria & Co. M/s. A F Ferguson & Co. are Chartered Accountants of global repute. The scope of external audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. The audit was done in accordance with auditing standards accepted in India.

#### Environment, Health & Safety

The independent 3rd party audits are conducted by M/s. IRQS for divisions certified to Environmental Management System, ISO 14001:2004 and Occupational Health and Safety Management System, OHSAS 18001:1999 once in a year.

Besides this, independent assessment is also conducted for legal Compliance and Safety by M/s. PricewaterhouseCoopers and Telos Consultancy Services respectively.

**Society** - Social audits are conducted once in every 10 years by a bench of external auditors comprising eminent personalities from the judiciary, social organizations and financial institutions appointed by Tata Steel's Board of Directors. The last audit was conducted in 2004. Steel Works at Jamshedpur & Sukinda Chromite Mines were certified to SA-8000 in 2004. M/s. DNV and M/s RINA conduct the external audit of the system half-yearly at respective places.

### Policy and current practice on independent assurance (2.21)

Tata Steel shall continue to get an independent assurance of its Corporate Sustainability Report. Accordingly, Tata Steel has appointed PricewaterhouseCoopers (P) Limited as independent assurance providers. Their independent assurance report has been included at the beginning of this report.

### Additional information (2.22)

Additional information on economic, environmental and social performance of the organization can be made available on request from the contact persons indicated in 2.10 above. This report is also available on Tata Steel's Internet website and on the Company's Intranet.

## SECTION - III

### GOVERNANCE STRUCTURE & MANAGEMENT SYSTEM

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## GOVERNANCE STRUCTURE AND MANAGEMENT SYSTEMS

### Governance Structure (3.1)

#### Company's Philosophy on Code of Governance

The Company believes in adopting the best practices in the areas of Corporate Governance. Even in a fiercely competitive business environment, the Management and Employees of the Company are committed to uphold the core values of transparency, integrity, honesty and accountability, which are fundamental to the Tata Group.

During the year, the Company has fine-tuned its corporate practices so as to bring them in line with the revised Clause 49 of the listing agreements. The Company adopted the Tata Code of Conduct for Non-Executive Directors and the Whistle Blower Policy as prescribed in the revised Clause.

The Company will continue to focus its resources, strengths and strategies for creation and safeguarding of shareholders' wealth and at the same time protect the interests of all its shareholders.

#### Board of Directors

The Company has a non-executive Chairman and the number of independent Directors is more than one-third of the total number of Directors. The number of Non-Executive Directors (NED) is more than 50% of the total number of Directors.

None of the Directors on the Board is a Member on more than 10 Committees and Chairman of more than 5 Committees (as specified in Clause 49), across all the companies in which he is a Director. The necessary disclosures regarding Committee positions have been made by the Directors.

The names and categories of the Directors on the Board, their attendance at Board Meetings during the year and at the last Annual General Meeting, as well as number of Directorships and Committee Memberships held by them in other companies are given in Table 3.1.

**Table 3.1 : Board Meetings of Board of Directors**

Name	Category	No. of Board Meetings attended in 05-06	Whether attended AGM held on 27.7.05	No. of Directorships in other public companies		No. of Committee positions held in other public companies**	
				Chairman	Member	Chairman	Member
Mr. R N Tata (Chairman)	Promoter, Non-independent, Non Executive	7	Yes	11	2	-	-
Mr. Keshub Mahindra (till 21.3.2006)	Independent, Non Executive	3	Yes	3	4	1	-
Mr. Nusli N Wadia		5	Yes	5	4	-	-
Mr. S M Palia		7	No	1	4	4	1
Mr. P K Kaul Financial Inst.' Nominee*		5	Yes	1	9	2	3
Mr. Suresh Krishna		5	No	5	2	2	2
Mr. Kumar Mangalam Birla		1	No	8	4	-	1
Mr. Ishaat Hussain	Promoter, Non-Independent, Non-Executive	6	Yes	2	10	2	3
Dr. J J Irani		7	Yes	4	7	-	3
Mr. B Jitender Financial Institutions' Nominee* (Ceased to be a Director w.e.f. 22.3.2006)	Independent, Non Executive	4	No	1	4	-	2
Mr. B Muthuraman Managing Director	Non-Independent, Executive	7	Yes	3	3	-	-
Dr. T Mukherjee Dy. M.D. (Steel)		6	No	2	4	-	1
Mr. A N Singh Dy. M.D. (Corporate Services)		7	Yes	2	-	1	-

\*Appointed by IDBI Bank Limited as the lead Institution.

\*\*Represents Chairmanships/Memberships of Audit Committee, Shareholders'/Investors' Grievance Committee and Remuneration Committee



Seven Board Meetings were held during the year 2005-06 and the gap between two meetings did not exceed four months. The dates on which the Board Meetings were held are:  
19.05.2005, 27.07.2005, 23.08.2005, 26.10.2005, 24.11.2005, 23.01.2006 and 23.03.2006

Dates for the Board Meetings in the ensuing year are decided well in advance and communicated to the Directors. Board Meetings are held at the Registered Office of the Company. The Agenda along with the explanatory notes are sent in advance to the Directors. Additional meetings of the Board are held when deemed necessary by the Board.

The information as required under Annexure IA to Clause 49 is being made available to the Board. The Board periodically reviews compliance reports of all laws applicable to the Company. Steps are taken by the Company to rectify instances of non-compliance, if any.

The Company has adopted the Tata Code of Conduct as given in Annexure-II for Executive Directors, Senior Management Personnel and other Executives of the Company. The Company has received confirmations from the Executive Directors as well as Senior Management Personnel regarding compliance to the Code during the year under review. It has also adopted the Tata Code of Conduct for Non-Executive Directors of the Company. The Company has received confirmations from the Non-Executive Directors regarding compliance to the Code for the period ended 31.03.2006. Both the Codes are posted on the website of the Company.

#### Audit Committee

The Company had constituted an Audit Committee in the year 1986. The scope of the activities of the Audit Committee is as set out in Clause 49 of the Listing Agreements with the Stock Exchanges read with Section 292A of the Companies Act, 1956. The terms of reference of the Audit Committee are broadly as follows:



- a) To review compliance with internal control systems;
- b) To review the findings of the Internal Auditor relating to various functions of the Company;
- c) To hold periodic discussions with the Statutory Auditors and Internal Auditors of the Company concerning the accounts of the Company, internal control systems, scope of audit and observations of the Auditors/Internal Auditors;
- d) To review the quarterly, half-yearly and annual financial results of the Company before submission to the Board;
- e) To make recommendations to the Board on any matter relating to the financial management of the Company, including Statutory & Internal Audit Reports;
- f) Recommending the appointment of statutory auditors and branch auditors and fixation of their remuneration.

Mr. P.K. Kaul, Chairman of the Audit Committee was present at the Annual General Meeting held on 27.07.2005. The composition of the Audit Committee is in line with the provisions of Clause 49 of the Listing Agreement and the details of meetings attended by the Directors are given in Table 3.2.

Audit Committee meetings are attended by the Vice-President (Finance), Chief (Corporate Audit) and Chief Financial Controller (Corporate) and Representatives of Statutory Auditors. The Company Secretary acts as the Secretary of the Audit Committee.

Six Audit Committee Meetings were held during 2005-06 on 18.05.2005, 26.07.2005, 22.08.2005, 25.10.2005, 23.12.2005, 20.01.2006, (The necessary quorum was present at the meetings).

**Table 3.2: Meetings attended by the Directors of Board**

Name of Members	Category	Meetings attended in 2005- 06
Mr. P K Kaul, Member (Chairman)	Independent, Non-Executive	4
Mr. Ishaat Hussain, Member (Chartered Accountant)	Promoter, Non-Independent Non-Executive	5
Mr. S M Palia, Member	Independent, Non-Executive	6
Mr. B Jitender*	Independent, Non-Executive	1

*\*Member of Audit Committee from 17.01.2006 to 22.03.06.*

#### Whistle Blower Policy

The Audit Committee at its meeting held on 25.10.2005, approved a Whistle Blower Policy that provides a formal mechanism for all employees of the Company to approach the Ethics Counsellor / Chairman of the Audit Committee of the Company and make protective disclosures about the unethical behavior, actual or suspected fraud or violation of the Company's Code of Conduct. The Whistle Blower Policy as given in Annexure-VIII, is an extension of the Tata Code of Conduct, which requires every employee to promptly report to the Management any actual or possible violation of the Code or an event he becomes aware of that could affect the business or reputation of the Company. The disclosures reported are addressed in the manner and within the time frames prescribed in the Policy. Under the Policy, each employee of the Company has an assured access to the Ethics Counsellor/Chairman of the Audit Committee.

#### Remuneration Committee

The Company had constituted a Remuneration Committee in the year 1993. The broad terms of reference of the Remuneration Committee are as follows:

- § Review the performance of the Managing Director and the Whole-time Directors, after considering the Company's performance.
- § Recommend to the Board remuneration including salary, perquisites and commission to be paid to the Company's Managing Director and Whole-time Directors.
- § Finalize the perquisites package of the Managing Director and Whole-time Directors within the overall ceiling fixed by the Board.
- § Recommend to the Board, retirement benefits to be paid to the Managing Director and Whole-time Directors under the Retirement Benefit Guidelines adopted by the Board.

The Remuneration Committee also functions as the Compensation Committee as per SEBI guidelines on the Employees' Stock Option Scheme. The Company, however, has not yet introduced the Employees' Stock Option Scheme.

The composition of the Remuneration Committee and the details of meetings attended by the Directors are given in Table 3.3.

**Table 3.3 : Remuneration Committee Meetings**

Name of Members	Category	Meetings attended in 05-06
Mr. Keshub Mahindra, Chairman* (till 31.03.06)	Independent, Non-Executive Promoter, Not-Independent	-
Mr. R N Tata, Member	Non-Executive	1
Mr. S M Palia, Member	Independent Non-Executive	1

*\*Ceased to be Chairman of Remuneration Committee w.e.f. 21st March 2006*

One meeting of the Remuneration Committee was held on 19.05.2005. The Chairman of the Remuneration Committee, Mr. Keshub Mahindra was present at the Annual General Meeting held on 27.07.2005. The Company has complied with the non-mandatory requirement of Clause 49 regarding the Remuneration Committee.

#### Remuneration Policy

The Company while deciding the remuneration package of the senior management members takes into consideration the following items:

- Employment scenario;
- Remuneration package of the industry; and
- Remuneration package of the managerial talent of other industries.

The annual variable pay of senior managers is linked to the performance of the Company in general and their individual performance for the relevant year measured against specific Key Result Areas, which are aligned to the Company's objectives.

The Non-Executive Directors (NEDs) are paid remuneration by way of Commission and Sitting Fees. In terms of the shareholders' approval obtained at the AGM held on 19.07.2001, the Commission is paid at a rate not exceeding 1% per annum of the profits of the Company (computed in accordance with Section 309(5) of the Companies Act, 1956). The distribution of Commission amongst the NEDs is placed before the Board. The Commission is distributed on the basis of their attendance and contribution at the Board and certain Committee Meetings as well as time spent on operational matters other than at the meetings. The Company pays sitting fees of Rs. 10,000 per meeting to the NEDs for attending the meetings of the Board, Committee of the Board and Audit Committee. For other meetings, the Company continues to pay to the NEDs sitting fees of Rs. 5,000 per meeting.

The Company pays remuneration by way of salary, perquisites and allowances (fixed component) and commission (variable component) to Managing and Whole-time Directors. Salary is paid within the range approved by the Shareholders. Annual increments effective 1st April each year, as recommended by the Remuneration Committee, are approved by the Board. The ceiling on perquisites and allowances as a percentage of salary is fixed by the Board. Within the prescribed ceiling, the perquisites package is approved by the Remuneration Committee. Commission is calculated with reference to net profits of the Company in a particular financial year and is determined by the Board of Directors at the end of the financial year based on the recommendations of the Remuneration Committee, subject to overall ceilings stipulated in Sections 198 & 309 of the Companies Act, 1956. Specific amount payable to such Directors is based on the performance criteria laid down by Board, which broadly takes into account the profits earned by the Company for the year.

#### Shareholders Committee

An Investors' Grievance Committee was constituted on 23.03. 2000 to specifically look into the redressal of Investors' complaints like transfer of shares, non-receipt of balance sheet and non-receipt of declared dividend, etc. One meeting of the Investors' Grievance Committee was held on 23.03.2006. The composition of the Investors' Grievance Committee and details of the meeting attended by the Directors are given in Table 3.4:

**Table 3.4 : Investors' Grievance Committee**

Name of Members	Category	Meetings attended in 05-06
Mr. Ishaat Hussain, Chairman	Promoter, Not-Independent, Non- Executive	1
Mr. Suresh Krishna, Member	Independent, Non-Executive	1



The complaints received from shareholders comprise correspondence identified as investor complaints i.e. letters received through statutory/regulatory bodies and those related to loss of securities, Court/Consumer Forum matter, fraudulent and non-receipt of dividend amounts (where reconciliation of the payment was in progress at the time of receipt of the letters) are indicated in Tables 3.5 & 3.6.

**Table 3.5 : Total Complaints received / resolved in 05-06**

Complaints pending as on 1st April 2005	6
During the period 1st April 2005 to 31st March 2006, complaints identified as above and reported under Clause 41 of the Listing Agreements	1789
Complaints disposed off during the year ended 31.03.2006	1788
Complaints unresolved to the satisfaction of shareholders as on 31.03.2006	7
No. of pending share transfers as on 31.03.2006	266*

*\*Transfers lodged in the last week of March 2005 and hence pending as on 31.03.2005.*

**Table 3.6: Complaints handled in 05-06 by type**

Sl. No.	Description	Nos. Received	Total Replied	Total Pending
A)	Complaints			
	Letters received from Statutory/Regulatory Bodies			
1	SEBI	69	63	6
2	DOCA	-	-	-
3	STOCK EXCHANGE	23	23	-
4	NSDL/CDSL	17	17	-
	Total Nos.	109	103	6
B)	Legal Matters			
	Court/Consumer Forum Matters	-	-	-
	Total Nos.	-	-	-
C)	Dividends	-	-	-
1	Non-receipt of Dividend warrants (Pending at the time of receipt of letters)	1679	1679	-
2	Fraudulent Encashment of dividend warrants	1	-	-
	Total Nos.	1680	1680	-
D)	Letters in the nature of reminders/complaints	-	-	-
	Total correspondence statistics	1789	1782	7

*Note: The correspondence identified, as investor complaints are letters received through Statutory/Regulatory bodies and those related to Court/Consumer forum matters, (where the Company/Registrar is involved and is accused of deficiency in service) fraudulent encashment and non-receipt of dividend amounts, where reconciliation of the payment is in progress/ completed after the end of the Quarter.*

#### Committee of the Board (COB)

The terms of reference of the Committee of the Board are to approve capital expenditure schemes and donations within the stipulated limits and to recommend to the Board, capital budgets and other major capital schemes, to consider new businesses, acquisitions, divestments, changes in organizational structure and also to periodically review the Company's business plans and future strategies. The composition of the COB and details of the meetings attended by the Directors are given in Table 3.7. Eight COB Meetings were held during the year 2005-06. The said meetings were held on 17.05.2005, 25.07.2005, 22.08.2005, 24.10.2005, 22.11.2005, 19.01.2006, 10.02.2006 and 21.03. 2006

**Table 3.7: Committee of the Board**

Names of Members	No. of meetings attended in 05-06
Mr. R N Tata, Chairman	6
Mr. Nusli N Wadia, Member	4
Mr. S M Palia, Member	7
Mr. Ishaat Hussain, Member (from 26.10.2005)	3
Dr. J J Irani, Member	8
Mr. B Muthuraman, Member	8

### Committee of Directors

The Committee of Directors has been constituted to approve of certain routine matters such as Opening and Closing of Bank Accounts of the Company, to grant limited Powers of Attorney to the Officers of the Company, to appoint proxies to attend general meetings on behalf of the Company etc. The Members of this Committee are – Mr. R.N. Tata (Chairman), Mr. Ishaat Hussain and Dr. J.J. Irani. The business of the Committee is transacted by passing Circular Resolutions, which are placed before the Board at its next meeting.

### Ethics and Compliance Committee

In accordance with the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 1992, as amended (the Regulations), the Board of Directors of the Company adopted the Tata Code of Conduct for Prevention of Insider Trading and the Code of Corporate Disclosure Practices (the Code) to be followed by the Directors, officers and other employees. The Code is based on the principle that Directors, officers and employees of a Tata Company owe a fiduciary duty to, among others, the shareholders of the Company to place the interest of the shareholders above their own and conduct their personal securities transactions in a manner that does not create any conflict of interest situation. The Code also seeks to ensure timely and adequate disclosure of Price Sensitive Information to the investor community by the Company to enable them to take informed investment decisions with regard to the Company's securities. In terms of the said Code, an Ethics & Compliance Committee was constituted on 30.05.2002 called Ethics and Compliance Committee. The composition of the Ethics and Compliance Committee is given in Table 3.8.

The Board has also appointed Vice President (Finance) as the Compliance Officer to ensure compliance and effective implementation of the Regulations and also the Code across the Company. During the year under review, the Compliance Officer submitted Monthly Committee Reports of the Tata Code of Conduct for prevention of Insider Trading to the Board of Directors.

**Table 3.8 : Ethics & Compliance Committee**

Name of Members	Category	Meetings attended during the year 05-06
Mr. Ishaat Hussain, Chairman	Promoter, Not-Independent, Non- Executive	1
Mr. Suresh Krishna, Member	Independent, Non-Executive	1

### General Body Meetings

- Location and time of last three Annual General Meetings (AGMs) are given in Table 3.9.
- No Extraordinary General Meeting of the shareholders was held during the year.
- No Postal Ballot was conducted during the year. None of the resolutions proposed for the ensuing Annual General Meeting need to be passed by Postal Ballot.

**Table 3.8 : Annual General Meetings**

Financial year	Details of location	Date & Time
2004-2005	Birla Matushri Sabhagar	27.07.2005 at 3.30 PM
2003-2004	19, Sir Vithaldas Thackersey Marg,	22.07. 2004 at 3.30 PM
2002-2003	Mumbai- 400020	23.07. 2003 at 3.30 PM

### Disclosures

- The Board has received disclosures from key managerial personnel relating to material, financial and commercial transactions where they and/or their relatives have personal interest. There are no materially significant related party transactions, which have potential conflict with the interest of the Company at large.
- The Company has complied with the requirements of the Stock Exchanges, SEBI and other statutory authorities on all matters relating to capital markets during the last three years. No penalties or strictures have been imposed on the Company by the Stock Exchange, SEBI or other statutory authorities relating to the above.
- The Company has adopted a Whistle Blower Policy and has established the necessary mechanism in line with clause 7 of the Annexure I D to Clause 49 of the Listing Agreement with the Stock Exchanges, for employees to report concerns about unethical behavior. No personnel have been denied access to the Ethics Counsellor/Chairman of the Audit Committee.
- The Company has fulfilled the following non-mandatory requirements as prescribed in Annexure I D to Clause 49 of the Listing Agreement with the Stock Exchanges:
  - The Company has set up a Remuneration Committee.
  - A half-yearly declaration of financial performance including a summary of the significant events in the six-month period was sent to every shareholder.
  - The Company has moved towards a regime of unqualified financial statements.

### Means of Communication

A half-yearly report sent to each household of shareholders, in addition to the results of the Company being published in the newspapers and posted on the website of the Company. The quarterly and annual results along with the Segmental Report are generally published in Indian Express, Nava Shakti, Free Press Journal and also displayed on the website of the Company ([www.tatasteel.com](http://www.tatasteel.com)) shortly after its submission to the Stock Exchanges. Official news releases and presentations made to Institutional Investors and analysts are posted on the Company's website.

### Management Discussion & Analysis (MDA) Report-

The MDA Report forms a part of the Directors' Report. All matters pertaining to industry structure and developments, opportunities and threats, segment/product wise performance, outlook, risks and concerns, internal control and systems, etc. are discussed in the said report.

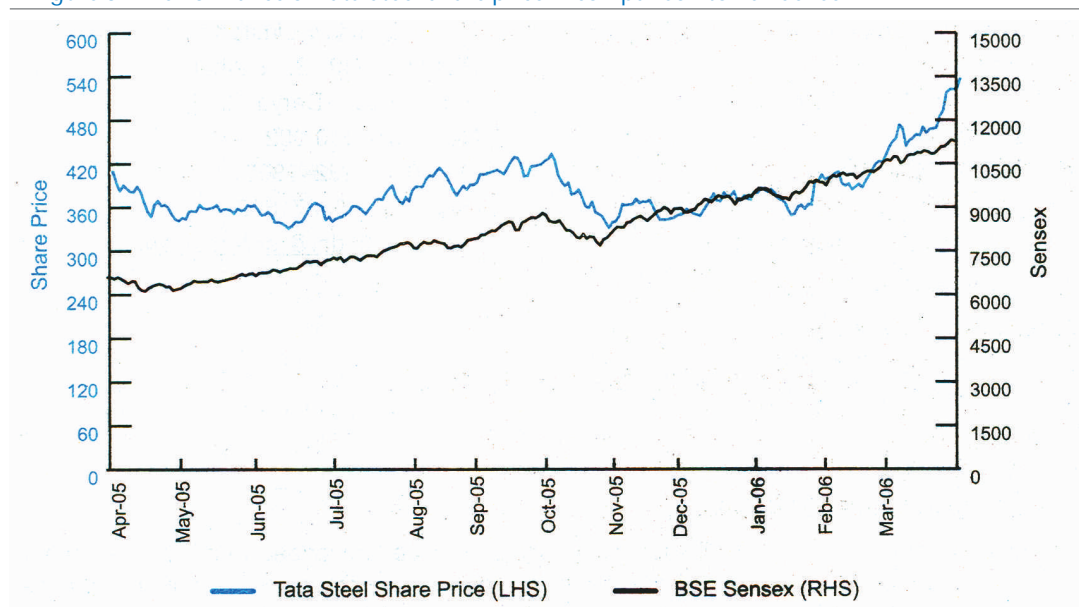
### Company's Corporate Website-

The Company's website is a comprehensive reference on Tata Steel's management, Vision, Mission, policies, corporate governance, corporate sustainability, investor relations, sales network, updates and news. The section on "Investor Relations" seeks to inform the shareholders, by giving complete financial details, shareholding patterns, corporate benefits, information relating to stock exchange, registrars, share transfer agents and frequently asked questions. Investors can also submit their queries and get feedback through online interactive forms. The section of "Newsroom" includes all major press reports and release, awards, campaigns, etc.

### Stock Information

Share holding details of the Company have been furnished in Section-2.6. The performance of Tata Steel's share in comparison to the Bombay Stock Exchange Sensex is furnished in the Figure 3.1

Figure 3.1: Performance of Tata Steel Share price in comparison to BSE Sensex



### Independent, Non-Executive Directors in the Board (3.2)

The Independent Directors are those who apart from receiving Director's remuneration do not have any material or pecuniary relationship or transaction with the Company, its promoters, its management or its subsidiaries, which may affect the independence of the Director's judgment. A financial institution nominee is considered to be an independent Director in all cases.

The Company has a Non-Executive Chairman and the number of Independent Directors is more than one-third of the total number of Directors. The number of Non-Executive Directors (NEDs) is more than 50% of the total number of Directors.

### Selection of Board Members (3.3)

The Board of Directors is guided by the organization's Vision, Mission & Values. The composition of the Board of Directors is a mix of full time executives and non-executives representing business houses and financial institutions, with requisite experience in handling economic, environmental & social issues. The Board Members regularly review the compliance status of the organization on these issues. There is a guideline for selection of Board Members. The criteria broadly cover individual skills that would add to the composite perspective of the Board. Ability to contribute positively to Board Dynamics, Leadership skills, Contemporariness and ability to devote adequate time are some key elements taken into account in selecting Board Members.

### Board Members involved in managing risks and opportunities (3.4)

The agenda papers along with status report on economic, environment and social compliance are sent in advance to all the Board Members before the meeting for review, comments and suggestions during the meeting. The feedback from the Board Members is analyzed by the top management and considered for business decision-making.

### Linking executive compensation with overall achievement (3.5)

Executive compensation is based on the achievement of individuals on parameters included in Key Performance Measures, which include both financial and non-financial parameters. At the beginning of the year a performance contract is signed by each executive, which forms the basis for assessing the performance of individuals when establishing the compensation packages.

### Responsibility for Embedding Sustainability (3.6)

The Board exercises control, reviews implementations of various policies and provides direction through various Board Committees. The detailed composition and role of these committees have been described earlier in this chapter in Section-3.1. Although there is no separate committee of the Board for sustainability issues, the MD, DMD (Steel) and DMD (Corporate Services) are responsible to the Board for the sustainability performance of the Company.

Tata Steel's leadership systems have two dimensions – the "Visionary" dimension and the "Architectural" dimension. The visionary dimension enables people to envision the future, to empower them and to energize them to achieve superior performance. The architectural dimension is an enabler and includes designing and creating structure, processes, policies, systems, strategies, and measures that support and enhance superior performance. These two characteristics are sometimes at conflict with each other, but the leadership constantly strives to strike a balance. At the heart of the leadership system are stakeholder expectations. These stakeholders' requirements drive all leadership actions.

A key element of Tata Steel's review mechanism of the implementation systems is an extensive framework of audits, which encompass all three elements of sustainability. These include internal and external financial audits, which are reported to the Audit Committee of the Board, internal and external EMS audits, TBEM assurance, social audits and OHSAS audits. While the Audit Committee of the Board reviews the internal and external audit reports, the EMS, OHSAS or Social Audit reports are reviewed by the Management Representative and senior management.

The key individuals responsible for audit of different aspects of the sustainability management system are:

- § Internal Financial Audits by Chief Corporate Audit.
- § Internal TBEM Audit by trained TBEM Auditors under the guidance of Chief, Business Excellence.
- § Internal Audit for ISO-14001 EMS by Audit In-charge EMS & Chief, Environment & OH.
- § Internal Audit for OHSAS-18001 by Audit In-charge EHS & Chief, Environment & OH.
- § Internal Audit for SA 8000 by Audit In-Charge & Chief, Business Excellence.
- § External Financial Audits by M/s. A F Ferguson and Billimoria and Company.
- § External EMS Audit ISO-14001 by M/s. IRQS.
- § External OHSAS-18001 Audit by M/s. IRQS.
- § External TBEM Audit by TQMS, Tata Services.
- § External Social Audit by a group of experts comprising a retired Judge of the High Court or Supreme Court, a social worker of repute & technocrat or representative of large business house.
- § External SA-8000 audit by DNV.

### Internally developed code of conduct and guiding policies (3.7)

The leadership team establishes, communicates and deploys Mission, Vision, Values and Code of Conduct. The strategic goals of the organization are derived from these and are cascaded down across the organization. The communication and deployment is done through channels such as dialogues, Union Management meetings, Joint Departmental Councils (JDC) and other Forums. The leadership system at Tata Steel is organized in Apex Teams of Quality Councils, Committees on HRD, IT, R&D and others. It is led by the Apex Quality Council. The strategic directions set by the council are translated into actionable drivers and cascaded down to the operational levels through the Quality Councils / Quality Sub Councils / Departments. The leadership system is deployed through constant review of organizational performance and by initiating corrective action and/or setting stretch targets with a focus on achieving business objectives.

The Vision statement of Tata Steel is presented on the inside of the front cover page. Guiding Policies, Code of Conduct, etc. are included as Annexures in Section-VII.

### Listening to Shareholders (3.8)

The suggestions, comments and feedback provided by the shareholders during the Annual General Meetings are carefully recorded and discussed in the Board Meetings. After reviewing the various points raised by shareholders, the Board directs the management to integrate the same in its business decisions. Besides the Annual General Meetings, Investor Satisfaction Surveys, meeting with investors and Investor Grievance Cell are other forums through which shareholders provide recommendations or direction to the Board.

## STAKEHOLDER ENGAGEMENT

### Identifying Key Stakeholders (3.9)

The key stakeholders of the organization are those who are affected by its products, services and activities or those whose concerns can affect the performance of business.

The vision statement clearly states that Tata Steel will continue to improve the quality of life of employees and the communities it serves. The Group purpose underscores the Tata Values on Nation building as “our heritage of returning to the society what we earn evokes trust among consumers, employees, shareholders and communities”.

The Vision and the Group Purpose statement clearly delineate the basis for identification of stakeholders i.e. consumers, employees, shareholders and community (including local, national, international, regulators, etc.). Within each group of stakeholders, key stakeholders are identified based on strategic imperatives derived from the strategic objectives.

### Approach to Stakeholder Consultation and Communication (3.10)

Inputs from stakeholders are taken through several structured / formal / informal engagement processes and considered while setting strategic objectives of the Company. Investor surveys, customer satisfaction surveys, employee satisfaction surveys and community need analysis are also undertaken periodically. Tables-3.10 & 3.11 indicate various forums and frequency of consultation with key stakeholders.

**Table 3.10: Stakeholder Consultation - External**

Stakeholder	Forum for Assessing Requirements, Communicating Directions & Receiving Feedback	Frequency
Shareholders & Financial Community	Investors meet across the globe; Annual General Meetings; Quarterly and half-yearly reports to Shareholders; Updating major Shareholders (LIC, UTI); Shareholder Relations' Meets;	Annual/ As per plan/ Annual
Customer	Customer forum; MD's Conference with customer groups, Worldwide; Visits to Customers & CVM, RVMs; Learning from Field Failures	As per plan Quarterly
Suppliers & Partners	Vendor Dialogues, Meetings with Key Suppliers; Vendor Meets & Recognition, SA 8000 Audits	Twice / year, As per plan, Once a year
External Public/ Govt. / Media	Meetings with Govt./Steel Ministry/Trade Bodies, Industry Associations; NGOs, Ministry for Environment & Forests, Press Briefings & Releases, etc.	As per need
Employee, Community & Society	Dialogues with the employees, JDCs, JWC, Apex Council, Senior Citizens Forum; Spouses' Dialogue; Uday, Joint Community Meeting, Community Need Analysis	Quarterly, Twice/year, As per plan

**Table 3.11: Stakeholder Consultation - Internal**

Communication/ Forum	Freq. (Nos./Yr)	Issues Discussed
MD Online	12	Customer, safety, plant performance, etc.
Senior, General & Ladies Dialogues, MCM, BE Councils	4 to 6	Vision, values, empowerment, innovation, continuous improvement, performance.
Dialogue with Union Committee Members (JCCM, JWC, and JDC)	3,6,2	Performance expectations, values, ST/LT directions, customer services, market conditions, production
Departmental Communication Meeting	12	BE, improvement, learning, training, customers' needs
BE Facilitators Meet	6	Developments in BE, innovative ideas, launch of new initiatives
Joint Works Quality Committee	6	5S & QC activities, safety, ergonomics, health, EMS

### Information generated by Stakeholder Consultations (3.11)

Types of information generated by stakeholder consultations are summarized in Table-3.12

**Table 3.12 : Information from Stakeholders**

Stakeholder	Information Generated
Shareholders	§ Overall performance and its implication on market capitalization and creation of shareholder value.
Customers	§ User needs, customer satisfaction, product quality and functionality.
Supplier	§ Identification of areas with conflicting goals, payment, material rejects and supplier satisfaction.
Employees	§ Employee Satisfaction, suggestions for improvement in product quality, social welfare and business excellence, professional growth, health and safety and quality of life.
Community	§ The needs of community, women empowerment, employment generation, environment and quality of life.
External Public & Government	§ Requirement under statutes, compliance status, threats to business and license to operate.

### Use of information from Stakeholders (3.12)

The feedback received from stakeholders forms one of the significant inputs to the strategic plan development and the consequent strategic objective setting. Figure 3.2 indicates the process for utilization of information received from stakeholders.

**Figure 3.2**

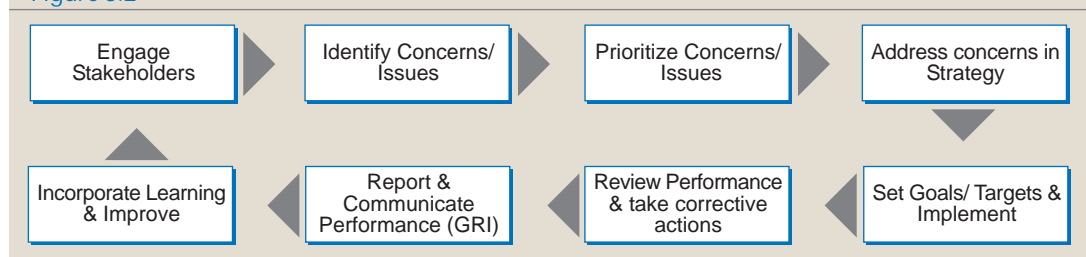


Table 3.13 describes the areas where stakeholder inputs are used

**Table 3.13: Use of Stakeholders Information**

Stakeholder	Use of Information
Shareholders & Financial Analysts	§ Objective & Target settings, investment decisions, diversifications/ merger /acquisition, company perception with analysis, emerging strategic issue identification.
Customers	§ Product improvement, product development, customer retention, market penetration, emerging demand scenario and price sentiments, development of short and long term business plans, identification of customer related issues.
Suppliers	§ Fine-tuning of vendor rating and vendor evaluation procedure, vendor relationship management.
Employees	§ Employee Satisfaction Index & Corporate Citizenship Index, identification of employee related issues.
Community	§ Plan for development of community in the areas of forestry, irrigation, women empowerment, income generation, health, hygiene, etc. and identification of key societal issues.
External Public & Government	§ Management programs for compliance and resource conservation, management programs for community development.
Media & Other	§ Perception of the company, external environment & business news issues identified.

### OVERARCHING POLICIES AND MANAGEMENT SYSTEMS

#### Following the path of precautionary approach (3.13)

A precautionary approach is the underlying spirit of every policy or guideline formulated at Tata Steel. This is clearly visible in Clause#1 and Clause#8 of the Tata Code of Conduct, which deals with National Interest and Health, Safety & Environment respectively (refer Annexure-II).

The merit of every proposed activity, project or process is evaluated for financial performance, environmental and social performance before adoption. Environmental impact assessments are carried out for all projects to be implemented and necessary environmental management plans are integrated in the project to internalize the cost. Life Cycle Assessment is regularly carried out for integrated iron and steel making route. The outputs



on emissions, discharges, resource usage and global warming are analyzed; targets are taken for continual improvement under EHSMS. Hence, only those proposals are selected which ensure compliance with these policies, hence ensuring the precautionary principle.

### Respecting externally developed, voluntary charters, sets of principles (3.14)

Tata Steel is a signatory to the United Nations Global Compact (in 1998) and abides by its principles. The principles of UN Global Compact address Human Rights, Labour Right, Environment and anti-corruption have been included as Annexure- I. Tata Steel is also a signatory to the Tata Group's Code of Conduct (in 1997). The salient clauses of the code of conduct pertaining to National Interest, Competition, Equal Opportunity Employment, Health, Safety and Environment, Quality of products and services, Corporate Citizenship, Public Representation, Ethical Conduct, Regulatory Compliance and political non-alignment have been included in Annexure – II.

In 1999 Tata Steel became a signatory of the CORE BCSD (Corporate Round Table on Environment and Sustainable Development-Business Council for Sustainable Development) Charter initiated by the then Tata Energy Research Institute (TERI) (in 1999), New Delhi based on the guidelines provided in International Chamber of Commerce Charter on Sustainable Development. Details of the CORE Charter are given in Annexure-III. The requirements of these are integrated in business through various tools adopted by Tata Steel such as ISO-14001, ISO-9001, OSHAS-18001, SA-8000 and Tata Business Excellence Model.

### Partnership with NGO's, Industry Associations/Organizations (3.15)

Table 3.14 below illustrates some of our ongoing partnership projects in collaboration with NGO's, Industry Associations and National / International advocacy organizations:

**Table 3.14 : Partnership**

Organizations / NGOs	Area of Partnership
The Global Business Council on HIV/AIDS London	(i) Preventive & Promotive activities (ii) Curative & rehabilitative activities (iii) Adopted East/West Singhbhum for conducting AIDS awareness.
United Nations Global Compact Forum	To promote good corporate practices in the areas of (i) Human Rights (ii) Labour (iii) Environment (iv) Anti-corruption
IISI Brussels, Ministry of Environment & Forests, Delhi	Life Cycle Assessment for Steel Sector and issues related to steel business like Quality, Technology, Markets, etc.
UNIDO, Confederation of Indian Industry, UNDP	Water pricing for resource conservation. Market based instrument for pollution prevention in steel sectors.
EPIA, USA	Adolescent Reproductive Health Project called SAHAS.
CARE International, USA	To promote safe motherhood and infancy to reduce Infant Mortality Rate and Child Mortality Rate of less than 5 years of age (CMR <5) in 162 villages.
UNICEF	WATSAN (Water and Sanitation Project) that will cover 100 villages.
Sir Ratan Tata Trust	Rehabilitation and reconstruction work for the Orissa Cyclone victims; irrigation project.
The Calcutta Samaritans	Running of a De-Addiction Center at Baridih.
CII/CIDA	Implementation of Corporate Sustainability Management System.
CII, FICCI, ASSOCHAM, ICC	Market and business related issues.
Government of Jharkhand	JSACS for AIDS awareness; JEP for education, irrigation projects
Packard Foundation	Adolescent Reproductive Health.
National Commission on Population	Population Sterilization
DRDA	Watershed and social mobilization



## Managing upstream and downstream impacts (3.16 & 3.17)

### Performance of Supplier and Procedure for Monitoring

The Procedure for monitoring contractor/supplier compliance with various statutes & management systems is given in Table 3.15

**Table 3.15: Suppliers Performance Evaluation**

Stage of monitoring	Compliance to various statutes	Frequency
At vendor registration	Sales Tax Registration, Number (State and Central), Provident Fund Code (for all service providers), Excise Registration Number, PAN Number, Employees State Insurance. SA-8000, ISO-14001, OHSAS-18001 compliance	At registration stage for vendors (both for suppliers and contractors)
While dealing with Tata Steel	<p>§ Vehicle registration papers, road tax papers, driving license for drivers and pollution under check certificate.</p> <p>§ Non-submission of Excise Duty Gate Passes.</p> <p>§ Specific cases of violation as pointed out by Provident Fund Commissioner, Income Tax Authorities, Sales Tax Authorities and Excise Authorities, Police, etc.</p> <p>§ Checking all the cases, all the time and for all vendors.</p> <p>§ Deducting from pending bills/ running bills for non-submission of ED gate pass.</p>	<p>§ Random checks by Security Departments for vehicles plying to and from the Steel Works.</p> <p>§ Deduction by accounts for specific cases.</p> <p>§ Details furnished on case-to-case basis on demand.</p> <p>§ Handled only as exceptions</p> <p>§ At invoice verification stage.</p>

### Product & Services Stewardship Initiatives

All units of Tata Steel are certified to ISO-9000, ISO-14001 and the main steel works at Jamshedpur and Sukinda Mines are certified to SA-8000. Life Cycle Assessment is carried out from cradle to gate (from mining to Hot Rolled coils) to systematically analyze the inputs and outputs, which can have adverse impact on environment and society. Targets are set as a part of annual business planning to continually improve the environmental and social impacts of our products, services and activities through better operating practices and technological intervention. In the downstream operations (supply of steel to stock yard and customers), Tata Steel recycles the wooden and structural supports used during shipment.

### Customer Satisfaction

Key processes for determining satisfaction of customers and building relationships for retention are done through "Manage Customer Accounts" and "Measure Customer Satisfaction" processes. Specific customer acquisition plans are drawn up on an annual basis during Annual Business Plan formulation, which is reviewed periodically. The determination of customer satisfaction is done segment-wise using products/ service attributes as parameters. This is achieved by conducting annual surveys through an independent surveyor. Customer complaints, if any, are handled and resolved expeditiously through a well-defined process.

The initiative on Customer Value Management focuses on adding value through long term collaborative partnerships with identified customers. The criteria for identifying key customers for Customer Value Management include Position on Product Portfolio Matrix, Impact potential, Nature of relationship (maturity, longevity of business, etc) cultural fit and strategic alignment.

There are no regulations on product information and labeling other than the standards on physical dimensions and chemical composition on various products manufactured by Tata Steel. Test certificates are issued at the time of delivery to the customer. No instance of non-compliance with regulations concerning product information and labeling, including any penalties or fines assessed for these breaches occurred in the reporting period.

### Major changes during the reporting period (3.18)

The details of mergers/acquisition/closures are furnished in Section-II under Section-2.14.

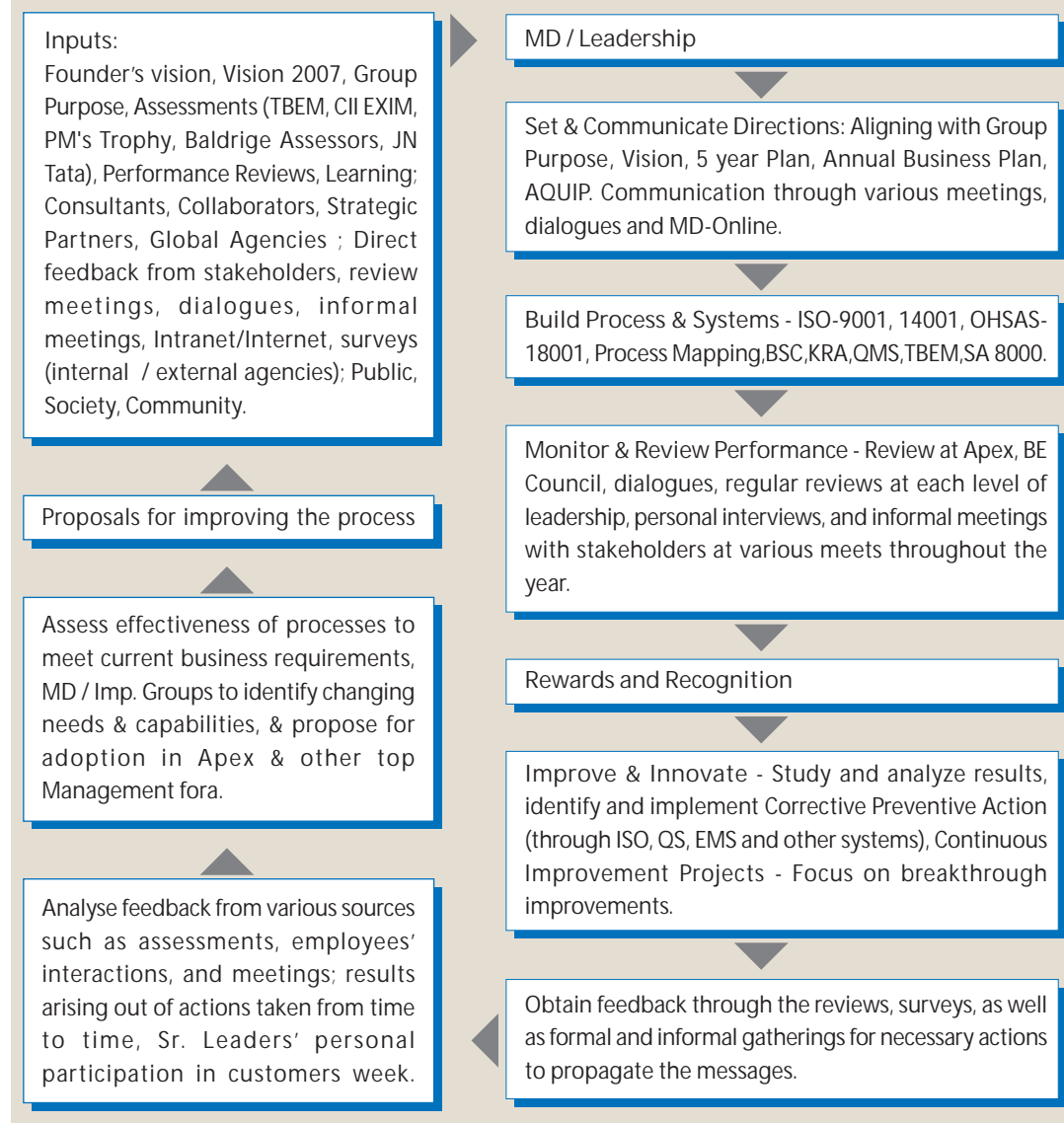
### Programmes & Initiatives towards sustainability at a glance (3.19)

#### Prioritization, target setting & senior management review

The management leadership prioritizes the concerns of stakeholders based on current business needs, market situation and the need to improve the quality of life of the "communities Tata Steel serves." The targets are set based on the historical data, technological and financial constraints and the industry benchmark as shown in Figure-3.3.



Figure-3.3: Tata Steel Leadership Planning Process



### Communication Systems

The principal communication channel is the Quality Management System and Environmental Management System of the organization. There is a four-tier review mechanism/process as below;

- § Apex Business Council level review – once in six months;
- § Business Excellence Corporate Council – once in three months;
- § Business Excellence Council – once in two months;
- § Departmental/Divisional Councils – every month.

The objectives and targets against economic, environmental and social performance form part of departmental key performance measures that are reviewed at all three levels as per the frequency given above. The key performance measures of the department are further cascaded down to individuals in the form of Key Result Areas that become the responsibility of the individuals. The outcomes of the review process are communicated to the employees at various forums like JDC, JWC, JWQC & APEX meetings. In-house publications such as Tisco Samachar, Tisco News, Supervisors' Newsletter, Talmel / Khasbat and the Intranet website are used for extensive communication. On the 1st Monday of every month, the MD addresses all the employees of the Company through the Intranet enabled videoconferencing and webcast facility MD ONLINE. This gives every employee of the Company the opportunity to ask questions and seek clarifications on issues related to sustainable growth and employee welfare.



## Management systems and major programme for performance improvement

The management systems essentially comprise design, deployment, review and improvement of the twelve key enterprise processes. Some of the sub-processes and programs include:

### Processes to assure business performance:

- § Design of products/services – the design of products/services is driven by customers needs as well as social and environmental considerations.
- § Design of production and delivery processes – the design of production and delivery processes are based on the Technical Delivery Condition, which are translated and documented in specific process charts.
- § Co-ordination – These processes are coordinated by the Customer Service Department (CSD), which interfaces between Marketing & Sales and the Steel Works.

Tata Steel has embarked on the journey of *Viable Vision* with Goldratt Consulting Limited (GCL). Viable Vision program aims at achieving real breakthrough improvements in terms of both top line & bottom line results which were so far beyond the imagination of anyone. This program is based on the principles of Theory of Constraints (TOC) developed by Dr Eliyahu M. Goldratt.

On 1st of June, 2005, the Viable Vision contract has been signed by Mr. B. Muthuraman, MD, Tata Steel and Dr. Eli Goldratt, Goldratt Consulting Ltd (GCL).

The viable vision program has two major components (i) a challenging vision which questions all existing assumptions and (ii) viability of achieving that vision. This program tries to devise a business strategy aimed at increasing sales and profitability through focusing on the market as the constraint. This strategy is backed up by tactics enabling it to leverage service levels (value sales), increased supply chain stability (reduced waste and inventory) and economy of scale (blue print for expansion ramp up) through capitalizing on the fact that we currently produce to what the market wants and will change to produce to what the market really needs.

With the implementation of viable vision program Tata Steel wants to achieve new heights of performance excellence, which was never dreamt of.

### Process performance:

- § Institutionalizing the Daily Management initiative to ensure predictability and consistency in operations.
- § Daily collection and analysis of data is done to ensure product quality and consistency.
- § Process consistency is also ensured through ISO-9000, TS-16949 and TS-13001 Quality Systems.
- § Learning acquired in one area is shared with and deployed in other areas as well.

### Human Resource focus:

The HR processes have improved performance orientation and have been further aligned and integrated with strategic objectives. Tata Steel continuously injects fresh talent, from business schools and technical institutions into the organization through its cadre based recruitment schemes in order to retain its cosmopolitan nature. Human Resource Management lays emphasis on:

- § Institutionalization of the concept of Total Customer Satisfaction, Internal Customers, and Supply Chains across the organization through MOU's between suppliers and key customers.
- § Continuous improvement is targeted through employee involvement in cross-functional teams, Quality Circles; fully autonomous profit centres. These are examples of organization wide empowerment.
- § Flexibility and rapid response is achieved through multi-skilling, cluster manning, Business Process Re-engineering of supply chain, a flatter organizational structure and innovative reward and compensation schemes.
- § Trade Unions are engaged in decision making at all levels from top management to shop floor.

### Employee development & training

- § Safety is a high priority area. To achieve world-class performance in safety, the Company has appointed M/s. DuPont Safety Services as consultants.
- § The Technical Education Advisory Committee guides employee development and training in line with the strategic goals of the Company and its long-term objectives. The in-house training centers (Technical Institute & Management Development Center) provide the majority of the training programs.
- § Employees are also deputed to other organizations and training centers in the country and abroad for specialized training.
- § Officers are trained to become business managers through special general management programs (e.g. CEDEP, France).

For further details on employees' development & training, please refer to LA9, LA16 & LA17 under Section-VI.

### Creating an atmosphere to help achieve a world-class workforce:

- § A variety of compensation and recognition systems such as special increments, Person(s) of the Month and Quality awards have been instituted.
- § Numerous state-of-the-art communication channels enable interaction and information / skill sharing across the organization.
- § Employees are continuously educated on preventive health care and hygiene, alcohol and drug abuse, HIV & AIDS.
- § Occupational Health Services besides creating awareness on occupational hazards also conduct general health check-ups. Health check-ups were given to all contractors' labor working in hazardous areas as part of the SA 8000 implementation.
- § To enhance employee motivation and satisfaction a number of facilities are provided by the Company, such as subsidized accommodation, subsidized electricity, free water, free medical treatment, free schools for wards, recreational clubs, fair price shops, etc.

### Responsibility towards the public / community:

Tata Steel, in keeping with the Group Purpose, its commitment to various codes and articulated policy position incorporates the following as central to its social responsibility:

- § Meeting regulatory and legal norms.
- § Ethical behavior is promoted through regular communication and commitment to the Tata Code of Conduct.
- § Social audits are conducted periodically to ascertain the effect of our products/processes and services on society followed by corrective actions.
- § ISO 9001, ISO 14001, OSHAS 18001, SA-8000 and CSMS are used to develop management systems for aspects that affect business.
- § Strengthening and supporting the community in a number of ways like maintaining the city of Jamshedpur, providing free medical treatment to employees and at nominal cost to non-employees at Tata Main Hospital, organizing eye camps, family planning, immunization and other camps, encouraging sports and youth development and participating in social programs in the villages. Details of the activities related to social responsibility and community support are given in Table-3.16.

**Table 3.16 : Activities for Community Support**

Type	Communities Impacted	Organizational Support
Health Care	Citizens of Jamshedpur and adjoining area	740 bed hospital with specialized burn care unit; Allied hospitals - nine dispensaries, Cancer hospital with MRI, 1 Blood Bank, 2 De-addiction centers; 5 Homeopathic Clinics; Public Health Services; Quality drinking water; AIDS awareness programme
	Rural Communities in and around Operations	Outreach services through mobile and community clinics; Family welfare programmes; Tuberculosis education, Immunization services; Safe drinking water; Low cost sanitation; Disability management; AIDS awareness programme
Educational Support	School children in Jamshedpur and 60 villages in Jharkhand and Orissa	11 schools run by Jusco at Jamshedpur; Liberal assistance to other schools. More than 200 libraries in areas of operations; Millennium Scholarship / VG Gopal scholarship for meritorious students; Financial assistance to SC/ST meritorious students; Coaching for entry into administrative / technical / computer education; Internship training for MBA/ Engineering /Medical students
Training for Gainful Employment	Population of Jamshedpur and Rural communities around us	Trade apprentice coaching and training at SNTI; Training of rural women population on specific trades; Computer Education; Traditional Birth attendant training for rural girls. Networking with Govt. and Non-Govt. training institutes such as Rashtriya Karigar Panchayat, Indo-Danish Tool Room, Ramkrishna Mission.

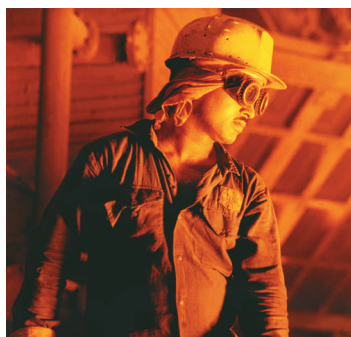


Type	Communities Impacted	Organizational Support
Promoting Economic Growth	Business, Community, Rural Population	Infrastructure development in Jamshedpur/ Adityapur; Development / support of local vendors; Procurement from social organizations; Agriculture extension/ skill upgradation; Micro-financing-Women Focused; Providing Market linkages; Organizing Gram Shree Mela & other trade fairs.
Sports & Adventure	Citizens of Jamshedpur, Rural Talents, Nation	Setting up of sports infrastructure; three state-of-the-art stadiums at Jamshedpur and three out-locations; eight training centers and academies; Flying Club / Horse Riding School / Rock Climbing/ river rafting/ parasailing; Corporate sponsorship of sporting events, Adventure Foundation, Football, Archery and Athletics Academies.
Civic Amenities	Citizens of Jamshedpur and employees of outlocations	Development and maintenance of civic amenities; 524 kilometers of roads; 35.5 M gallons of water supplied daily; 17 large & small parks maintained; children's entertainment park; Zoological Garden; club houses in all residential complexes; Emergency Fire Services.
Promoting Art & Culture	Local Communities	Establishment of Tribal Culture Center; Jamshedpur School of Arts; Corporate sponsorship to traditional and contemporary cultural events.
Professional society membership	SPPE, BIS, JMA, AIWC, IIM, XLRI, CII, FICCI, ASSOCHAM, ICC	Tata Steel's leadership team contributes to Nation building by taking on leadership roles in CII, IIM & XLRI, etc. Corporate sponsorship and Associations. Center for Excellence created for the much needed business transaction facility.
Disaster relief	Communities affected by disasters	Tata Relief Committee instituted to respond and alleviate large-scale suffering of people owing to natural calamities.

#### Environment & Health related processes

Tata Steel has adopted the Environmental Management System (ISO-14001), Occupational Health & Safety Management Safety (OHSAS-18001) & Social Responsibility Management System (SA-8000) to manage its Environment, Health & Safety (EHS) effectiveness and performance.

Tata Steel has improved its compliance with respect to Safety and environmental requirements of the countries to which it exports products. It has availed the services of the world-renowned company SGS India Limited to oversee export shipments. Risks associated with current and future products are investigated through R&D and actions are taken to minimize or eliminate the same at the product design stage itself. Future products are evaluated vis-à-vis public concerns. Public concerns associated with new projects are addressed in the Risk Analysis done for each project. To assess the risks to society and environment and to incorporate sustainability concerns in corporate strategy, Tata Steel has undertaken Life Cycle Assessment (LCA) under the aegis of the Ministry of Environment and Forests. Under this project, MoEF in collaboration with the International Iron & Steel Institute had initiated Life Cycle Assessments in 3 Steel Plants in India i.e. Tata Steel, Bhilai Steel Plant & Vizag Steel Plant. The study focused on environmental burdens of steel making starting from mining to manufacture of steel up to the gate of the factory. Furthermore, a study on the "Carrying Capacity" of Jamshedpur has been carried out by NEERI in the year 2000, which serves as a blueprint for environment friendly development of this region.





## Approach towards Social Development

- § Leadership & Policy Support: The management has adopted the Article of Association on social responsibility. The Company has a Social Accountability Policy and a Corporate Social Responsibility Policy, which were released in 2003.
- § Strategy on Corporate Social Responsibility: The Company has annual programs as per the Tata Council for Community Initiatives (TCCI) Guidelines. The Company has a matrix of its competencies stating the exact opportunities for action.
- § Allocating resources & system of accounting: The Company recognizes that social expenditure is a developmental cost and records it under a separate account head. Social expenses are distinct from employee welfare.
- § Assigning key responsibilities: The management has key persons deployed for this work and its management representative has annual goals by means of KRAs.
- § Communication strategy: To keep employees and the public at large informed about the Company's work on social responsibility, the Company publishes its reports through newsletters, in-house magazines, its website and the Directors' Annual Report.
- § Volunteering: The Company encourages employees to volunteer for social work.
- § Documentation: The Company documents its work methodically.

Tata Steel subscribes to Tata Council for Community Initiatives guidelines. The declaration of the Council on social responsibility made on 14.12.99 is presented below:

- § The community is central to the core values we adhere to in the Tata Group.
- § Tata Community programs aim at building trust and improving the quality of life.
- § Tata programs facilitate sustainable change.
- § We believe that the community gives us valuable opportunities to learn.
- § Commitment to social responsibility is explicit in every Tata Company.
- § We network through our core competence to empower communities.
- § Tata volunteers are committed to the spirit of service.

## Internal & External Audit Systems

Internal and external audits are carried out at predefined intervals regularly. While most of the audits are carried out half-yearly or yearly, the Social Audit is conducted once in ten years. The management structure and the agencies that carry out such audits are described in Section 3.6.

## Management systems certification status (3.20)

Most of the units of Tata Steel are certified to ISO-14001 and OHSAS-18001. Units, which cater to the requirements of external customers like Finishing Mills are certified to ISO-9001-2000 and other departments/sections, (upstream production & service units) which have internal customer focus, are certified to Tata Steel Standard TS-13001, which is equivalent to ISO-9001. The units, which cater to the Auto industry requirements e.g. Flat Products and Bearings, are certified to TS-16949. In addition, the Steel Works and Sukinda Mines are certified to SA-8000.



## SECTION - IV

### ECONOMIC PERFORMANCE

GRI INDICATOR	DESCRIPTION	PAGE NO.
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<b>ADDITIONAL</b>		
<b>Customers &amp; Suppliers</b>		45
EC1	Net sales	45
EC2	Market spread	48
<b>Suppliers</b>		48
EC3	Cost of goods, materials and services purchased	48
EC4	Contracts paid in accordance with agreed terms, excluding agreed penalty arrangements	48
EC11	Our Suppliers	48
<b>Employees</b>		49
EC5	Total payroll and benefits	49
<b>Providers of Capital</b>		49
EC6	Distribution to providers of capital broken down by interest on debts and borrowings, and dividends on all classes of shares with any arrears of preferred dividends to be disclosed	49
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## CUSTOMERS & SUPPLIERS

### Net Sales (EC1)

Financial performance and Balance Sheet of the Company is indicated in Table-4.1 & 4.2 respectively

Table-4.1: Financial Performance

	Rupees Million (05-06)	Rupees Million (04-05)
a) Net Sales Income	151393.9	144989.5
b) Total Expenditure	92078.8	84535.9
c) Operating Profit	59315.1	60453.6
d) Add: Dividend and Other Income	2547.6	1480.3
e) Profit before Interest, Depreciation, Exceptional items & Taxes	61862.7	61933.9
f) Less: Interest	1184.4	1868.0
g) Profit before Depreciation, Exceptional items and Taxes	60678.3	60065.9
h) Less: Depreciation	7751.0	6187.8
i) Profit before Exceptional items & Taxes	52927.3	53878.1
j) Less: Exceptional items	527.7	905.3
k) Profit before Taxes	52399.6	52972.8
l) Less: Provision for Current Taxation	15790.0	18336.6
m) Less: Provision for Deferred Taxation	1275.8	(105.4)
n) Less: Provision for Fringe Benefits Tax	270.0	-
o) Profit after Taxes	35063.8	34741.6
p) Add: Balance brought forward from the previous year	17902.1	6374.2
q) Balance	52965.9	41115.8
Which the Directors have appropriated as under to:		
i) Proposed Dividend	7195.1	7195.1
ii) Tax on Dividend	1009.2	1018.6
iii) General Reserve	15000.0	15000.0
TOTAL	23204.3	23213.7
Leaving a balance to be carried forward	29761.6	17902.1



**Table-4.2: Balance Sheet**

<b>FUNDS EMPLOYED</b>		<b>Rs. Million 31.03.06</b>	<b>Rs. Million 31.3.06</b>	<b>Rs. Million 31.03.05</b>
01	Share capital	5536.7		5536.7
02	Reserves and surplus	92016.3		65062.5
03	Total shareholders' funds		97553.0	70599.2
04	Loans			
	a) Secured	21917.4		24681.8
	b) Unsecured	3244.1		2715.2
	c) Total Loans		25161.5	27397.0
05	Deferred tax liability (net)		9570.0	8294.2
06	Provision for employee separation compensation		13887.1	15142.6
07	Total funds employed		<u>146171.6</u>	<u>121433.0</u>
<b>APPLICATION OF FUNDS</b>				
08	Fixed assets			
	a) Gross Block	165649.0		150552.5
	b) Less – Impairment	941.9		975.2
	c) Less – Depreciation	66056.6		58454.9
	d) Net Block		98650.5	91122.4
09	Investments		40699.6	24326.5
10	A) Current assets			
	a) Stores and spares parts	4426.6		3490.5
	b) Stock-in-trade	17320.9		15233.4
	c) Sundry debtors	5394.0		5818.2
	d) Interest accrued on investments	2.0		2.0
	e) Cash and Bank balance	<u>2883.9</u>		<u>2467.2</u>
		30027.4		27011.4
	B) Loans and advances	<u>12678.6</u>		<u>13824.4</u>
		42376.0		40835.8
11	Less: current liabilities and provisions			
	a) Current Liabilities	28359.9		26898.3
	b) Provisions	<u>9727.3</u>		<u>10101.6</u>
		38087.2		36999.9
12	Net current assets		4288.8	3835.9
13	Miscellaneous expenditure (to the extent not written off or adjusted) Employee Separation Compensation		2532.7	2148.2
14	<b>Total assets (Net) / Contingent Liabilities</b>		<u>146171.6</u>	<u>121433.0</u>

Earnings and distributions of revenue during the financial year 05-06 are depicted in Figure 4.1 & 4.2 respectively.

Figure 4.1 :Earnings 05-06 (Rupees Million)

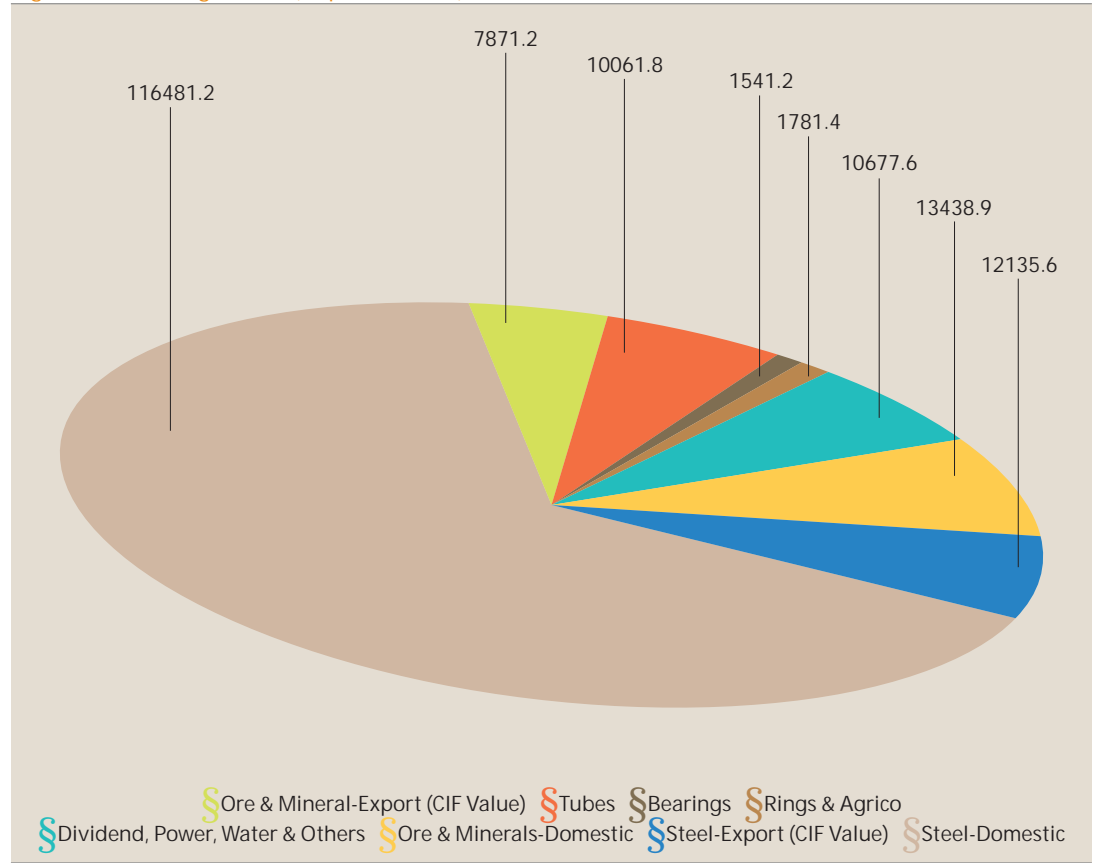
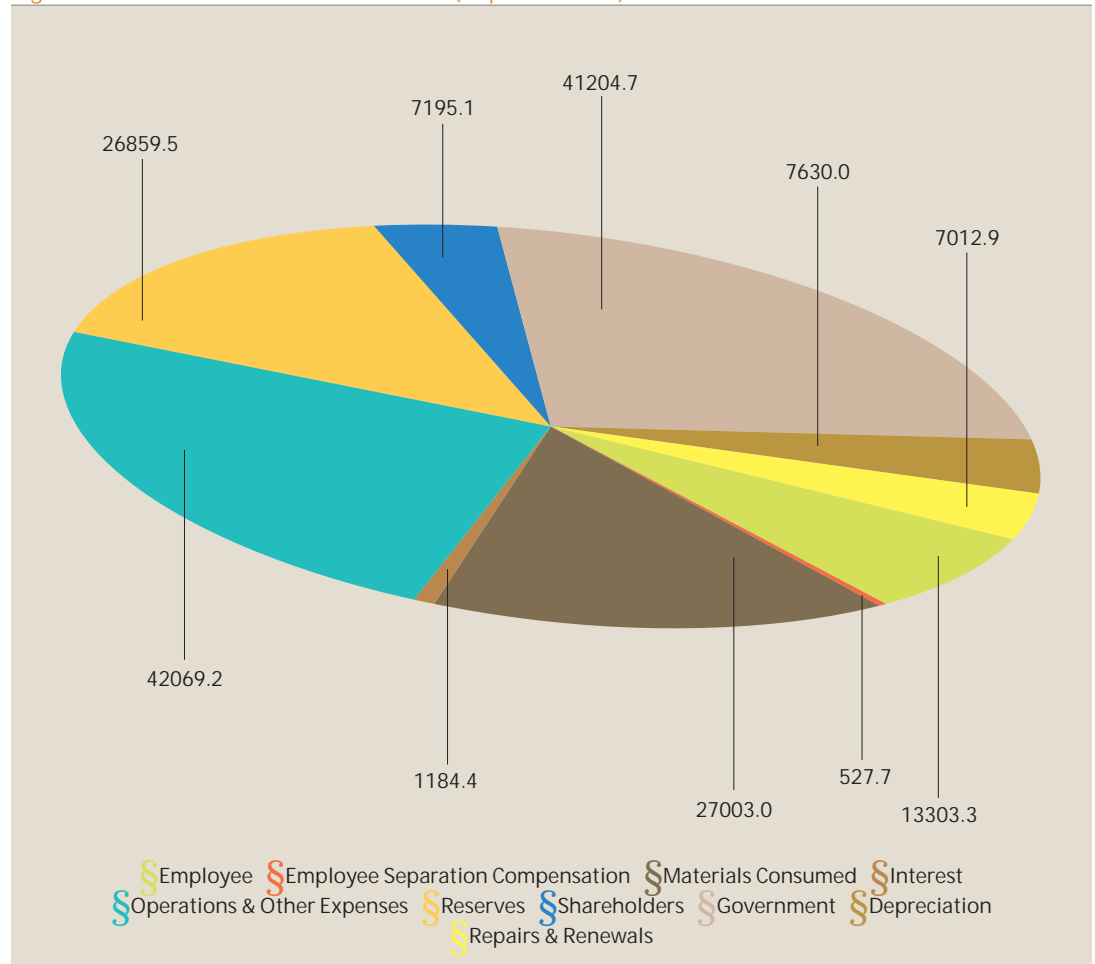


Figure 4.2 :Distribution of Revenue 05-06 (Rupees Million)



## Performance of TIS Group Companies (FY 05-06)

Table-4.3: TIS Group details

Name of the company	% share held by Tata Steel	Original cost of investment (Rs. Million)	Goodwill (capital reserve) (Rs. Million)	Accumulated profit (loss) for the year ended 31.03.06 (Rs. Million)	Carrying amount of investments on 31.03.06 (Rs. Million)
Jamshedpur Injection Powder Ltd.	30.00	33.8	0.1	74.0	107.8
NatSteel Vina Co. Ltd.	33.90	12000	-	-	-
Southern NatSteel (Xiamen) Ltd.	50.00	-	-	-	-
Southern Steel Berhad	27.05	1001.3	-	118.4	882.9
Tata Metaliks Limited	47.65	161.5	32.9	556.2	717.7
Tata Sponge Iron Limited	39.74	72.0	62.9	599.9	671.9
Tayo Rolls Limited	36.53	33.6	0.3	100.3	133.9
Tinplate Company of India Ltd.	31.89	300.9	-	253.2	47.7
TKM Overseas Limited	49.00	11.3	-	1.5	12.8
TRF Limited	36.32	49.6	5.4	116.58	166.1

### Market Spread (EC2)

The market spread in India and Outside for revenue generation is indicated in Table 4.4. The break-up of regions within India and outside India is not compiled by the organization at present. This information will be furnished in subsequent reports.

Table-4.4: Geographical Revenue Generation

Geographical Market	04-05 (Rs. Million)	05-06 (Rs. Million)
India	121878.2	131603.5
Outside India	23111.3	19790.4
TOTAL	144989.5	151393.9

### Cost of goods, materials and services purchased (EC3)

Rs. 80744 Million in 05-06

(Rs.76569 Million in 04-05)

### Contracts paid in accordance with agreed terms, excluding agreed penalty arrangements (EC4)

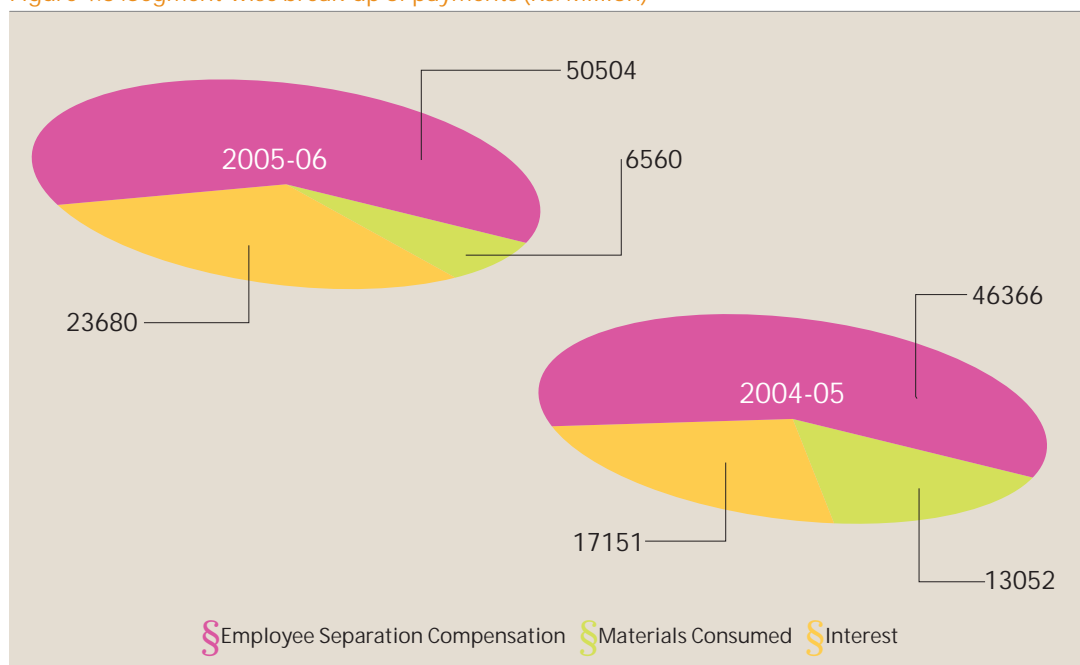
100% of the contracts were paid in accordance with the contract terms during the reporting year.

### Our Suppliers (EC11)

A total sum of Rs. 80744 Million was paid to the suppliers and service providers during the reporting period as against Rs.76569 Million in 04-05. The break-up of payment segment-wise is given in Figure-4.3. Five top Vendors from whom revenue procurement were done during FY06 are as follows;

- § Tata International (44.68%)
- § Tata Refractories (3.07%)
- § Tata (UAE) FZE (2.51%)
- § ITW India Ltd (2.14%)
- § Tata South East Asia (1.85%)

Figure 4.3 :Segment-wise break-up of payments (Rs. Million)



## EMPLOYEES

### Total Payroll and benefits (EC5)

- \* Wages & Benefits - Rs.13515.1 Million in 05-06 (Rs.12910 Million in 04-05)
- \* Early Separation Scheme - Rs. 528 Million in 05-06 (Rs. 1190 Million in 04-05)

## PROVIDERS OF CAPITAL

Distribution to providers of capital broken down by interest on debts and borrowings, and dividends on all classes of shares with any arrears of preferred dividends to be disclosed (EC6)

1. Interest on debts and borrowings Rs.1184 Million against Rs.1868 Million during 04-05.
2. Dividends - Rs. 8204 Million against Rs. 8214 Million during 04-05.

The Board has declared a dividend on Ordinary Share @ 130% (Rs.13.0 per share) for the year ended 31.03.06. The dividend was paid on 553,472,856 Ordinary Shares at Rs.13.0 per share.

### Retained earnings at end of reporting period (EC7)

Retained earnings are given in Table 4.5.

Table-4.5: Retained Earnings

	04-05 (Rs. Million)	05-06 (Rs. Million)
Retained earnings	32725	34610
Increase in retained earnings	13184	1885

## PUBLIC SECTOR

### Taxes paid to the Government (EC8)

The total sum of taxes like sales tax, excise duty, wealth tax, etc. paid by the organization during the reporting period is Rs. 37390 Million against Rs. 32010 Million during 04-05. A break-up by region is not available.

### Subsidies received (EC9)

The organization has not received any government subsidy, tax break, duty drawback, government benefits, etc. during the reporting period.

### Donations to community, civil society and other groups (EC10)

The total donations to the community, civil society and other groups during the reporting period were – Rs.75.72 Million against Rs.48.72 Million during 04-05.

### Spent on community infrastructure development (EC12)

In the year gone by, it has rendered service to victims of the Tsunami and the devastating floods in Orissa. Through the Tata Relief Committee, the Company provided relief to over 10, 000 families by setting up relief camps and undertaking rehabilitation and reconstruction projects including building 100 'in-situ' houses in the fishermen's colony and 800 housing units in Nagapattinam. Tata Steel in coordination with the District Administration responded with immediate relief services in four blocks in the Jajpur District of Orissa when 2400 families were affected by heavy rainfall in the area.

## INDIRECT ECONOMIC IMPACT

### Indirect economic impact of business (EC13)

Tata Steel has not made any attempt to map and value its economic externalities, but recognizes that by virtue of the nature of its operations there are several economic externalities. Tata Steel has created a township and other allied infrastructure, which have created redistribution of income and benefits. Although there is no established methodology to capture the indirect impact, there are several institutions and organizations in and around Tata Steel supported by the Company both in terms of skilled manpower (employees as members, executives and directors), sourcing of goods and services and also financial support. These organizations employ thousands of people who are indirectly benefited by the organization's products and services. Such organizations include Small Scale Industries, Rotary Clubs of Jamshedpur, Lions Clubs of Jamshedpur, Artificial Limb Fitting Centre, Arogya Bhawan, 2 Hospitals, 10 English Medium Public Schools, Transport Nagar, Jamshedpur Sports Association, Tata Steel Zoological Society (TSZS), Tata Steel Rural Development Society (TSRDS), Tribal Cultural Society (TCS), Credit Societies, Pay Roll Savings, RD Tata Technical Institute, etc.



## OTHER DETAILS

### Research & Development

**Specific areas in which R&D was carried out by the Company-** Research was carried out in the areas of raw materials including iron ore, coal, coke, ferro chrome and titania, sinter quality and blast furnace productivity, product development, process improvement, energy utilization, energy conservation and waste utilization. The expenditure on R&D is described in Table 4.6.

**Table-4.6: Expenditure on R&D**

Expenditure on R&D (Rs. Million)	(04-05)	(05-06)
a) Capital	27.4	41.4
b) Recurring	309.8	208.4
c) Total	337.2	249.8

**Benefits derived-** Some of the important benefits from R&D projects are listed below;

- § A new technology was developed in collaboration with Central Leather Research Institute, Chennai, for reducing hexavalent chromium to parts per billion levels in chrome or concentrate. This will ensure that the Company's product meets stringent international specifications on hexavalent chromium. A patent has been filed on the new process.
- § Galvanized coated steels have been established for fuel tank application in the automotive industry. This product replaces imported tem coated steels and has been accepted by a number of auto manufacturers such as Bajaj Auto Limited, Hero Honda Motors Limited, Honda Motorcycles and Scooters India Private Ltd., TVS Limited, etc.
- § Corrosion resistant hollow structural tubes have been developed and launched under the "STRUCTURA" brand, which have double the corrosion resistance of ordinary tubes.
- § A new process has been established for the production of hydrogen gas in using waste heat of steel making slag. A patent has been filed for this process.
- § A new formulation has been developed and implemented in collaboration with IIT Kharagpur for rubber rolls used in various sections of the cold rolling mill. The life of these rolls has increased from an average of around 10 days to currently in excess of 100 days. This exceeds Nippon Steel Corporation's performance of 90 days.
- § Besides the above, a large number of projects were completed, many of which have resulted in benefits in terms of increased productivity (such as reducing reheating time of slabs of interstitial free grade of steels), reduced cost and enhanced product quality with customer support.

### Future plan of action –

- § Establish flow sheet and design equipment for 1.5% Al<sub>2</sub>O<sub>3</sub> in fines.
- § Establish 8% ash in coal with high yield at pilot scale.
- § Establish the use of 7-holes lance in steel making for better dephosphorisation.
- § Reduce slag volume in blast furnace.
- § Pilot scale demonstration of high strength (>1000 Mpa yield strength), high ductility (50% elongation) steel for automotive applications.
- § Reduce electricity consumption in the production of ferro chrome.
- § Commercialize use of LD slag as soil conditioner.

### Status of Patents & Copyrights (05-06)

- § Patents sealed - 44 Nos.
- § Copyrights sealed - Nil
- § Patent applications in Process - 256 Nos.
- § Copyright applications in Process – Nil
- § TOTAL – 300 Nos.

### Technology Absorption, Adaptation and Innovation

#### 1. Efforts made:

- Steel Making / Slag Casting Area
- § Vessel lining-One LD vessel at LD#2&SC was tried with Mag-Carbon lining resulting in doubling of the vessel life from 1650 heats (with Tar-Dolo lining) to 3284 heats.
- § Ladle lining-Use of Alumina-Magnesia-Carbon brick in steel ladle has resulted in ladle life improvement from 70 heats (with Tar-Dolo brick) to 82 heats.
- § Vanadium addition-Introduction of Nitrovan-Vanadium as a substitute of Fe-V has helped in reduction of Vanadium requirement by 20%.
- § Caster productivity-Modification of primary and secondary cooling in two curved mould casters (Caster B&C) has resulted in about 15% increase in productivity.



### Hot Strip Mill

- § Auto surface inspection-VAI Surface Inspection System for on-line defect monitoring of HR Coils has been installed and is being stabilized.
- § Coil conveyer line-Addition of new coil conveying line at C-1 Yard has resulted in minimized multiple handling.
- § Paint marking machine-Installation of on-line Robo-Tech Paint Marking machine of Tebulo make has improved HR Coil identification.
- § DWH-Upgrading of HSM Data Warehouse is being carried out with respect to capacity and software.

### Cold Rolling Mill

- § RCL-1-Entry and exit mandrels have been fabricated by TGS to prevent coil slip problem.
- § RCL-1 entry-Coil loading sequence system has been automated fully.
- § CPL-Additional cradle rolls have been installed in two stations for better handling.
- § System upgradation in dispatch section-Intelligent zoning system has been developed by CTTS, for the mapping of entire dispatch yard and easy staking of coils.
- § Wagon loading-After modification, coil tracking and wagon loading is now completely automatic. A Patent has been filed for this application.
- § CGL-1-The problem of premature pot failure due to fast erosion of pot surface thereby leading to production loss has been overcome by incorporation of a Stainless Steel Pot (AISI316L).
- § CGL-2-Process improvements in the heating and drying system of CGL-2 have resulted in conservation of steam. Laser technology for air-knife distance adjustment in CGL-2 has resulted in conservation of zinc/material inputs.

### LD Shop#1

- § Heat size increased from 130 to 150 tons.
- § 93% heats routed through ladle furnace after LF2 commissioning.
- § Casting of 150mm sq billets introduced.
- § High speed casting at CC2-more than 3.5 m/min.
- § Calibrated Nozzle Changer introduced.
- § Casting stabilization of stick electrode grades through LF to attain low phosphorus.
- § Increased % of hot metal from torpedoes to 30%.
- § New porous plug introduced in ladles.
- § High low rate oxygen blowing lances tried in BOF.
- § Multi hole bottom stirring elements introduced.
- § Mag carbon refractory lining in BOF tried.
- § LF root modified to reduce leakage.
- § In-house development of auto blowing of vessel.
- § Installed wire feeder at OLP.
- § BO hood gas analyzer installed.
- § Developed new dummy bar attachment.
- § Modified DRT drive system at CC1.
- § Third drum filter started with in-house modifications.
- § Flux addition system relay logic converted to PLC logic.
- § Modified TOCB hydraulic circuit at CC1.
- § Modified equalizer shaft of TOCB at CC1.
- § Ergonomic fixing of CNC at CC2.

### Merchant Mill

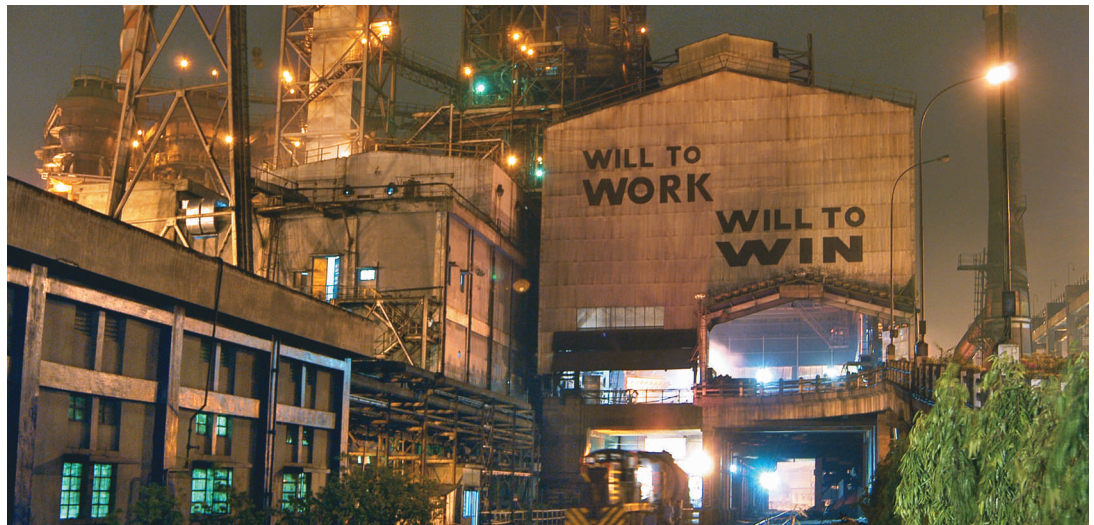
- § Installation of pinch roll to reduce the speed of the back end of the rebars.
- § Introduction of forward cascading of mill stand motors.
- § Upgradation of rotary shear to cut sections above 28mm.

### Wire Rod Mill

- § Mill automation upgradation for reliable operation of shears in the mill.

### New Bar Mill

- § Automated billet yard management system.
- § Walking beam type reheating furnace.
- § Mill configuration having Horizontal-Vertical-Combination rolling stands.
- § Compact housing less stands with multi groove design and fast and accurate pass changing facility.
- § Up-loopers between successive stands in intermediate and finishing stands.
- § Rolling with slitter pass and power slitter for higher throughput rate.
- § TMT cooling system (HYQST arrangement) featuring fully automatic separate cooling controls for each slitted line.



#### "G" Blast Furnace

- § The state-of-the-art rolled Copper staves from GHH and special 3rd generation cast iron NSC staves; make this furnace refractory-less bosh to stack. The technology learnt and adapted with advantage such as consistent surface profile throughout the campaign; increase in campaign life from 10 years to >14 years; reduced chances of build-up and increased furnace availability on account of avoidance of shutdown for gunning.

#### A-F Blast Furnaces

- § "D" Blast Furnace in its 12th campaign has completed 4.0 million tonnes of hot metal throughput, the highest ever since inception. To enhance its campaign tonnage a technique of HEARTH CAPPING AND STACK REPAIRING was adopted during "D" Blast Furnace major shutdown in November '05. The technique reuses the carbon hearth and allows replacement of stack and throat bricks. This technique of repair has added new life to "D" Blast Furnace and it is now ready for another 4.0 million production of hot metal.

#### Sinter Plant

- § Thermo vision camera for thermal imaging and control of uniformity of permeability across the width of the pallet at SP#3; pre-palletizing of Electro Static Precipitator dust for improved permeability at SP#3; measurement of individual raw materials' moisture for green mix moisture control at SP#3; 700 mm bed height of sinter machine at SP#3; LCI drive for 8.4 MW waste gas fan motor at SP#3; 40m span Barrel Reclaimer at RMBB(N).

Technology Absorption, Adaption and Innovation in Tubes Division – The following efforts are made to improve operational efficiency.

- § Tube bundle weight system in PT Finishing – Weight of tube bundles was calculated theoretically before dispatch. Tube weighing system has been installed. Each bundle is weighed and the information is captured on SAP system online. To reduce the project cost, weighing platform has been designed and manufactured in house.
- § Design of roll profile – New tube sizes are required by the customers. For rolling a particular tube size, sets of rolls are used. These roll sets are different of each size of tube. Set of rolls if procured from outside is very costly. Rolls designed in-house and manufactured in Machine Shop for the tube sizes 60mmx40mmx1.6mm for the PT Mill, 60mmx40mmx2.9mm and 115mmx69mmx3.15mm for HFIW Mill.
- § Modified tube oiling system for new CT Mill – Oiling is done on black tubes before dispatch, in-house and manufacturing of oiling system has been done. Designs of nozzles have been changed to avoid clogging of oil/dust. This will help in trouble free operation of the oiling unit.
- § Modernization of compressed air system – Compressed air was generated from age-old Broomwaide compressors. These compressors were maintenance intensive and inefficient. These have been replaced with energy efficient compressors. This will result in generation of compressed air with less power consumption.
- § Modernization of drives in PT Mill – Existing drives of PT mills were old and maintenance intensive. This resulted in frequent breakdown in mills. To overcome this problem and reduce down time, digital drives have been installed in forming mill, sizing mill, leveler, pinch roll of 3" ERW Mill, accumulator. Forming mill, sizing mill of 2" PTM and in normalizing furnaces.

## 2. Benefits

- Efforts have led to improved efficiencies, cost competitiveness and an enhanced product range.

## 3. Particulars of technology imported during the last five years.

Technology imported during the last five years is presented in Table 4.7

**Table-4.7: Technology imported during past five years**

Innovation/Technology	Year of Import / Absorption	Status of Implementation
Utilization of sensible heat from blast furnace hot stove waste gas at "G" Blast Furnace in association with NEDO, Japan	2002	Commissioned
Installation of electromagnetic stirrer and submerged entry nozzle in the billet caster of LD#1 (Concast, Switzerland)	2002	Commissioned
Installation of probes in "G" Blast Furnace to monitor various parameters, carry out intensive R&D activities and thereby acquire in-depth knowledge of in-furnace phenomena (Paul Wurth, Luxembourg)	2002	Commissioned
Electrolytic cleaning line (SMS Demag, Germany)	2003	Commissioned
Upgradation of "G" Blast Furnace (SMS Demag, Germany)	2004	Commissioned
Upgradation of HSM	2004	Commissioned
Upgradation of billet caster-1 at LD#1 (Concast, Zurich)	2004	Commissioned
Ladle furnace-2 at LD#1 (SMS Demag, Germany)	2004	Commissioned
New Rebar Mill (Morgan, USA)	2004	Commissioned
Upgradation of caster at LD#2 (Voiest Alpine, Austria)	2004	Commissioned
Imported design and engineering for hot metal desulphurisation unit at LD#1 (Kuettner GmbH)	2005	Commissioned
Supply of imported engineering for new induced draught fans, electrics & accessories for the LD Converter GCP at LD#1 (Ebara Corporation)	2005	Commissioned
Adequacy checking of BOF converters for augmentation of heat size at LD#2 (SMS Demag, Germany)	2005	Commissioned
Imported design and engineering for upgradation of Caster 2&3 at LD#2 (VAI, Austria)	2005	Commissioned
Imported design and engineering for hot metal desulphurisation unit 2&3 at LD#2 (Kuettner GmbH)	2005	Commissioned
Imported design and engineering for capacity increase of slab reheating furnace nos.1&2 of HSM (Techint)	2005	Commissioned
Supply of design and engineering and training for 150 tph walking beam furnace to Rebar Mill (Bricmont)	2005	Commissioned
Imported design and engineering (Mother Well Bridge-Clayton walker)	2005	Commissioned
Supply of imported design and engineering for LD gas boosters (Howden Power Ltd., UK)	2005	Commissioned
Supply of imported design and drawing for technology control system at HSM (SMS Demag, Germany)	2005	Commissioned
Supply of imported design and drawing for basic level automation at ASM (Alstom, USA)	2005	Commissioned
Supply of imported design and drawing for dual zinc pot at CRM (CMI, Belgium)	2005	Commissioned
Supply of imported design and drawing for BAF, CRM (LOI, Germany)	2005	Commissioned
Supply of imported design and drawing for 4 <sup>th</sup> Stove of "G" BF (Paul Wurth, Italia, Italy)	2006	Under Implementation
Supply of imported design and drawing for "H" BF (Paul Wurth Italia, Italy)	2006	Under Implementation
Supply of imported design and drawing for SP#4 (Outokumpu Technology, Germany)	2006	Under Implementation
Supply of imported design and drawing for LD#2 expansion project (SMS Demag, Germany)	2006	Under Implementation
Supply of imported design and drawings for converter gas cleaning plants in LD Shops#1&2 (SMS Demag, Germany)	2006	Under Implementation

## SECTION - V

### ENVIRONMENTAL PERFORMANCE

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## MATERIALS

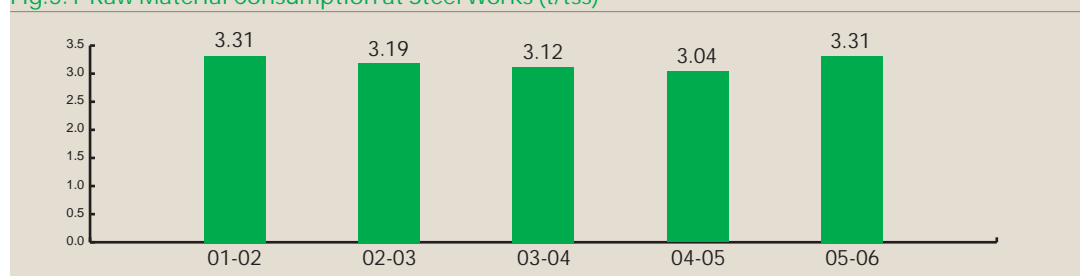
### Materials used other than water (EN1)

Minerals and semi-processed materials used as raw materials in iron and steel making at Jamshedpur Works, except lubricants, are indicated in Table 5.1 and Fig.5.1

**Table 5.1 : Raw Material Consumption**

Raw Material Consumed (Tonnes)	04-05	05-06
Iron Ore	5737011	7807221
Thermal Coal	617204	690227
Coking Coal / Coke	3858290	3982639
Limestone, Dolomite, Pyroxenite, Soapstone & Quartzite	1730234	2216365
Ferro Manganese	45066	23281
Zinc and Zinc Alloys	18763	18039
Spelter, Sulphur, Fluxes, Alloys etc.	488857	235728
Others	4613	20181
Total	12495425	14973500
Saleable Steel Production - tpa	4109002	4524407

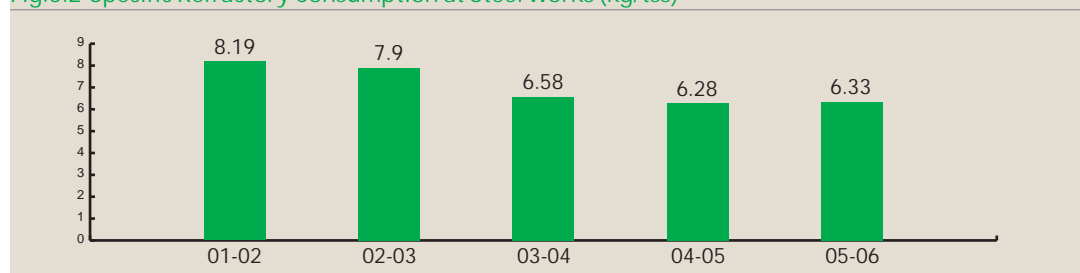
**Fig.5.1-Raw Material Consumption at Steel Works (t/tss)**



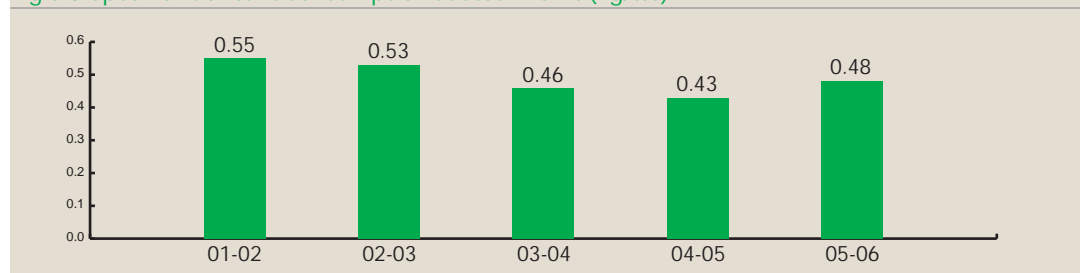
The specific consumption is calculated based on the total tonnage of raw materials divided by saleable steel production. During the year 2005-06, use of semi-processed materials such as Pig Iron and Sponge Iron were reduced considerably. This is one of the reasons for increase in specific raw material consumption for 2005-06 at Steel Works.

Pattern of refractory consumption and lubricant consumption at the Steel Works is given in Fig.5.2 and Fig.5.3 respectively

**Fig.5.2-Specific Refractory Consumption at Steel Works (kg/tss)**



**Fig.5.3-Specific Lubricant Consumption at Steel Works (kg/tss)**



Raw material consumption patterns at West Bokaro and Jharia Collieries are given in Fig.5.4 and Fig.5.5 respectively. Reduction in ash content to <15% in West Bokaro coal had a favourable impact in containing specific raw material consumption.

Fig.5.4-Specific Consumption of Magnetite, Frother & Diesel at West Bokaro (kg/tonne of raw coal)

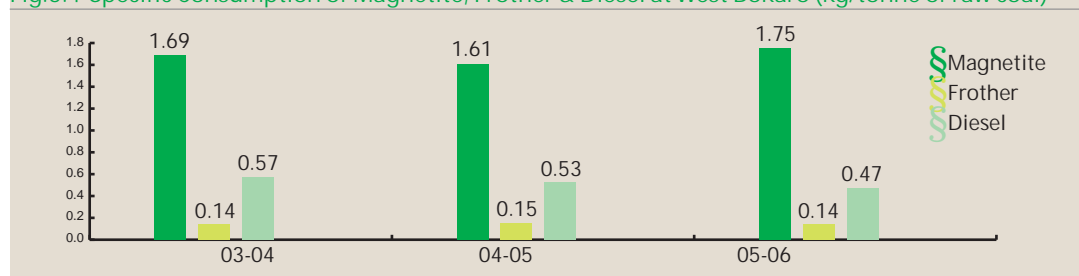
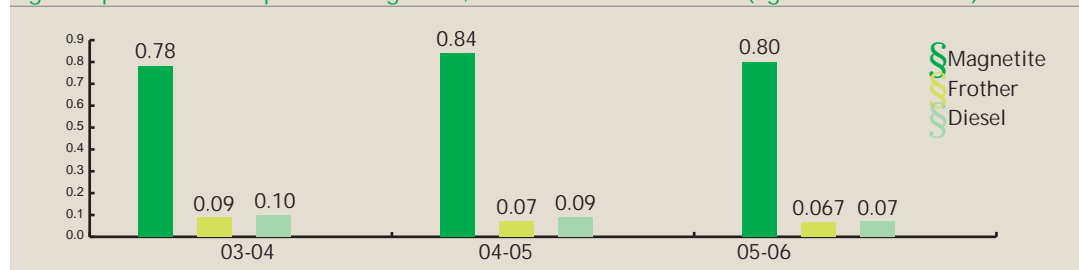


Fig.5.5-Specific Consumption of Magnetite, Frother & Diesel at Jharia (kg/tonne of raw coal)



Raw material consumption and Production of Ferro Manganese and Ferro Chrome from FAMD is indicated in Table 5.2.

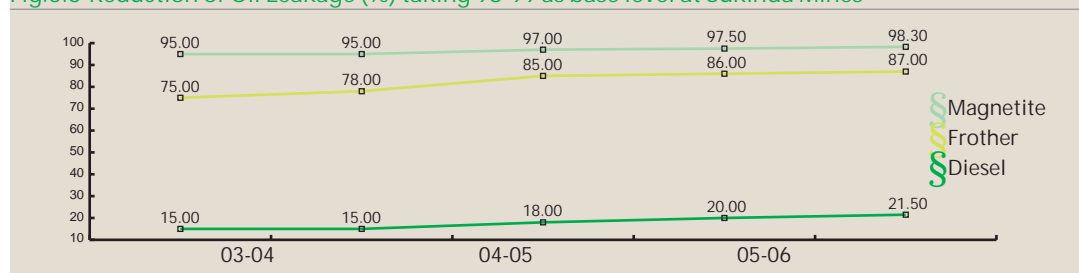
Table 5.2: Raw Material consumption at FAMD

	Ferro Manganese		Ferro Chrome	
	Prod. (t)	Raw Mat. Con. (t)	Prod. (t)	Raw Mat. Con. (t)
04-05	44201	128180	41405	135154
05-06	41243	125850	50025	155152

The Tubes Division used steel supplied from Steel Works. The scrap generated from this Unit is recycled to Steel Works. Even though Tata Steel is vertically integrated, materials consumed in mining operation have not been considered here. Similarly, other consumables and spares used in the mining operations have also not been included.

Fig.5.6 indicates the cascade use of lubricants and recycle of waste oils for energy recovery at Sukinda Mines.

Fig.5.6-Reduction of Oil Leakage (%) taking 98-99 as base level at Sukinda Mines



#### Wastes (from external sources) used (EN2)

The only waste material from an external source that is sometimes used by Tata Steel is the iron/steel scrap purchased from market for Steel Melting Shops. During the year 2005-2006, no scrap was purchased.





## ENERGY

### Energy consumption and their sources (EN3 & EN 4)

Details of energy consumed in Tata Steel are exhibited in Table 5.3.

**Table 5.3: Energy consumption at Tata Steel**

Particulars		04-05		05-06	
		Quantity	Joules (10 <sup>15</sup> )	Quantity	Joules (10 <sup>15</sup> )
<b>Power and Fuel Consumption</b>					
1.	Electricity				
a)	Purchased Units (M.KWH)	1589.83	18.878	1871.27	22.220
b)	Own Generation				
i)	Through Diesel Generator Units (MKWH)	10.11	0.127	12.96	0.163
ii)	Through steam turbine/generator Units (M.KWH)	1025.48	12.881	1018.88	12.798
2.	Coal				
a)	Coking Coal (Million Tonnes)	3.57	101.180	3.65	103.448
b)	Blast Furnace Injection Coal Quantity (Million Tonnes)	0.22	5.527	0.38	9.546
c)	Middling coal & ROM (Million tonnes)	0.62	11.521	0.64	11.892
3.	Furnace oil (Kilo Liters)	10619.16	0.416	11160.68	0.437
4.	Others				
	LDO (Kilo Liters)	6642.53	0.241	7093.81	0.258
	LPG (Tonnes)	2947.16	0.379	3387.25	0.436
	NG (Tonnes)	3120.86	0.118	2823.46	0.106
	Purchased Oxygen (t)	437200	2.063	537561	2.537

Consumption per unit of production is indicated in Table 5.4. The consumption per unit of steel production does not include the energy consumption in mines. The details of Mine energy consumption are furnished separately under EN17. The energy consumption at stockyards and marketing offices has also not been reported, as the same is insignificant.

**Table 5.4: Energy consumption at various units per unit of production**

Particulars	Steel (per tonne)	Tubes (per tonne)	Bearings (per no.)	Ferro Alloys (per tonne)	Rings & Agrico (per no.)	Growth Shop (per tonne)	CRC West (per tonne)	WIRE DIV. (per tonne)
Electricity (KWH)	425.00 (414.00)	96.00 (117.00)	0.72 (0.79)	3829.00 (3828.70)	1.20 (1.19)	813.02 (506.89)	159.97 (158.38)	211.94 (213.34)
Furnace Oil (Liters)	- 0.82 (0.87)	-	-	-	- (-)	16.24 (8.23)	-	23.58 (22.76)
Coking Coal (Tonnes)	(0.87)	-	-	-	-	-	-	-
Others								
Light Diesel Oil (Liters)	0.71 (0.58)	-	-	-	-	-	9.0 (10.84)	8.19 (9.15)
LPG (Kgs)	-	-	-	-	-	-	13.05 (13.42)	9.23 (7.04)
NG (Kgs)	-	-	-	-	-	-	-	25.26 (25.41)

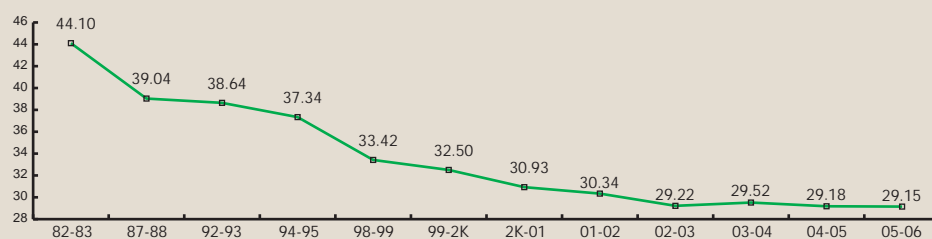
*Note: Figures in brackets are for the year 2004-05 and are modified wherever necessary.*

### Energy efficiency and renewable energy initiatives (EN17)

The Steel Works have integrated iron & steel production facilities at Jamshedpur and its specific energy consumed was 29.15 G. Joule/tonnes of crude steel during 05-06. This is a decrease of 0.103 % over the previous year. The reducing trend of energy consumption per tonne of steel production is depicted in Fig.5.7.



Fig.5.7-Specific Energy Consumption at Steel Works (G. Joule/tcs)



#### Specific Energy Consumption (Steel Works) – Continual Improvement

Tata Steel has initiated actions in a phased manner to improve its energy performance through fuel substitutes, modernization, recovery & reuse of by-product energy. Energy Conservation measures taken are:

- § Augmentation of A-F Blast Furnaces; blast oxygen enrichment system to increase the oxygen supply to A, D & F Blast Furnaces, which helped in increasing the blast furnace productivity and reduction in fuel rate. This system was designed and commissioned to increase the oxygen enrichment supply from 900 tpd to 1250 tpd.
- § Re-engineering of the blast furnace gas network in West Plant area to meet the demand of West Plant boilers and reduce the loss of energy.
- § Modification of stoker fired boilers for by-product gases firing in Boiler#7 of Boiler House#1 to eliminate middling coal firing and utilization of by-product gases.
- § Efficient utilization of by-product gases in the West Plant boilers to reduce middling coal consumption.
- § Improved insulation of steam lines, maintenance practices and re-engineering of process steam line to reduce losses on account of consideration and leakages.
- § External extensive energy audits were carried out in the area of iron and steel making process, steam and power generation and thermal and electrical equipment performance to identify the reasons for energy losses and deficiencies in the system.

Additional investments and proposals for reduction of consumption of energy:

- § Modification of stoker fired boilers for by-product gases firing at Power House#3 boilers to reduce middling coal consumption.
- § Installation of a 30 MW backpressure turbine.
- § Enhance LD gas recovery to match the benchmark figure of 80 Nm<sup>3</sup>/tcs by installing new LD Gas Holder and evacuation system.
- § Recovery of sensible heat of coke by installing a coke dry quenching system in Battery#5,6&7 at Coke Plant.

Energy conservation measures during 05-06 have resulted in achieving:

- § Lowest ever plant specific energy consumption of 29.15 GJ/tcs.
- § Lower coal (middlings) consumption of 0.132 million tonnes for steam and power generation – a reduction of 15.9% as compared to the previous year.
- § Higher boiler efficiency and higher efficiency of turbo-generating set.
- § Lowest ever oxygen vent loss of 9.46 t/day.



At other units as well, the energy conservation measures are also under implementation. Specific energy consumption at Sukinda is indicated in Fig.5.8. Specific power consumption at Collieries, Ferro Alloy Plant and Mines is given in Fig.5.9, 5.10 & 5.11 respectively. Specific HSD consumption at Naomundi-Joda and Sukinda Mines is given in Fig. 5.12 & 5.13 respectively

Fig.5.8-Specific Energy Consumption at COB Plant-Sukinda(KWH/t)

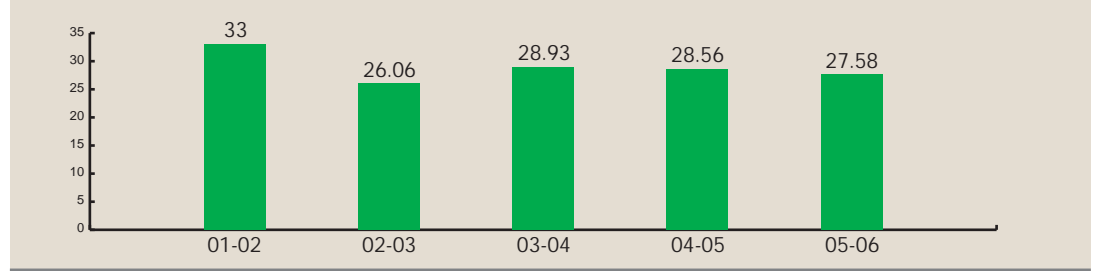


Fig.5.9-Power Consumption at Collieries (KWH/t of clean coal)

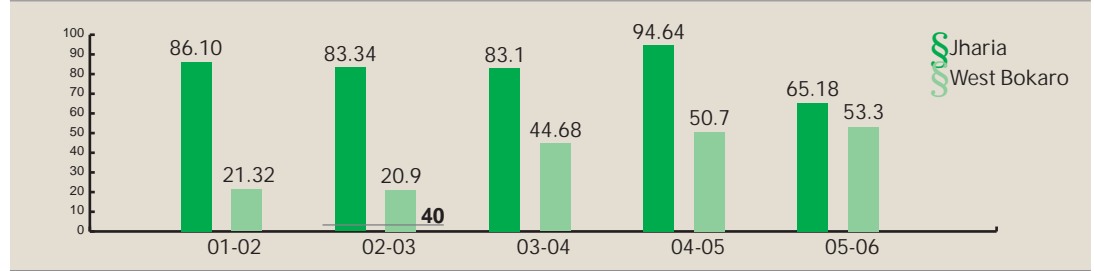


Fig.5.10-Power Consumption at Ferro Alloy Plants (KWH/tonne of product)

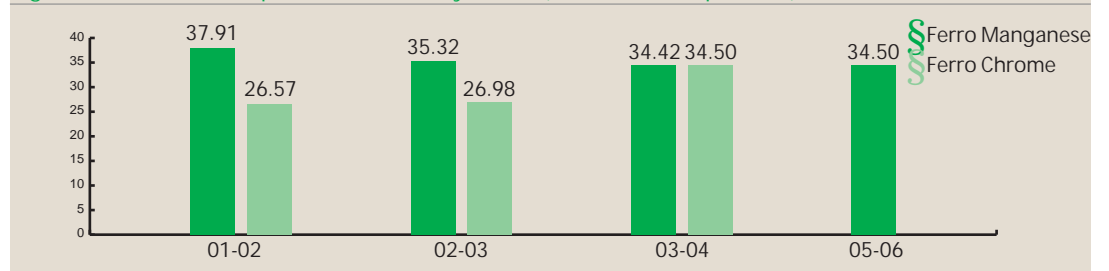


Fig.5.11-Power Consumption in Mines (KWH/t)

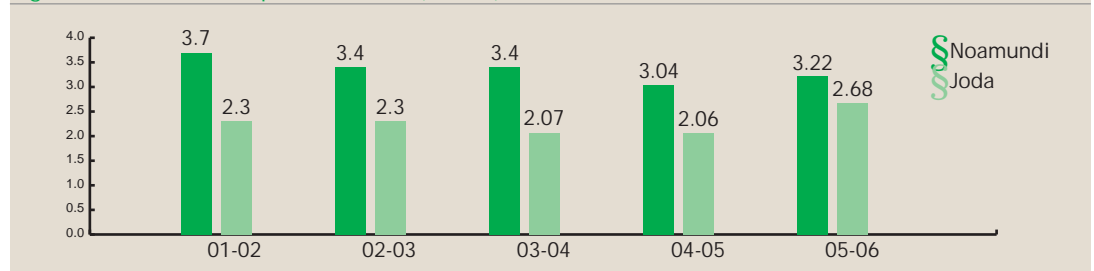


Fig.5.12-Specific HSD Consumption in Mines(Litre/tonne)

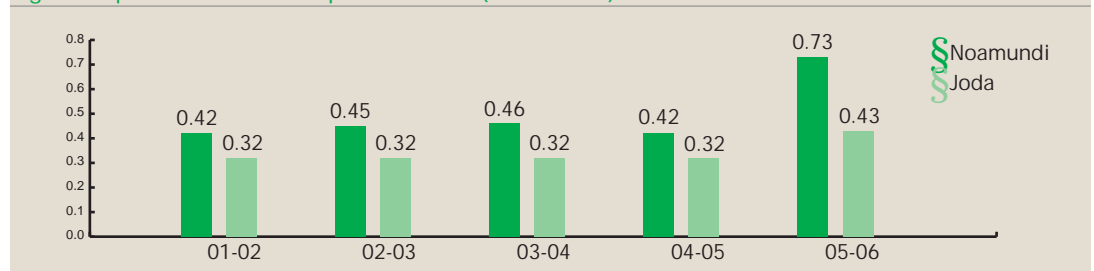
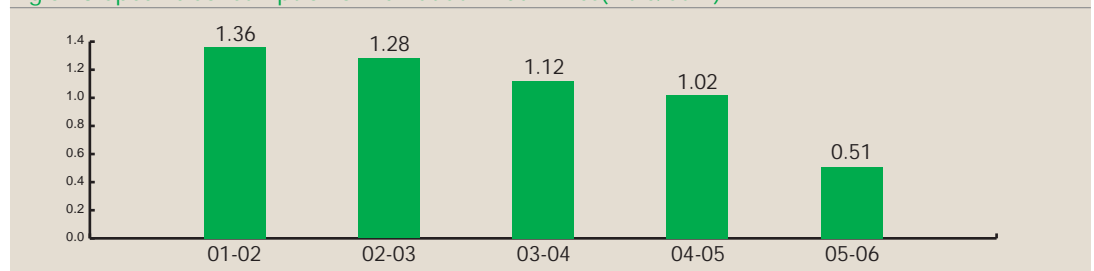


Fig.5.13-Specific Consumption of HSD at Sukinda Mines(Litre/Cum)





Tata Steel has so far not embarked upon the use of renewable energy due to the higher generation cost and low potential of generation in the areas where it operates.

**Energy consumption footprint (i.e. annualized lifetime energy requirements) of major products (EN18)**  
 This is not applicable to Tata Steel as the Company produces steel products only and not equipment/ appliances that may consume energy in use. The steel has 100% recyclability and is considered globally as an environment friendly metal.

**Other indirect energy use due to organizational travel, product life cycle management, and use of energy-intensive materials (EN19)**

Organizational travel and its impact on energy use are not captured at present due to the large size of the organization and accounting complexities associated with the same. We do not intend to report on this indicator in the near future.

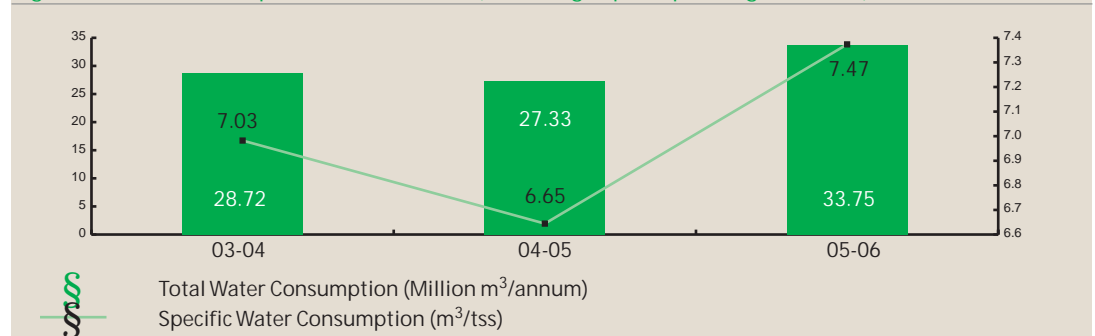
Product Life Cycle energy usage is difficult to capture in the case of steel products. Iron ore and coal, the major raw materials used for steel manufacture, are highly energy intensive due to the presence of high alumina, silica and phosphorous content in iron ore and high phosphorous content in coal. Life Cycle Assessment is carried out using ECOBILAN TEAM™ Software on a yearly basis for environmental burdens associated with steel manufacturing at Tata Steel (from mining activities to steel dispatch at the gate of Jamshedpur Factory). The other energy intensive material used in the manufacture of steel, oxygen purchased from M/s. BOC India or M/s. Praxair Plants located outside the Steel Works at Jamshedpur. The energy consumed in the manufacture of oxygen at BOC Plant is not included in the scope of this report.

## WATER

### Total Water Use (EN5)

Tata Steel has taken various actions to optimize its use of water. There is an increased emphasis on water re-circulation in all process units. Specific water consumption (including that for power generation) is given in Fig.5.14. Commissioning of 1 MTPA facilities impacted negatively the trend of specific water consumption in 2005-06. The entire domestic consumption of the city of Jamshedpur, that is 60.26 million m<sup>3</sup>/annum of water (58.87 million m<sup>3</sup> /annum in 04-05), is supplied and managed by the Company.

**Fig.5.14-Water Consumption in Steel Works (including captive power generation)**



Water consumed for industrial and domestic purpose at the other units is indicated in Table 5.5. The water consumption at the remaining units within the scope is insignificant and hence not reported.

**Table 5.5 Water Consumption in million m<sup>3</sup>**

	Industrial		Domestic	
	04-05	05-06	04-05	05-06
Jharia	1.034	1.03	3.96	3.96
West Bokaro	4.26	3.45	3.20	2.9
Sukinda	1.6	1.36	0.624	0.6
Noamundi	2.59	2.13	1.10	0.87
Joda East	1.22	1.42	0.098	-
Gomardih	0.011	0.011	0.074	0.08
CRC West	0.16	0.111	-	-
Wire - Borivali	0.24	0.20	0.043	0.048
Wire - Tarapur	0.24	0.25	0.016	0.015
<b>TOTAL</b>	<b>11.355</b>	<b>9.962</b>	<b>9.115</b>	<b>8.473</b>

**Water sources and related ecosystems/habitats significantly affected by use of water (EN20)**

The water for industrial and domestic usage at Jamshedpur and other units is drawn from rivers/underground sources as presented in Table 5.6. These rivers are perennial in nature and water abstraction does not have any adverse impact on the eco-system. The other source of water at Jamshedpur is a captive reservoir at Dimna (Capacity-34.224 million m<sup>3</sup> and Area-92.6 sq. km.). Dimna Lake is situated on the northeastern side of the Jamshedpur town at a distance of 12-13 kms. It is an earthen dam with masonry concrete walls constructed by the Company about three decades ago to meet the emergency water supply demand of the Works and Township, particularly during poor monsoon years. Three major drains carrying rainwater and surface run-off water from nearby villages feed this artificial impounding. However, during monsoon and post-monsoon seasons the Company also pumps water from the river Subarnarekha to Dimna Reservoir.

**Table 5.6: Details of Water Sources**

Name of mine	Water source	Purpose	Remarks/Dry season flow
Steel Works Jamshedpur	Subarnaekha river/ Dimna	Industrial & Domestic	Adequate
Noamundi	Baitarni River	Industrial	Source is about 20km away from Mines-51246 m <sup>3</sup> /hr
	Jojo Nalla	Domestic	Source is about 3 km away from Mines-455 m <sup>3</sup> /hr
Joda	Kundra Nalla	Industrial & Domestic	Source is about 5 km away from Mines-2977 m <sup>3</sup> /hr
Gomardih	Nakati Nalla	Domestic	Source is about 5 km away from Mines-not available
	Ground water	Industrial	Ground water is available in the active mining area-not available
Jharia	Damodar River	Industrial & Domestic	One km from site.
Sukinda	Mines Drainage	Industrial & Domestic	Mines drainage treated and used.
West Bokaro	Mines drainage + Raw River	Industrial & Domestic	Water is treated before use.





## River Water Quality

The river water analysis is given in the Table-5.7. This analysis indicates that the quality of river conforms to the National Standard (BIS-2296 – 1982 – Class-B). There is no adverse impact on river water quality during winter season, when abstraction of water is maximum.

**Table 5.7: River Water Quality**

		Subarnarekha		Kharkai	
		04-05	05-06	04-05	05-06
Cd	0.01 mg/l	NT	NT	NT	NT
Cr <sup>+6</sup>	0.5 mg/l	0.003	0.005	0.003	0.006
Total Chromium	-	0.015	-	0.015	-
Cu	1.50 mg/l	0.025	0.04	0.06	0.06
Fe	0.30 mg/l	0.11	0.04	0.25	0.07
Zn	15 mg/l	0.13	0.13	0.145	0.08
Ni	NA	0.013	0.07	0.20	0.12
Mn	0.50 mg/l	0.03	0.07	0.015	0.04
NO <sub>3</sub> (N)	20 mg/l	3.0	3.5	3.45	3.6
Pb	0.10 mg/l	0.015	0.028	0.008	0.024
pH	6.5 – 8.5	7.5	7.5	7.4	7.5
Total Hardness	300 mg/l	80	141	109	154
DO	6 mg/l	5.15	4.7	4.6	4.2
TSS	NA	25	43	44	44
BOD <sub>3</sub>	2 mg/l	4.5	6.5	3.6	5.5

NA – Not Applicable; NT – No Trace

Studies have also been carried out to study the Dimna Lake stratification and eutrophication. No stratification was observed in the Lake as indicated by no changes in Dissolved Oxygen (DO) levels at different depths. The Company does not use any groundwater source for either industrial or domestic use at Jamshedpur.

## Impact on Renewable Water Reserve (EN21)

The flow of river water after 500 meters from the confluence of Rivers Subarnarekha and Kharkai (water abstraction point) at Jamshedpur is shown in the Table 5.8.

**Table 5.8: Details of River flows**

Water Abstraction from River Subarnarekha	Post Monsoon	Winter	Summer
River flows at Jsr. cum/sec	9.40	4.50	5.93
Water pick up, cum/sec	2.494	2.608	2.423
% age	26.53	57.96	40.86

Source: Regional Environmental Impact Assessment Study Report for Jamshedpur Region by NEERI, Nagpur- May 1995.

At Jharia the water is withdrawn from Damodar and Katri rivers and at West Bokaro from a seasonal nalla. The groundwater from the underground mines and wastewater from coal washeries is used after treatment for industrial and domestic purposes at both locations. At mines & quarries, the water is drawn from different sources as shown in Table 5.6 above.

## Recycling & Reuse of Water (EN22)

Gross make-up water requirement for Steel Works was 960,450 cum/day (avg) during the reporting period. Approx. 900,000 Cum/day of water remains in circulation in steel manufacturing processes through the close circuit system and cooling ponds. The make-up water represents primary evaporation, seepage and blow-down losses.

## BIO-DIVERSITY

### Land, Location and Biodiversity (EN6)

The Steel Works is situated at Jamshedpur in the state of Jharkhand, India. The factory covers 702 hectares of land within the lease area of 5094 ha. West Bokaro Division in Hazaribagh District covers 1740 hectares of land, in which mining and coal beneficiation activities are performed. Jharia Division occupies 2500 hectares of land for its industrial, mining and domestic activities in the district of Dhanbad. Both are in the state of Jharkhand. The iron ore and dolomite mines are located at Noamundi in the state of Jharkhand and at Joda, Katamati, Khondbond and Gomardih in the state of Orissa. The lease area for various units and the details of forest and non-forest land are furnished in the Table 5.9. The mine leases are in areas rich in biodiversity.

**Table 5.9 Land owned, leased or managed for production activities or extractive use**

Units	Lease area in hectare	Forest area in lease in hectare	Non-forest area in lease in hectare
Jamshedpur	5094	Nil	5094
West Bokaro	1740	597	1143
Jharia	2230	Nil	2230
Noamundi	1160.06	762.430	397.630
Joda East	671.093	521.622	149.471
Gomardih	372.796	Nil	372.796
Khondbond	978.000	836.757	141.243
Katamati	403.32	199.17	204.15
Sukinda	331.00	73.697	257.303

**Reclamation & Afforestation Measures-**

- § Massive plantation in all the units of Tata Steel is detailed in Table 5.10.
- § More than 3.85 million saplings were planted covering more than 450 hectares at the mines between 1997 & March 2004. More than 240 hectares of mined out areas have been reclaimed with plantations so far.
- § Survival rates have been improved from 30% to 85% (in past 10 years) by providing protection to the saplings planted and watering them during dry periods.
- § Trials were conducted during the reporting period to identify the species to be planted during the afforestation programmes.
- § The Company has the total capacity of raising 0.4 million saplings every year across its locations.
- § Sir Dorabji Botanical Parks have been developed at Jamshedpur, West Bokaro, Dhanbad, Noamundi and Joda during the last 8-10 years. These parks house ornamental plants, fruit trees, more than 300 varieties of cacti, 100 varieties of roses, rare flowering plants, rock gardens, spices, condiments and medicinal plants.

**Table 5.10 Tree Plantation at various locations**

Location	Green Millennium Count-down 97-2K	During 02-03	During 03-04	During 04-05	During 05-06
Jamshedpur	204969	28155	11488	9845	5500
Mines Division	717500	24300	37000	47000	37000
Collieries	435555	125111	110287	156700	157254
FAMD (Sukinda & Bamnipal)	48250	22000	43568	48000	75000
Gopalpur	62043	-	-	962	-
Bearings Division	2653	500	-	-	-
CRC West	1063	125	115	85	
TOTAL (numbers)	1472033	200191	202458	262592	269254

**Impermeable surface created (EN24)**

The records of creation of impermeable surface by the organization over 99 years of its existence are not traceable. However, during the reporting period, new facilities like Power House#5, Sinter Plant#3, Re-Bar Mill, 6th Lime Kiln, were installed covering approximately 150 hectares of land that is concreted making it impermeable.

**Impact on protected and sensitive areas (EN25)**

Areas of operation of the Company do not have any World Heritage sites, sensitive areas or Biosphere Reserves or Protected areas. However, at a distance of 10 km from Jamshedpur, Dalma Wildlife Sanctuary (a protected area) is situated. The Regional EIA and carrying capacity study conducted by NEERI in May 1995 and 2000, indicates that there is no significant environmental impact on Dalma Wild Life Sanctuary. The Environment Protection Act 1986 in India defines sensitive areas like Taj Mahal, Doon Valley, Dahanu, Mahabaleshwar and Coastal Regulatory Zones, etc. and none of these fall within a 10 km radius of the Company's operations.

**Contribution in changing natural habitats (EN26)**

No reportable changes to natural habitats have occurred from the Company's activities as indicated by Environmental Impact Assessment Studies conducted for all the units including all mines and collieries.

**Managing Surrounding Ecosystems (EN27)**

As a part of its compensatory afforestation commitment and voluntary initiatives, the Company strives to rehabilitate the degraded lands with local species such as Shesham, Mahua, Sal, Teak, etc. with a view to restoring the native ecosystem. Details of plantation work at different locations of the organization are given in the Table 5.10 above.

### Impact on Biodiversity (EN7)

The Company conducted Regional Environmental Impact Assessment Studies for Jamshedpur Region in 1993-95 and later commissioned the National Environmental Engineering Institute (NEERI) to conduct a study on Carrying Capacity of the Region in the year 2000. Environmental Impact Assessments have been undertaken for all the units of Tata Steel. A recent example is the EIA report for a 6.8 MTPA Growth Plan at Jamshedpur. The reports indicate that there is no major impact on bio-diversity associated with the organization's activities and/or products and services in terrestrial or fresh water environments.

### IUCN Red List species within operational areas (EN28)

Noamundi & Joda mining lease areas have the following species from Schedule-I&II of the Wildlife Protection Act 1972.

Schedule-1 – Sloth Bear

Schedule-2 – Indian Python

(Note-There are some stray incidents of elephants passing by)

Data on IUCN Red list species has not been collected

### Our activities in or around protected or sensitive areas (EN29)

No unit of Tata Steel is currently operating or planning to operate in Protected and Sensitive Areas. There are no national parks/wild life sanctuaries/CRZ/other sensitive areas/notified areas within 10 kms of any current or proposed sites barring the Dalma Sanctuary, which is about 10 kms from the Steel Works in Jamshedpur.

## EMISSIONS, EFFLUENTS & WASTES

### Greenhouse Gases & Climate Change (EN8)

A considerable reduction in the effective CO<sub>2</sub> emission rate is evident when the credit for slag granulation (as per IISI guidelines; CO<sub>2</sub> emitted for equivalent amount of clinker used in cement making as replaced by granulated slag) is taken into account. The Fig.5.15 indicates the trends in specific CO<sub>2</sub> emission from Steel Works. Absolute quantity of CO<sub>2</sub> emissions for the last 3 years are indicated in Table 5.11. CO<sub>2</sub> emissions calculations are based on GHG protocol guidelines.

Fig.5.15-Carbon Dioxide Emission (t/tcs)

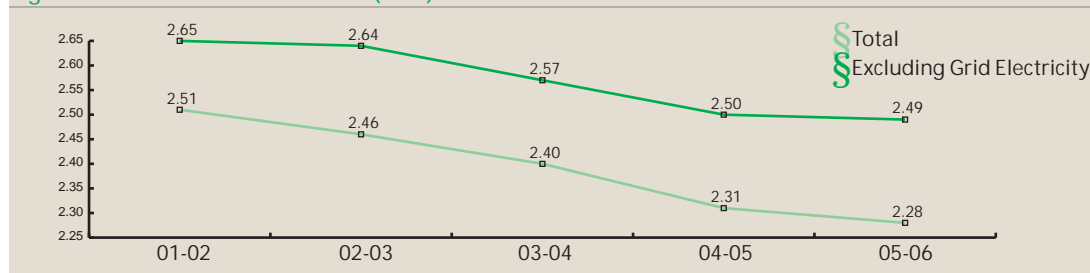


Table 5.11 CO<sub>2</sub> emission as per GHG protocol

Emissions	Units	03-04	04-05	05-06
Process + Stationary Combustion	(t)	11614085	10972384	12685398
Mobile Emissions	(t)	16350.20	17489.50	18722
HFC Emissions	(t)	1164.50	1489.20	1358
Total Emissions	(t)	11631541.82	10991371.72	12705479
Crude Steel Production	(t)	4224264	4103715	4730592
CO <sub>2</sub> emission	(t/tcs)	2.75	2.68	2.68
Slag credit	(t)	784717.51	745767.15	922970
Emission including slag credit	(t)	10846824.31	10245204.57	11782509
CO <sub>2</sub> emission including slag credit	(t/tcs)	2.57	2.50	2.49
Total emissions (Imported Elect.+ Mobile +HFC)	(t)	683336.02	738359.55	1001586
Total emissions excluding (Imported Elect.+ Mobile +HFC)	(t)	10146031.64	9472234.79	11703891
CO <sub>2</sub> emission excluding (Imported Elect.+ Mobile +HFC)	(t/tcs)	2.40	2.31	2.28

## Greenhouse Gas Emission Reduction

### A Responsible Commitment to Sustainable Development

Consumption of energy and carbon emissions is interlinked. Any effort to reduce energy consumption has a significant impact on reduction of GHG emissions. Tata Steel's efforts towards GHG reduction and addressing climate change include;

- § Fuel substitution in boilers (coal to by- product gas), a CDM project
- § Modernization/automation of the steel plant
- § Recovery and reuse of by-product energy
- § Increased green foliage
- § Reduction in refrigerant consumption by using R134 & vapour absorption technology
- § Use of low NOx burners
- § Proposed installations of Coke Dry Quenching and Top Recovery Turbine (CDM Projects)
- § Use of steel slag in cement manufacture

### Ozone-Depleting Substances (EN9)

The Steel Works used 5.747 tonnes of refrigerant during the reporting period (05-06) compared to 7.426 tonnes of refrigerant used during previous year (04-05). The organization has replaced R11 & R12 by R134 and vapour absorption systems.

### Indirect GHG emissions (EN30)

The indirect GHG emissions are emitted from sources like the refrigerators and air conditioners supplied by the organization or owned by the employees at their residences, GHG emission on account of purchase of oxygen, etc. It is practically impossible for a large entity like Tata Steel to compile data for such emissions.

### Hazardous Waste under the Basel Convention (EN31)

The Company does not import or export any waste deemed "hazardous" under the terms of the Basel Convention Annexure-I, II, III & VIII. All hazardous waste generated is handled as per the requirement of Hazardous Waste Management & Handling Rules 1989/2000. All hazardous waste is appropriately recycled and/or disposed off as detailed in Waste Handling (EN 11).

### Water discharges, runoff and the receiving eco-systems (EN32)

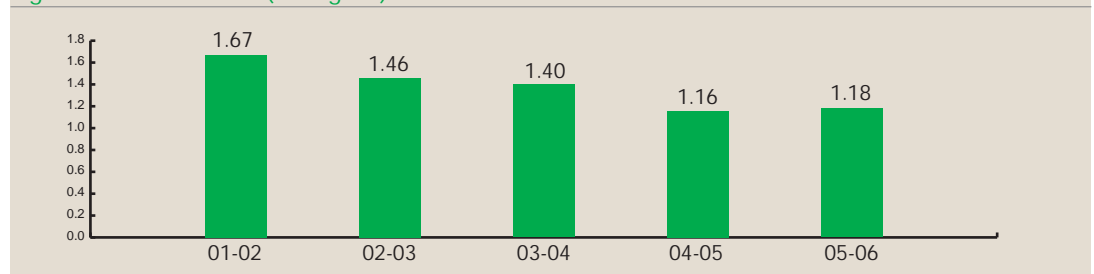
The Company discharges its treated effluent from the Works and treated domestic sewage from the township of Jamshedpur to the rivers Subarnarekha and Kharkai as well as other surface water sources. Studies carried out by NEERI in the year 1993 & 2000 at Jamshedpur to assess impact on eco-systems/habitats of rivers found no significant impact on the aquatic eco-system as given in EN20. Noamundi & Joda Mines, West Bokaro, Jharia Collieries, Sukinda Mines have achieved zero discharge. The domestic effluent is discharged through the septic tank – soaking pit route at the mines and collieries. Sewage Treatment Plants have been provided for the entire township of Jamshedpur.

### Emissions (EN10)

#### Emission through process stacks

Tata Steel has undertaken several initiatives, which have resulted in a considerable reduction in stack emission as seen in the Figure 5.16. Indian standards (norms) for SO<sub>2</sub>, NO<sub>x</sub>, & PM for stacks in steel plants are furnished in Table 5.12 along with actual values monitored during the reporting period.

Fig.5.16-Stack Emission (PM-kg/tcs)





**Table 5.12: Emissions from process stacks**

Process Stacks Attached to	Air Pollutant	Indian Standard	Actual Value (04-05)	Actual Value (05-06)
Blast Furnance Stoves	PM	150 mg/Nm <sup>3</sup>	18.4-27.4	18.4-20.9
	SO <sub>2</sub>	No Standard	52-122	78-122
	NOx	No Standard	71-220	122-172
Sinter Plant	PM	150 mg/Nm <sup>3</sup>	98.6-117.6	96.6-143.9
	SO <sub>2</sub>	No Standard	190-275	121-235
	NOx	No Standard	29-190	32-488
Refractories Production	PM	150 mg/Nm <sup>3</sup>	58.174.3	42.8-72.4
	SO <sub>2</sub>	No Standard	6-290	6-285
	NOx	No Standard	70-340	68-345
Steel Melting Shops	PM	150 mg/Nm <sup>3</sup>	87.1-110.2	83.8-101.7
Coke Plant	PM	50 mg/Nm <sup>3</sup>	18.5-98.6	18.1-84.1
	SO <sub>2</sub>	800 mg/Nm <sup>3</sup>	65-540	28-385
	NOx	500 mg/Nm <sup>3</sup>	172-365	93-438
Captive Power Plants - Jamshedpur	PM	350 mg/Nm <sup>3</sup>	33.5-118.7	33.5-122.4
Captive Power Plants - West Bokaro	PM	350 mg/Nm <sup>3</sup>	116-140	97-146
Pickling Line, Tarapore	SPM	150 mg/Nm <sup>3</sup>	18.42	17.42
	SO <sub>2</sub>	228 kg/day	38.85	33.00
Pickling Scrubber, Tarapore	HCl Mist	35 mg/Nm <sup>3</sup>	11.33	12.5

**Emission load from Steel Works – tonnes / annum**

Total emission load at Jamshedpur over the past three years is furnished in Table 5.13. The emission loads are calculated based on the actual measurement of PM, SO<sub>2</sub> & NOx. The flue gas volume for Coke Oven, Power Houses chimneys is based on calculations using carbon inputs to the boilers and Coke Ovens. For all other stacks the actual volume flow is measured. The emission for crude gas bleeding & coke quenching towers are estimated on the industry norms. On an average, two-sample measurement basis are taken per point source in a year. Emissions from A-F BF Cast House and CAL incinerator stacks have not been included in this report. The gas volumes for Blast Furnaces & LD Shops are indirectly calculated based on different fuels.

The Emission loads do not include fugitive emissions. Stack emissions represent approximately 90% emissions. The gross emissions loads are presented only for the Steel Works.

**Table 5.13: Emission load at Jamshedpur**

Parameter (tpa)	03-04	04-05	05-06
Particulate Matter	5832	4777	5570
Sulphur-di-oxide	9949	8173	7287
Oxides of Nitrogen	7534	6538	6215



## Ambient Air Quality at Jamshedpur

Ambient air quality within the Steel Works of Jamshedpur is indicated in the Fig. 5.17, 5.18 & 5.19. AAQ in the city of Jamshedpur is depicted in Fig. 5.20, 5.21 & 5.22. Contributions from vehicular movement of the community and other industries are visible in the graphs, if compared with AAQ of the Works.

Fig.5.17-SPM levels ( $\mu\text{g}/\text{m}^3$ ) in Works

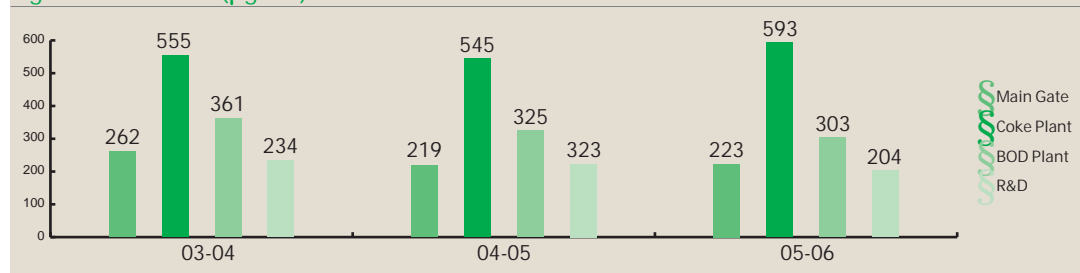


Fig.5.18-SO<sub>2</sub> levels ( $\mu\text{g}/\text{m}^3$ ) in Works

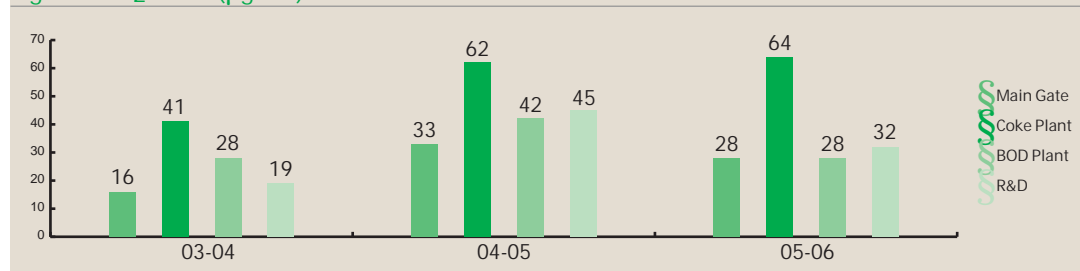


Fig.5.19-NO<sub>x</sub> levels ( $\mu\text{g}/\text{m}^3$ ) in Works

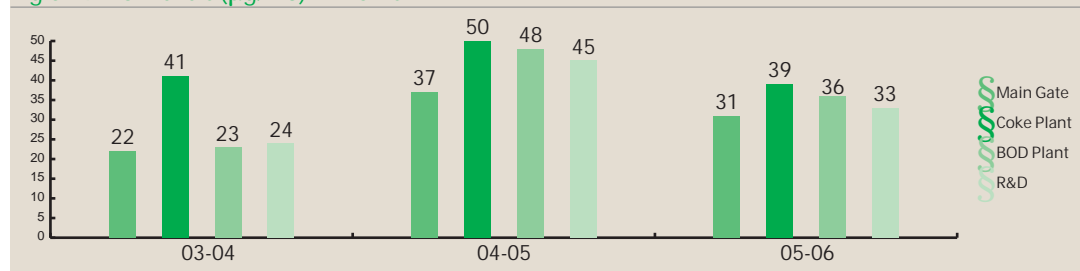


Fig.5.20-SPM levels ( $\mu\text{g}/\text{m}^3$ ) in Township

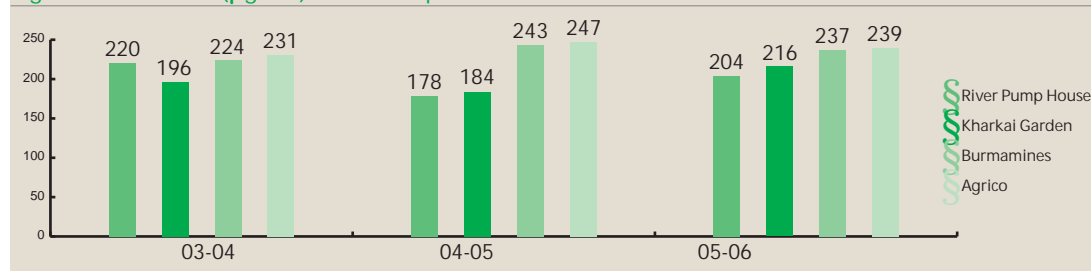


Fig.5.21-SO<sub>2</sub> levels ( $\mu\text{g}/\text{m}^3$ ) in Township

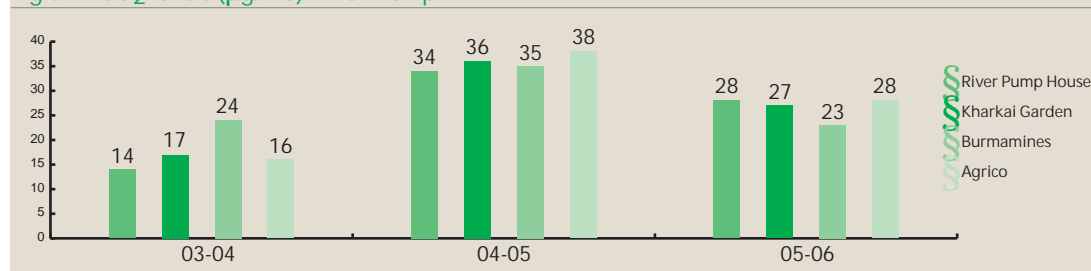
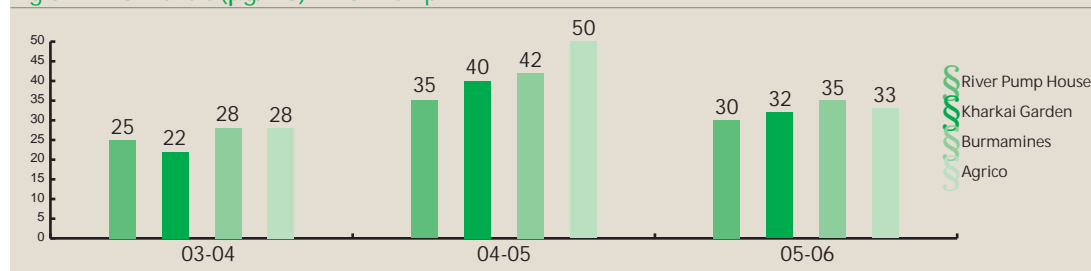


Fig.5.22-NO<sub>x</sub> levels ( $\mu\text{g}/\text{m}^3$ ) in Township



### Ambient Air Quality at Mines and Collieries

Fig. 5.23 and Fig. 5.24 indicate the air quality at Mines Division and West Bokaro respectively. The ambient air quality at the Jharia Division is given in Table 5.14.

Fig.5.23-SPM level at Noamundi & Joda Mines ( $\mu\text{g}/\text{m}^3$ )

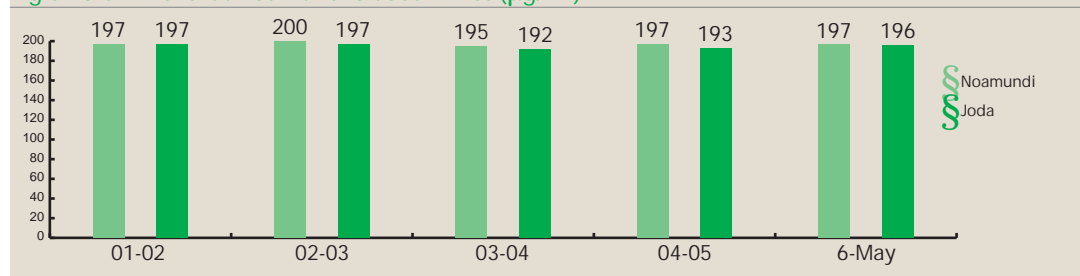


Fig.5.24-RPM level at West Bokaro ( $\mu\text{g}/\text{m}^3$ )

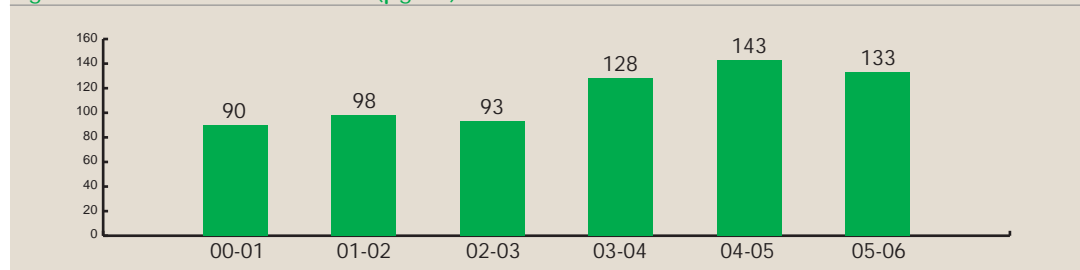


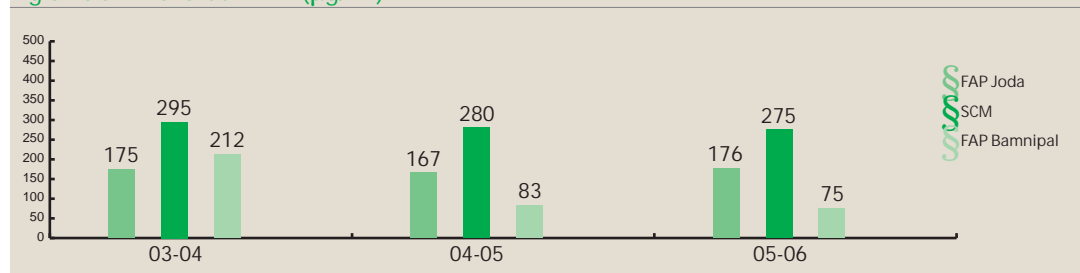
Table 5.14: AAQ at Collieries

	RSPM ( $\mu\text{g}/\text{Nm}^3$ ) Limit-250 $\mu\text{g}/\text{Nm}^3$	TSPM ( $\mu\text{g}/\text{Nm}^3$ ) Limit- 500 $\mu\text{g}/\text{Nm}^3$	SO <sub>2</sub> ( $\mu\text{g}/\text{Nm}^3$ ) Limit- 80 $\mu\text{g}/\text{Nm}^3$	NO <sub>x</sub> ( $\mu\text{g}/\text{Nm}^3$ ) Limit 80 $\mu\text{g}/\text{Nm}^3$
Jamadoba	177.05	377.36	21.16	20.08
6&7	190.76	402.98	27.62	19.56
Digwadi	184.17	383.01	21.32	15.11
Sijua	184.21	368.8	22.53	17.14
Belatand	208.3	438.56	32.32	19.98
JCPP	198.92	439.07	23.46	16.25
BCPP	203.34	425.21	29.08	18.65
FBPP	194.97	452.55	21.46	15.75

### Ambient Air Quality at FAMD Division

The AAQ in the FAMD Division is given in the Fig.5.25

Fig.5.25 SPM level at FAMD ( $\mu\text{g}/\text{m}^3$ )



### Ambient Air Quality at Sukinda Chromite Mines

The ambient air quality monitored at four locations within Sukinda Chromite Mines viz. product handling, chrome ore beneficiation plant, housing colony and the hospital is well within the statutory limits (Table 5.15).

Table 5.15: AAQ at Sukinda ( $\mu\text{g}/\text{m}^3$ )

Station	2004-05				2005-06			
	SPM	SO <sub>2</sub>	NO <sub>x</sub>	RPM	SPM	SO <sub>2</sub>	NO <sub>x</sub>	RPM
COB Plant	193.90	2.00	11.90	79.60	155.22	2.00	13.40	71.85
Stack Yard	201.10	2.00	15.10	79.10	175.57	2.00	15.67	82.34
Laboratory Top	81.00	2.00	10.60	37.30	88.82	2.00	10.62	37.30
Hospital	67.70	2.00	9.80	31.80	73.67	2.00	9.93	36.11

### Ambient Air Quality at CRC West

Ambient air quality at three locations of CRC waste is measured on monthly basis and given in Table- 5.16.

Table 5.16: AAQ at CRC West ( $\mu\text{g}/\text{m}^3$ )

	2004-05				2005-06			
	SPM	SO <sub>2</sub>	NO <sub>x</sub>	HCl	SPM	SO <sub>2</sub>	NO <sub>x</sub>	HCl
Norm	500	120	120	75	500	120	120	75
Near Aquatherm	228.50	23.62	18.62	14.16	208	23.2	17.5	15.2
Near ET Plant	170.20	24.34	15.79	41.74	180.2	26.1	23.3	17.9
Near Scrubber	171.00	21.54	17.36	38.65	177	29.7	23.4	31.2

### Ambient Air Quality at Wire Division, Mumbai

Ambient air quality at Wire Division is measured on monthly basis and given in Table-5.17.

Table 5.17: AAQ at Wire Division ( $\mu\text{g}/\text{m}^3$ )

	2004-05					2005-06				
	SPM	SO <sub>2</sub>	NO <sub>x</sub>	HCl	Lead	SPM	SO <sub>2</sub>	NO <sub>x</sub>	HCl	Lead
NORM	500	80	80	70	0.15	500	80	80	70	0.15
BORIVILI	165	20	16	14	0.02	273	33.3	29.8	17.8	0.02
TARAPORE	180	22	18	4.45	0.012	325	41.2	32.2	24.3	Nil

Tata Steel has implemented a variety of mitigative measures to improve the working environment at the shop floor. Work area environment quality at different places in the Works is furnished in Figure –5.26. As per the requirement of Amendment Rules 1997 to the EP Act, 1986, visible fugitive emissions from Coke Ovens are monitored regularly and details are furnished in Table- 5.18.

Fig.5.26-Improvement in Work Area Environment (SPM in  $\mu\text{g}/\text{m}^3$ )

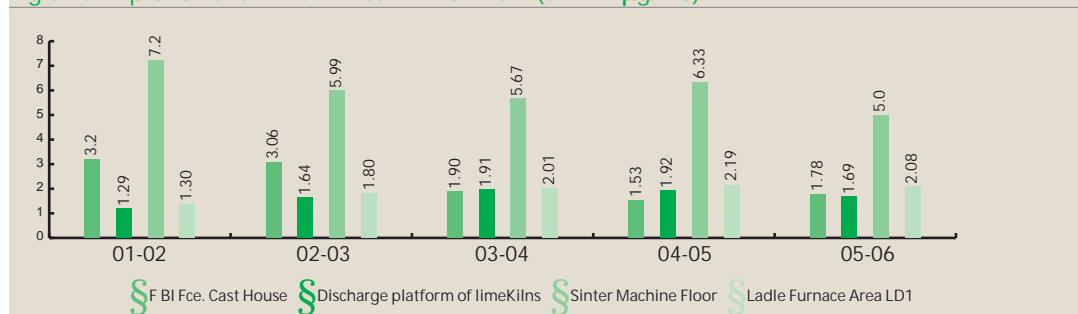


Table 5.18 : Visible Fugitive Emission from Coke Ovens at Coke Plant

		Batt#3		Batt#5		Batt#6		Batt#7		Batt#8		Batt#9	
		04-05	05-06	04-05	05-06	04-05	05-06	04-05	05-06	04-05	05-06	04-05	05-06
Percentage Leaking Doors (PLD)	5% for new Battery / 10% for Old Battery	5.6	3.9	2.1	2.9	2.4	3.0	2.3	3.2	2.1	3.3	2.2	2.7
Percentage Leaking Off Takes (PLO)	4%	1.9	1.3	0.3	1.3	0.7	0.9	0.8	1.2	0.3	Nil	0.1	Nil
Percentage Leaking Lids (PLL)	1%	Nil	Nil	Nil	0.1	Nil	0.1	Nil	0.3	Nil	Nil	Nil	Nil
Charging Emission (Sec/Charge)	50 Sec.	86	69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA – Not Applicable													

Note:- The reported information is calculated on the basis of two half-yearly samples for determining the annual average





## Waste Handling (EN11)

Most of the solid wastes generated from the Steel Works are recycled/reused. Wastes such as, sludges from BF gas cleaning plant and part of LD slag could not be recycled because of high alkali and high phosphorous content as, respectively. Solid Waste utilization statistics including hazardous wastes during the year 2005-2006 are presented in Table-5.19.

**Table 5.19: Waste Utilization**

		04-05		05-06	
		Tonnes	% of generation	Tonnes	% of generation
B F Slag	Cement making	1105487	92.48	1351619	91.07
L D Slag	Sinter making	888564	74.37	700559	61.63
B F Sludge	Domestic fuel	27982	85.05	40064	87.05
L D Sludge	Sinter making	80909	70.42	146334	114.00
Mill Scale	Sinter making	57801	100	68822	110.29
Flue Dust	Sinter & dom. Fuel	25260	32.75	27979	27.55
Lime Fines	Sinter making	100849	100	112138	100
Dolo Dust	Sinter making	1140	100	24041	100
Ref. Waste	Sale	13673	100	10689	100
Tar Sludge	Coke making	3626	100	5360	100
Oil Sludge	Coke making	1219	100	2540	100
BOD Sludge	Coke making	277	100	-	-
U/S Lime St.	Sinter making	86627	100	24513	100
Mill Sludge	Sinter making	8440	100	12631	100
Roll dust	Sinter making	Nil	Nil	-	-
<b>TOTAL</b>		<b>2401854</b>	<b>83.16</b>	<b>2527289</b>	<b>80.2</b>

## Hazardous Wastes & Bio-Medical Wastes

The details of hazardous waste generation and utilization in Steel Works and bio-medical wastes for TMH Jamshedpur are furnished in Table 5.20. Waste quantities were not weighed and are reported based on average capacity of trucks/tankers/containers. The hazardous waste reported does not include all the parameters reported to the State Pollution Control Board, as some of the wastes, which are recycled in the processes, have not been established as hazardous. Tata Steel did a characterization of these wastes during the year 03-04 and only the following wastes have been found to be hazardous.

**Table 5.20: Hazardous Waste Generation & Utilization**

	Class/Category	Units	Quantity		
			04-05	05-06	
1 Tar Sludge	1.8	t	3620	5405	Recycled to Coke Plant
2 BOD Sludge	1.9		277	-	Recycled to Coke Plant
3 Cyanide Sludge (at Ring Plant)	11.1	t	19	19.2	Treated in BOD Plant
4 Zinc Dross	16.3	t	1553	1447	Sold to authorized agencies
5 Chrome Sludge	17.1	t	19.8	5.6	Protected landfill
6 Lube oil sludge/Coolant oil sludge	37.1	t	1853	2735	Recycled to Coke Plant/Power Plant
7 Lead acid batteries	41.3	nos.	382	749	Auctioned to registered recycler
8 Used lube oil/grease	44.1	KL	192	260	Recycled to Blast Furnace

## Bio-Medical Wastes (Tata Main Hospital) Generation & Disposal per Month (Average Quantity)

1 Human anatomical wastes	1	kg	6583	5935	Incineration – 100%
2 Micro-biological/bio-technology waste Waste sharps	3	kg	445	169	Autoclaving – 100%
3 Solid Waste (Infection Waste)	4	kg	10112	5991	Incineration – 100%
4	-	kg	4524	5388	

Hazardous wastes generated at the mines and collieries were auctioned to registered recyclers and oily waste/sludge is land filled in secured landfills. Table 5.21 and Table 5.22 indicate the hazardous waste generated at Mines and West Bokaro Colliery, respectively.

**Table 5.21 : Hazardous Wastes Generated at Mines**

		Quantity	
		04-05	05-06
Maint. And repair work	Oil sludge/ Emulsion/ Soaked cotton (m <sup>3</sup> )	40.56	25.41
Lubricant	Used oil, Nos.	215	352
Batteries	Used battery, Nos.	121	177

**Table 5.22 : Hazardous Wastes Generated at West Bokaro**

	Quantity	
	04-05	05-06
Oil soaked cotton, m <sup>3</sup> /year	270.1	197.4
Used oil, liters	295706	423865
Used Batteries, Numbers	451	602

#### Effluent Management (EN12)

Wastewater from process was treated with best available physio-chemical methods and recycled in the process. Wastewater from the coke plant was treated biologically where organic pollutants are oxidized and decomposed by microorganisms.

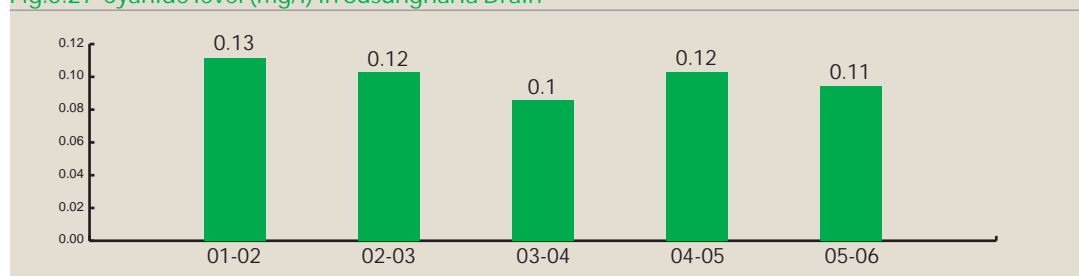
The absolute effluent quantities and pollution loads from the Steel Works are furnished in Table-5.23. The levels of total pollutant discharge in the wastewater streams have reduced considerably at various locations as shown in the Fig.5.27, 5.28 & 5.29.

Noamundi and Joda Iron Mines & Collieries at West Bokaro and Jharia do not discharge any overflow from the Slime/Tailing Dams. The quality of the treated effluent discharged from the Jharia Group of Collieries is presented in Table 5.24.

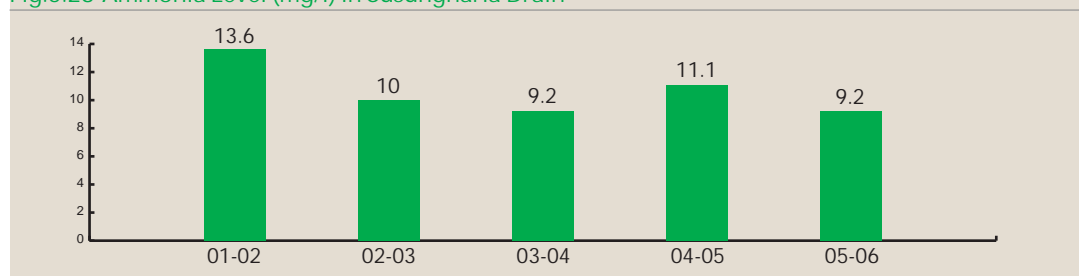
**Table 5.23 : Pollutants & effluents from Steel Works**

Parameter	03-04	04-05	05-06
Effluent Quantity (million m <sup>3</sup> )	9.04	11.10	11.20
TSS (tonnes)	656.78	721.30	726.20
Oil & Grease (tonnes)	20.10	21.13	23.98
Ammonia (tonnes)	71.26	94.94	103.98
Cyanide (tonnes)	0.83	1.05	1.20
Phenol (tonnes)	1.25	1.15	1.24

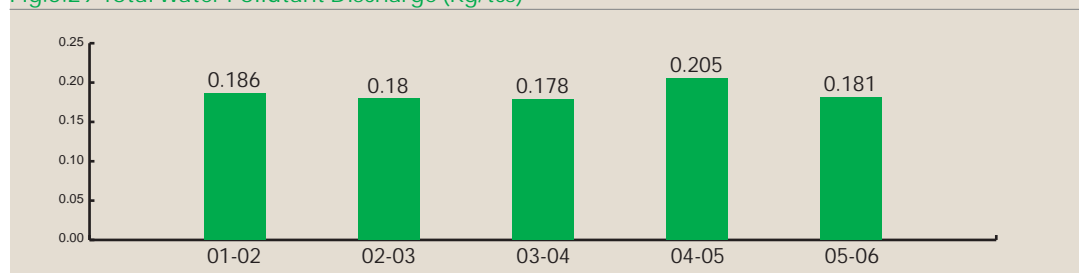
**Fig.5.27-Cyanide level (mg/l) in Susungharia Drain**



**Fig.5.28-Ammonia Level (mg/l) in Susungharia Drain**



**Fig.5.29-Total Water Pollutant Discharge (Kg/tcs)**



**Table 5.24 : Quality of treated effluent discharged from Jharia Group of Collieries**

	pH Limit- 5.5 to 9.0	TSS Limit- 100 mg/lit	DO Limit- >5	BOD Limit 30 mg/lit	COD Limit 250 mg/lit	Oil & Grease Limit 10 mg/lit
Jamadoba (2 Pits)	8	24.73	7.03	1.48	25.78	0.99
Jamadoba (3&4 Pits)	8	16.18	7.01	1.7	71.18	1.07
Jamadoba 6&7 Pits	8	22.36	6.98	0.93	35.45	1.28
Digwada Colliery	8	28	7.12	1.68	44.8	0.89
Sijua Colliery (15 Pits)	7.05	20	6.96	2.48	49.12	0.85
Sijua Colliery (8 Pits)	7	21.57	7	1.45	26	1.1
Sijua Colliery (2 Pits)	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge
Bhelatand Amalgamated Colliery	8	18.95	7.02	2.26	32.26	1.04

#### Effluent Management at CRC (West)

Wastewater from the pickling and cleaning line process was treated with the best available physio-chemical method. Some portion of treated water was used for gardening. The details are given in Table 5.25

**Table 5.25 : Effluent details at CRC (West)**

	03-04	04-05	05-06
Total quantity (m <sup>3</sup> /year)	19598	19071	20531
Specific quantity m <sup>3</sup> /tonne of pickling production	0.146	0.128	0.122
Waste water from cleaning line process			
Total quantity (m <sup>3</sup> /year)	50215	275890	44685
Specific quantity m <sup>3</sup> /tonne of cleaning pond	0.89	0.48	0.66

#### Treated discharged water quality at Wire Division, Mumbai

The division ensures that only treated water is discharged into outlets. Results are given for COD (Chemical Oxygen Demand), BOD (Bio Chemical Oxygen Demand), Suspended Solids, Fe (Iron) and pH. All are below maximum permissible limits (Table 5.26). The operations at the Wire Rod Mill involve no water discharge. It demonstrates the effectiveness of actions taken by the Wire Division through investment in an Effluent Treatment Plant.

**Table 5.26 : Effluent details at Wire Division**

Plant	Year	pH (5.5-9.0)	TSS (100 mg/l)	COD (250 mg/l)	BOD (30 mg/l)	Fe (5 mg/l)
Borivilli Wire Plant	04-05	7.06	13.8	72	16	1.36
	05-06	7.1	12	55	10	1.32
Tarapore Wire Plant	04-05	7.08	13.6	91	14	1.28
	05-06	7.0	19	58	10	1.31

#### Significant spills (EN13)

There was no reported incidence of any oil spill or chemical spillage in the organization during the reporting period.

#### SUPPLIERS

##### Environmental Performance of suppliers (EN33)

The environmental performance of suppliers related to their discharges and emissions is not captured by the organization due to large vendor base spread all over the world. However, stringent procedures have been laid down under ISO-14001 for contractors working in the premises of the organization. The compliance to these procedures is mandatory and punitive action is taken against defaulters. The procedure for monitoring contractors/suppliers compliance with labour laws is also furnished in Section-III.

## PRODUCTS & SERVICES

### Significant environmental impact of principal products and services (EN14)

The International Iron & Steel Institute (IISI), Brussels, has initiated a Life Cycle Study for steel products, at present restricting the scope from mining of raw materials to the dispatch of material from the steel plant gates. The issues addressed under the LCA program include raw material consumption, energy usage, discharges & emissions, climate change, acid rain and eutrophication. At Tata Steel, LCA has proved to be very successful in analyzing inputs to the processes and discharges to the atmosphere. As per IISI norms, the tracking of performance and significant impact of steel products and services beyond the gate is not possible due to multiple usage of steel. This parameter will not be assessed by the organization in the near future.

### Recycling and reuse of our products (EN15)

Steel products are 100% recyclable in their life cycle. However, it is difficult to keep track of products after they leave the factory gate and hence this information has not been furnished. Tata Steel recycles all scrap steel generated in the plants. The organization did not purchase any scrap from the market during the reporting period.

## COMPLIANCE

### Environmental compliance status (EN16)

- § No major complaints received during the reporting period.
- § No penalty or fines have been imposed for non-compliance.

## TRANSPORT

### Significant environmental impacts of transportation used for logistical purposes (EN34)

- i) Diesel and Petrol consumed for transport of raw materials and by in-house vehicles are accounted for in the calculation of CO<sub>2</sub> emission as per GHG protocol.
- ii) Contractor's vehicles are not considered in the GHG calculation. It is not possible to track the mileage and fuel consumption of contractors' vehicles entering the Steel Works. We do not intend to track this in future.
- iii) Company vehicles including locomotives are monitored for vehicular emission (CO, HC for Petrol and smoke density for Diesel vehicles) every six months. All the contractors and suppliers vehicles are checked for Pollution Under Control Certificates at the Factory's entry gate to the Steel Works. The Company has put up vehicle emission monitoring stations at various locations in the township where the State Pollution Control Board checks the vehicles. All units under EMS follow this practice.
- iv) Particulate Matter, Sulphur Dioxide and Nitrogen Oxides are not monitored for transport vehicles, as it is not a legal requirement.

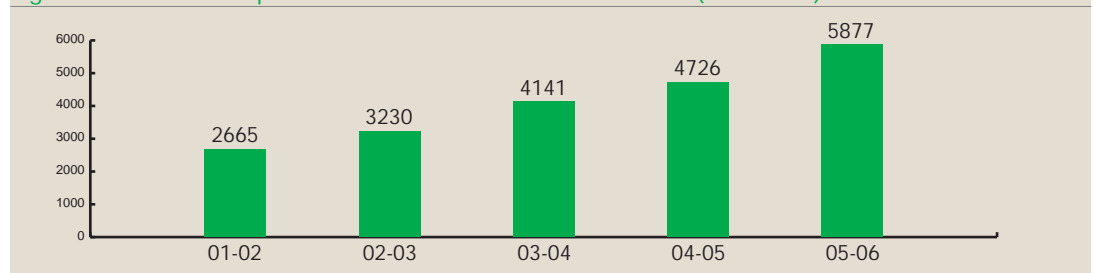
## OVERALL

### Environmental expenditure (EN35)

#### Capital Investment on Pollution Abatement

Under different phases of modernization, several state-of-the art pollution control systems have been installed to prevent and control pollution. Fig.5.30 provides cumulative capital expenditure over the years, on pollution abatement. Expenditure during the reporting year on pollution abatement also includes facilities provided during 1 MTPA expansion in Jamshedpur Works.

Fig.5.30-Cumulative Capital Investment on Pollution Abatement (Rs. Million)





### Operating Cost of Environmental Protection (Rs. in Million) in the Steel Works

The operating costs include expenditure on power consumption, consumable chemicals and spares, Water cess paid, and the revenue expenditure like cost of chemicals, glassware, etc. The details are given in Table 5.27.

**Table 5.27: Environmental Expenditure**

Cost Element	01-02	02-03	03-04	04-05	05-06
Power Consumption	268	350	347	419	428
Consumables	263	300	300	216	277
Revenue Expenses	8.0	10	12.0	16.0	17
Water Cess & Other Charges	7.6	7.5	11	15.0	16
Total Costs	646.60	667.5	670.0	666.0	738
Total Crude Steel production (mtpa)	3.749	4.10	4.224	4.104	4.730
Operating Costs, Rs./tcs	173	163	159	162	156



## SOCIAL PERFORMANCE

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## SECTION - VI



## EMPLOYMENT AT TATA STEEL

### Workforce (LA1)

As on 31.03.2006, Tata Steel had a total permanent workforce of 38,182. The break-up of workforce is furnished in the Table 6.1. In addition, there were approximately 5,631 contractor's employees in works & non- works area.

**Table 6.1: Details of Workforce (Numbers)**

Location	Officers	Non-Officers	Total
Jamshedpur	2769	18139	20908
Noamundi (Iron Mines)	201	1787	1988
Jamadoba (Collieries)	187	6871	7058
West Bokaro (Collieries)	181	3436	3617
Kolkata (M&S)	128	234	362
Mumbai (Head Office)	28	31	59
Adityapur Complex	104	528	632
CRC West & Wire Division	230	1202	1432
CRM Sisodra	51	242	293
Kharagpur	62	568	630
FAMD	152	1033	1185
CRE Offices- Delhi, Bhubaneshwar, Ranchi & Raipur	13	5	18
<b>TOTAL</b>	<b>4106</b>	<b>34076</b>	<b>38182</b>

### Job creation (LA2)

Tata steel always endeavors to curtail the excess workforce but still seeks to create jobs for the masses. Tata Steel had 42,511 employees on its roll as on 31.03.2004, which dropped to 39,648 as on 31.03.2005, and further decreased to 38,182 as on 31.03.2006.

Tata Steel is giving serious consideration to reducing its labour cost, which is currently 9% of its turnover. The contract labour reduced to 5,631 in FY 05-06 from 7743 in FY 04-05.

Despite reduction of workforce at Works, due to increased production, Tata Steel has created indirect employment in the area of transportation, which we have not been able to capture. In addition, due to the outsourcing of various activities in operational areas and during implementation of expansion project, there was an increase in the employment of contractors and suppliers.

### Employee Benefits (LA12)

The benefits given to employees beyond those legally mandated are summarized below and also presented in Table 6.2.

**Table 6.2: Facilities to the Work Groups**

Facilities	Diverse work groups
Preferential house allotment	Working couples
Free water and medical services, subsidized electricity	All employees
Metro allowance	Metro employees
Monetary incentives	Employees acquiring higher education in related field
Work allowance / Night shift allowance	Graduate Trainees / People working in shift

The steel company has spent a sum of Rs.381,366,444.47 on medical services in the year 05-06 as against Rs 344,649,299.19 in 04-05 and Rs. 102,047,596.13 in 05-06 as against Rs. 83,570,769.81 in 04-05 on Educational facilities for the employees and their families at Jamshedpur.

- 1 Early Separation Scheme: a monthly pension of 1 time /1.20 times of an employee's salary depending upon his age and length of service, till the time the employee would have attained the age of 60 is given on separation.
- 1 Family Benefit Scheme: in case of fatality in the Works, a monthly pension equal to the amount of the last drawn salary of the deceased is given to the legal heir until the time the deceased would have attained the age of 60.
- 1 Special leave to Women: leave is given to women executives, with children of less than 5 years of age to take care of their children, in case of sickness.
- 1 Basic Plant training: 18 months training with stipend to employees' wards to enhance their employability.

- 1 **Holiday Home:** Tata Steel has arranged four Holiday homes for the benefits of workers & supervisors and their families. These holiday homes are located at different places - Puri (17 double bedded rooms & 3 four bedded), Haridwar (Five double bedded rooms & one four bedded), Gangtok (Six double bedded rooms), Jamshedpur (Four double bedded rooms). We also have the Mirzadih Guest House at Dimna, Jamshedpur.
- 1 **Tisco Officers' Beach Club:** All officers of Tata Steel are eligible to be members of the Beach Club. The Beach Club offers the "Tisco Executive Holiday Plan" that includes Hotels, Sterling Resorts & Sterling Guest Houses across the country. Besides this, Tata Steel also provides a riding school and water sports center facilities in Dimna.

## EMPLOYEES INVOLVEMENT IN DECISION MAKING IN TATA STEEL

### Employees and Trade Unions (LA3)

Tata Steel has a firm belief that a healthy union is always an asset for the management. Accordingly we have Trade Unions at all locations. 100% of employees (other than officers) are represented by independent Trade Unions. The details of the Trade unions at different locations are given in Table 6.3. The officers do not have any association or union.

**Table 6.3: Trade Union details**

Location	Union	Number of Employees
Jamshedpur	Tata Workers' Union	18139
Noamundi & Joda	INMF	1787
Jamadoba	RCMS	6871
West Bokaro	RCMS	3436
Mumbai HO, CRC West & Wire Division Tarapore	Mumbai Labour Union and Tisco Head Office Employee Association	1233
Kolkata	The Tata Employees' Union Kolkata	234
Adityapur	INTUC	528
CRM Sisodra	CITU	242
Kharagpur	CITU	568
FAMD	INMF	1033
CRE offices	-	5
TOTAL		34076

### Consultation and negotiation with employees (LA4)

Tata Steel is a pioneer in the area of Joint Consultation in India and has a three-tier Joint Consultation System that ensures participation of employees at all levels, including top management.

MD-online is another forum to share and interact with employees. The Managing Director , on the first working day of the month, communicates the performance of the organisation through webcast and video conferencing and also receives feedback for an hour. Hotmail is another e-communication channel available for employees to share their views. Feedback is provided within 48 hours from the MD's office. Collective bargaining issues are discussed with the recognised unions at different locations on a regular basis. The Joint Consultative Management System is presented under LA13. The Personnel Manager of each department consults with employees and their families in the areas of Family Welfare, Savings, Education of Children and other issues.

### Employee participation in decision-making (LA13)

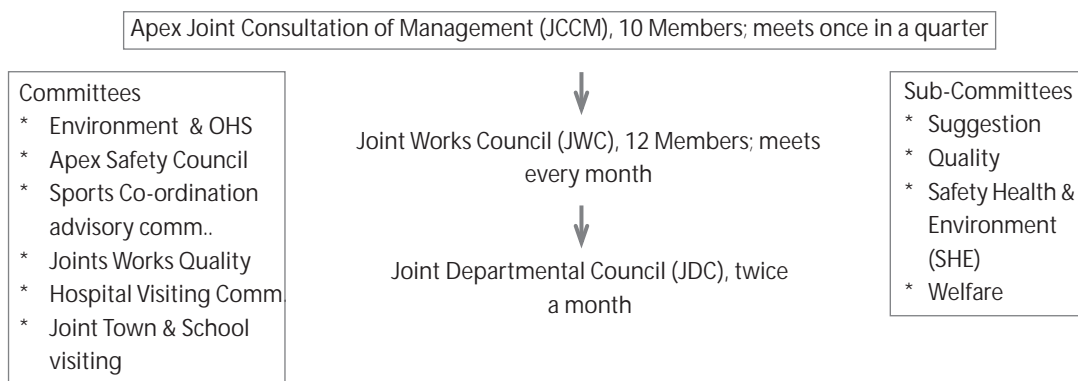
A system of Joint Consultation has been in place in Tata Steel for the last 50 years. This is a unique system in which both management & employee representatives consult each other at all levels on matters relating to the progress & prosperity of the organization. It is a three-tier system, which fulfills the need for self-expression of employees. Employees discuss various issues related to production, productivity, quality, safety, welfare, training etc. excluding issues of collective bargaining & individual grievances. The three-tier system is made up of the Joint Consultative Council of management, Joint Works Council & Joint Departmental Councils supported by various sub committees as shown in Figure 6.1.

Office Bearers of respective unions are members of Joint Consultative Committees of Management and it is in this forum that they discuss issues except issues of collective bargaining.

In the JCCM, JWC, JDC and other Sub-Committee meetings, issues related to operational performance, safety and environment, welfare of the employees and future directions for sustainable growth are discussed.



**Figure-6.1 Structure of Joint Consultation System**



## HEALTH & SAFETY AT TATA STEEL

### Health & safety monitoring and communication (LA5)

The Factory Act 1948 and the Bihar Factory Rules 1950 guidelines, Mines Acts/Rules and Explosive Acts/Rules form the basis for recording and notification of occupational accidents and diseases in the organization. Any occupational accident is reported immediately to the safety control room manned round the clock by telephone. Any injury is reported to the nearest first-aid-station. There are two first aid stations inside the Works, which are equipped with a well-maintained ambulance and trained staff, to take care of any emergency. Information pertaining to department, location, nature, time of accident, person involved and damage occurred is sent to the Safety Department in the prescribed format. This reporting also includes minor incidents, dangerous occurrences and near miss cases. Reportable accidents (where the injured did not return to work for 48 hours) are reported to the Inspector of Factories.

In case of any fatal accident, the information is sent in writing to the Chairman, General Safety Committee, Inspector of Factories and local government officials on the day of the incident. The work is stopped till it is cleared by the Inspector of Factories after site verification. Within 48 hours of the accident, an enquiry committee is constituted to investigate the root cause/s of the accident. The recommendations are discussed in the General Safety Committee and are circulated to all Departmental Heads/Chiefs to take necessary preventive actions to prevent a recurrence.

Occupational Health and Safety management at Tata Steel is also systematized with the OHSAS-18001 standards to which it has already been certified.

An on-line system, called Safety Excellence Management System (SEMS), is in place to log and set target dates for removing the unsafe conditions observed on site. Observations can be assigned three priority values on a three-point scale based on severity of consequence of an existing unsafe situation and probability of occurrence of an accident. A Safety Officer logs his observation at a particular section in a department, which results in an e-mail to the unit leader of the section and the head of the section notifying them of the observation. The unit leader after corrective action triggers a "Closed by Department", e-mail to the Safety Officer who verifies the status and closes it or rejects the same. In the latter case, the above cycle is followed again.

Tata Steel initiated a safety excellence journey under the guidance of DuPont resources a world-class leader in safety. The safety programmes, which began at Steel Works, have been rolled out across all locations including Mines. These initiatives have led to a perceptible change in behaviour of employees including that of contractors, and outside the place of work. Numerous initiatives, which include identification of safety standards, life saving rules, safety condition as an employment, compulsory site visits and observations on an on-line system, systematic risk assessment of all accidents and incidents will help the company to change the attitude of all those working in and on behalf of the company. The company aspires to become world-class in safety.

### Joint Health & Safety Committee involving management and worker representatives (LA6)

The senior management constitutes the Apex Safety Council in which the Managing Director of the Company is the Chairman and Members are Management & Workers Union representatives. The Apex Safety Council is supported by nine Apex Safety Sub-Committees on Training, Safety Standards, Incident Investigation, Observation, Occupational Health, Isolation Policy & Procedures, Communication, Contractor Safety Management and Road & Rail Safety. Each Sub-Committee has representation from the Workers Union as well as management.

### Safety performance (LA7)

Tata Steel has taken steps to capture all kinds of injuries including First-aid cases, foreign body in the eye, lost time cases (cases which keep employees away from duty for more than 48 hours) etc. There was a significant reduction in first-aid cases and eye injury cases as indicated in Figures 6.2 & 6.3.

Fig.6.2-First Aid Cases (No.)

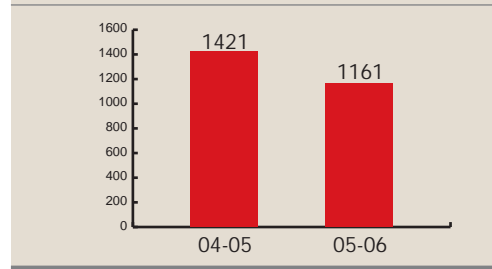
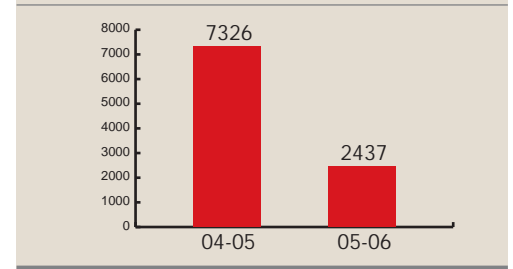


Fig.6.3-Foreign body in eye (No.)



### Trend of lost time injury cases / Frequency Rate / Severity Rate / Man days Lost

Figures 6.4, 6.5, 6.6 & 6.7 show the various safety performance parameters. For each fatal accident, 6000 man-days loss is considered for calculation.

Fig.6.4-Frequency Rate Works (Employees)

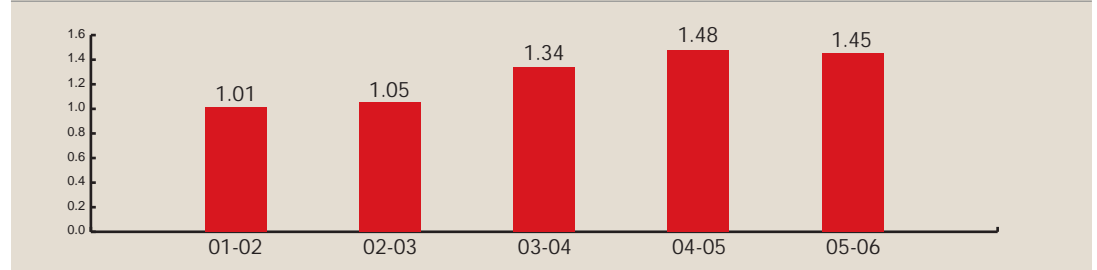


Fig.6.5-Severity Rate (Employees)

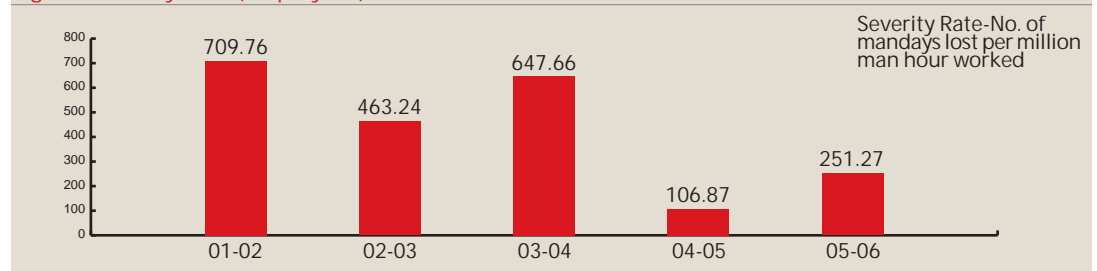


Fig.6.6-Mandays lost (employees)-(Days)

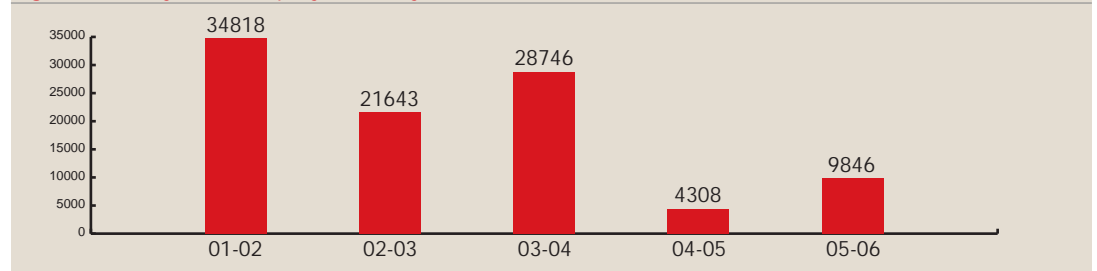
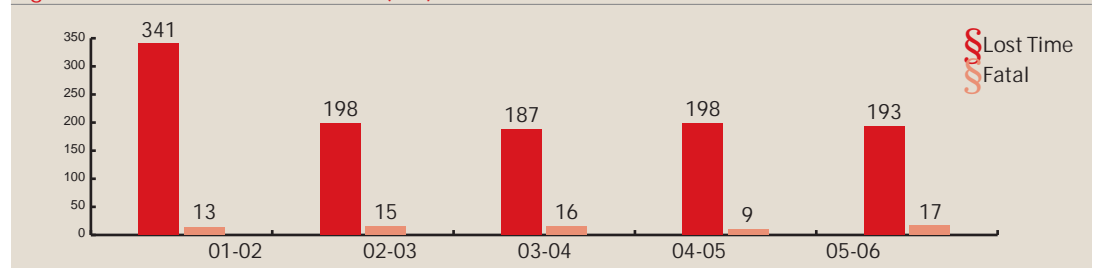


Fig.6.7-Fatal & Lost Time Accidents (No.)



### Corrective and preventive action on identified root causes of incidents:

The existing on-line incident reporting system is effectively being utilized for tracking action on recommendations. An issue, which remains open, gets escalated to the higher management for review. This has led to the capturing of most incidents and a satisfactory level of recommendations being implemented after the incident.

We have also put in place a system of safety alert, just after the incident, to communicate issues related to serious injury across the organization. It immediately sends a signal for immediate actions to prevent such injuries across the organization.

### Skill & Will development

A number of coaching and counselling programmes were organized to develop “WILL” among the leadership team for improvement in safety and ways to demonstrate commitment through behaviour and day to day routine decisions. All operations managers and line supervisors have been trained on carrying site safety observations, demonstrated felt leadership, incident investigations, contract safety management, safety standards for action and implementations.

Skill improvement programmes have been designed and training imparted for workers with the result that there is now a very good improvement at the shop floor. Though contractor’s employees cannot enter the works site without having attended mandatory three-day safety programme, specific programmes on skill development programme with certifications have been rolled out to get competent contractor’s supervisors.

### Health Performance

Tata Steel believes in promotion and maintenance of a higher degree of physical, mental and social well-being of its employees. To this effect, several activities like regular health monitoring, counselling and training of employees on the shop floor with respect to health related issues were carried out across the organization. The trends related to health monitoring, health status and awareness programs at Steel Works are given in Figures 6.8 to 6.17.

Fig.6.8-Eye Examination of Mobile Equipment Operators (Nos)

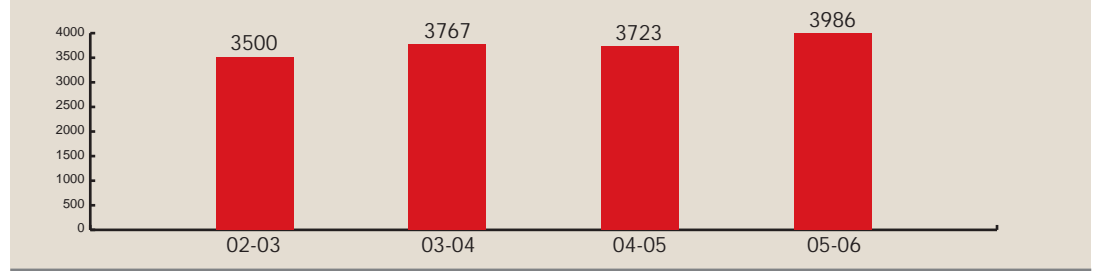


Fig.6.9-Statutory Periodical Medical Examination (Nos)

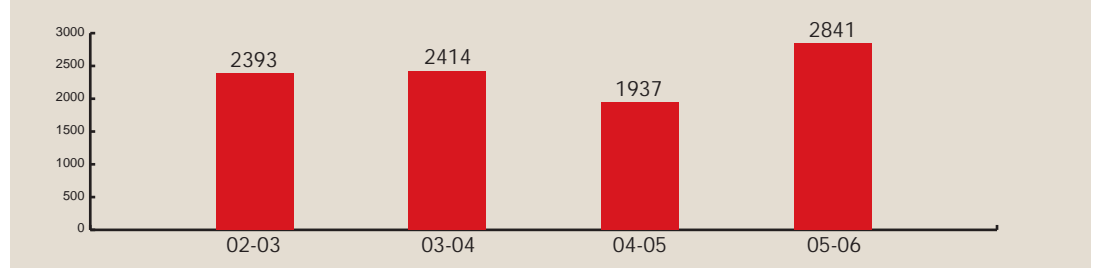


Fig.6.10-Occupational Health Surveillance Trend of Anaemia (%)

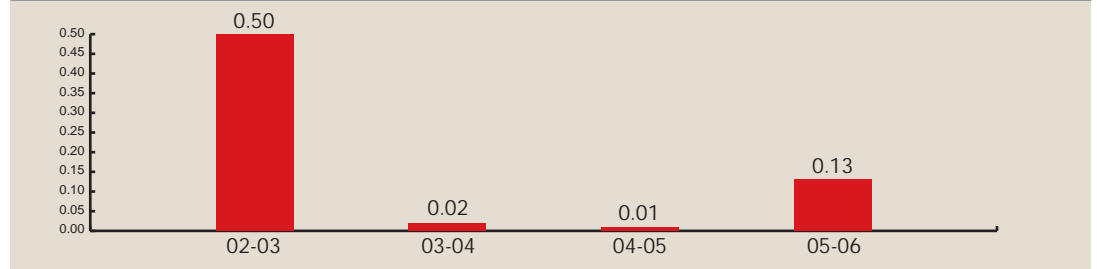


Fig.6.11-Audiometric Examinations (Nos)

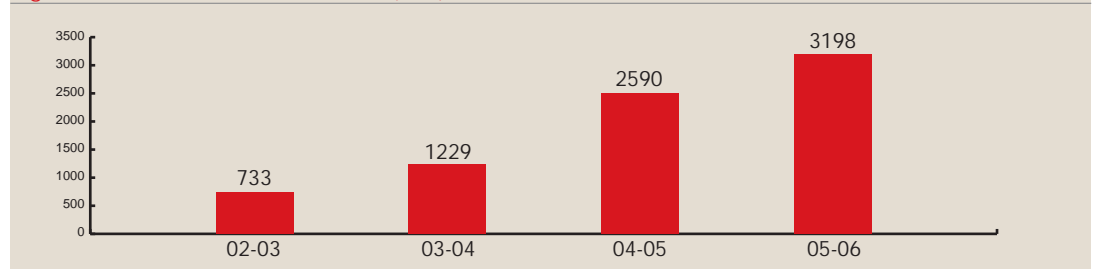


Fig.6.12-Occupational Health Surveillance- Trend of Abnormal Lung Function Test (%)

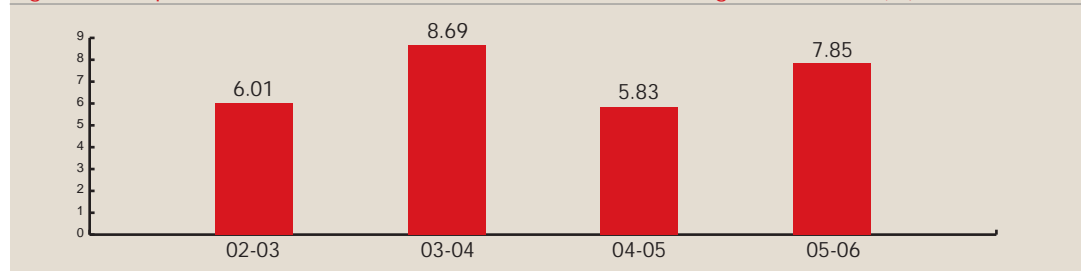


Fig.6.13-Occupational Health Check-ups (Nos.)

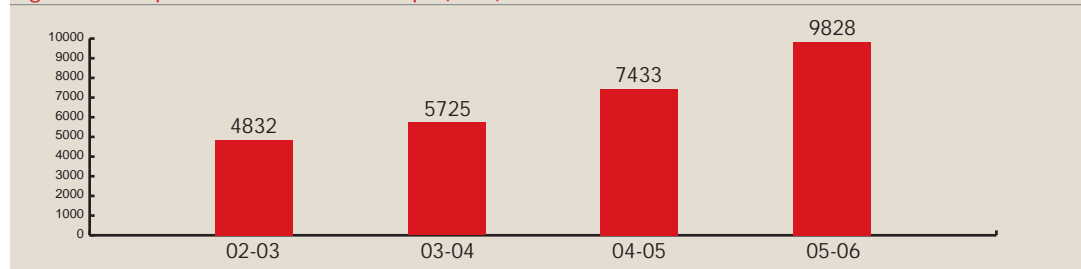


Fig.6.14-Occupational Health Surveillance- Trend of High Blood Pressure (%)

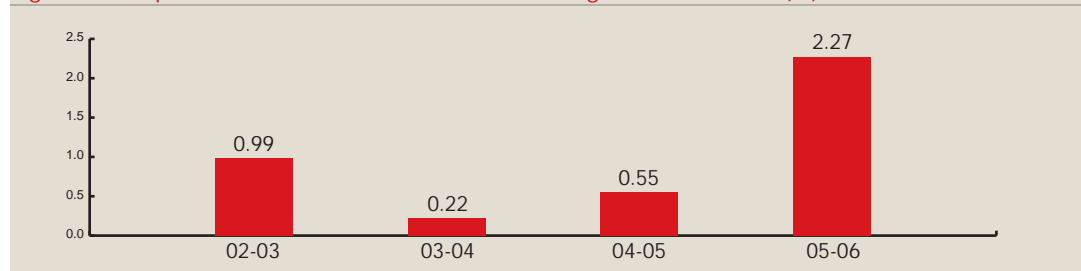


Fig.6.15-Occupational Health Surveillance- Trend of Diabetes (%)

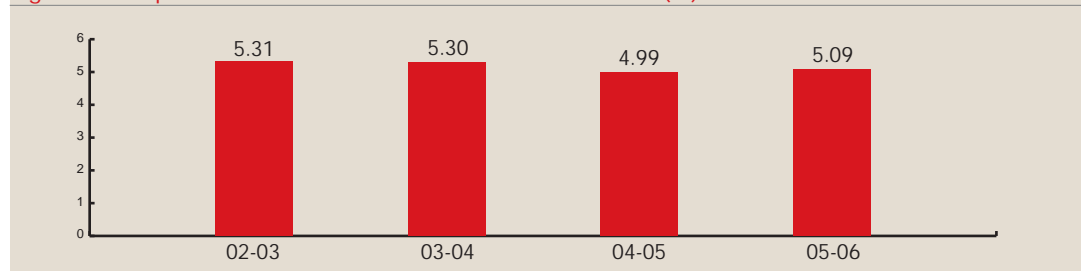


Fig.6.16-Participants Trained at Works & Outlocations (Nos.)

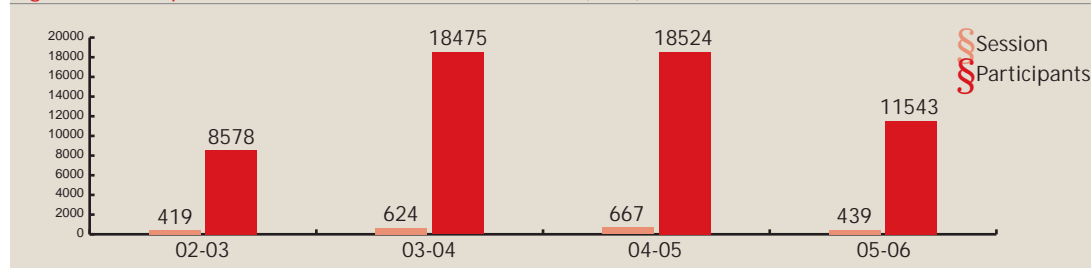
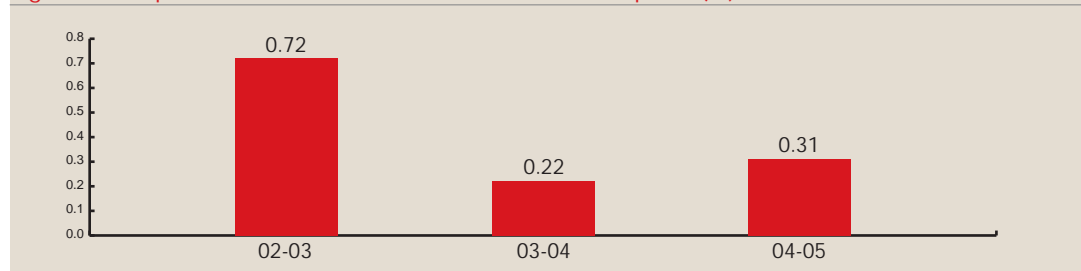


Fig.6.17-Occupational Health Surveillance- Trend of Eosinophilia (%)



#### Initiatives on HIV & AIDS (LA8)

It was the Founder, J N Tata's belief that, "a healthy worker is a productive worker". At Tata Steel, all our health initiatives aim to provide optimum health services to our employees and their families for mental, social and physical well-being. This concern is also extended to all stakeholders.



In economic terms too, healthy and happy workers are more productive; absenteeism and employee replacement/re-training costs are very low.

Tata Steel's commitment is top down and has extended to address HIV & AIDS. The Company has a stated policy on HIV/AIDS signed by the Managing Director. In 1994, Core Group-AIDS was formed under the Chairmanship of, Dy. MD (Corporate Services) and the Nodal Center-AIDS placed under Dr. H K Gardin, Convener, Core Group-AIDS to focus on this grave threat and formulate strategies for its control and prevention. The Core Group-AIDS members are drawn from the existing staff of departments such as Social Services, Community Development, Personnel, Public Health, local health institutions and the Government-run Voluntary Counselling & Testing Center.

All initiatives on HIV/AIDS are integrated into the ongoing social and welfare programs for the 38,182 employees at the workplace at all locations, as well as the community residing in and around Jamshedpur. Tata Steel has a very strong culture of social responsibility, which is imbibed and practiced by employees and the citizens of Jamshedpur, resulting in a large army of social volunteers and social entrepreneurs.

The activities of the Core Group-AIDS are focused on HIV/AIDS and include identification of target groups/areas, conducting AIDS Awareness Programs, developing peer leaders, developing and implementing a Health Information Management System at the district Civil Surgeon's office, organizing sensitization and skill building workshops on HIV/AIDS for doctors, para-medics and grass-roots level staff and helping prevent Parent to Child Transmission by facilitating safe delivery of the baby in a hygienic environment. Apart from this Nodal Center Core Group-AIDS focuses on counselling of STD/HIV/AIDS patients and their family members, prepares teaching materials, distributes condoms through six condom vending machines and has a help line.

"A life saved is worth a million". This program has had an impact on the stakeholders and led to many of them changing their "unsafe" sexual behavior, thus saving them from the scourge of AIDS. These programs have also helped reduce the stigma and discrimination, especially at the workplace. This has prompted the Company to conduct more of these IEC interventions on a war footing. The employees are very happy that for more than a decade Tata Steel has been conducting such initiatives not only for them, but also for their families and the society at large.

The Company also believes in networking to help create synergy in activities and ensure better utilization of resources. Its partners include WHO, NACO and Jharkhand SACS, CII Indian Business Trust, Tata Council on Community Initiatives, ILO, Global Business Coalition on HIV/AIDS, Global Compact, GRI, Rotary International, INP+, British Council, Xavier Labour Relations Institute, Ladies Core Group – AIDS, Jharkhand AIDS Prevention Consortium, Jharkhand Health Society and other regional NGOs.

#### Health & Safety Management System and ILO guidelines (LA14)

In 2005-06 the organization sustained the systems for OHSAS-18001 & SA-8000 Standards. ILO guidelines on Occupational Safety & Health Management System (ILO-OSH-2001) are integrated with OHSAS-18001 & SA-8000 management systems.

#### Addressing health & safety at workplace jointly with trade unions (LA15)

The Joint Consultation agreement with the trade union was signed in 1956 to enhance the participation of the workforce in managing the operation of the organization including Health and Safety aspects. The Joint Committees as explained above have been formed under these agreements at all locations with equal participation of employees and management. The representatives from the Union are duly elected members of the workforce of the Company.



## BUILDING PEOPLE

### Training of employees (LA9)

The workforce in Tata Steel is broadly divided into two categories (i) officers and (ii) unionized employees. Table 6.4 shows the average hours of training per year per employee in the two categories over the last four years.

**Table 6.4: Training details**

Description	02-03	03-04	04-05	05-06
Training man-hours per non- Officer per annum	44.41	52.45	52.50	42.16
Training man-hours per Officer per annum	17.95	20.06	14.87	14.06

The Table 6.5 contains additional data with regard to employee training at Tata Steel:

**Table 6.5 Employee Training at Tata Steel**

Subject	02-03	03-04	04-05	05-06
Average number of employees on roll	45629	42511	40508	38182
No. of employees trained	43248	36262	39648	37952
Training man-days	583848	561995	533085	468286
Man-days per employee per annum	13.5	13.22	13.16	11.93
Total man-hours for non- officer at SNTI	1734275	1997356	1851144	1436525
Total man-hours for officers at TMDC	75344	90156	65325	59806
Programme days	18230	18080	18090	15833
Total number of new programmes	58	45	51	47
Programme Quality index (5 point scale)	4.65	4.68	4.66	4.68
Faculty Quality index (5 point scale)	4.52	4.65	4.79	4.75
Training expenditure per employee	Rs. 4114	Rs. 4338	Rs. 4473	Rs. 5134
No. of summer trainees	979	1217	1193	658
No. of officers nominated for external training programme	745	804	830	611
No. of participants in one year Foremanship programme	45	52	55	55



### Programmes to support continued employability of employees (LA16)

Tata Steel has in-house training facilities both for technical and managerial training. The training needs for all officers are identified through Personal Development Plans (PDP) in the SAP-HR portal on the intranet and for all other employees by Training Need Surveys (TNS). Delivery of technical training by the Company's Technical Training Institute and managerial training by the Tata Management Development Center (TMDC) enable the Company to enrich the mix of its workforce in terms of its managerial and technical competence. Higher end training requirements of both technical and managerial are met through external programmes. Table 6.6 indicates the topics covered in internal and external training programmes. Table 6.7 indicates the institutes and organizations where external training programmes are attended in India and overseas.

Officers trained on the managerial topics find them useful for their career growth as well as continued employability even after superannuating. Many employees manage career endings as a faculty in Management Institutes or assignments on contract with local companies. Equipped with managerial and technical skills some entrepreneur employees also start their own consultancy firms.

**Table 6.6: Topics Covered in Training Programmes**

Internal Training	External Training
1 Achievement Orientation	1 Business Environment
1 Change Orientation	1 Change Orientation
1 Communication	1 Communication Skills
1 Conflict Management	1 Finance
1 Customer Orientation	1 General Management & Human Resources
1 Empathy	1 Health Management
1 Financial Management	1 Influencing Skills
1 General Management	1 International Management
1 Influencing Ability	1 Information Technology
1 Learning	1 Marketing
1 Marketing	1 Operations Management
1 Operations Management	1 People Development
1 Other Initiatives and Miscellaneous	1 Strategic Thinking & Management
1 People Development	1 Team & Conflict.
1 Planning & Organizing Skills	1 General Management
1 Problem Solving & Decision Making	1 Marketing
1 Project Management	1 Operations Management
1 Strategic Thinking & Management	1 Organization & Management
1 Team Building	1 Programmes for Senior Management
	1 Strategic Thinking & Management

**Table 6.7: Locations for External Training**

India	Overseas
1 IIMs	1 CEDEP, France
1 XLRI, Jamshedpur	1 INSEAD, France & Singapore
1 TMTC, Pune	1 IMD, Switzerland
1 ISB, Hyderabad	1 MIT, USA
1 NIAS, Bangalore	1 HARVARD, USA
1 ASCI, Hyderabad	1 WHARTON, USA
1 CII, Kolkata	
1 AIMA	

#### **Policies and Programmes for skills management of employees (LA17)**

Unionized employees in the Company are organized into clusters in the departmental hierarchy. Departments may have 3-4 clusters depending upon the operational needs. Each cluster is a combination of jobs, necessitating multi-skilling of employees. Employees move up within and between clusters on attaining the requisite skill. While the Technical Training Institute imparts vocational and basic skills; the departments impart on-the-job training. Technical training programmes run by Technical Training Institute of the Company are indicated in Annexure-IX.

Skill enhancement is a continuous process. Skill training to an employee, which begins at the time he joins the Company, continues throughout his career. Reinforcement takes place by way of his promotion within and between clusters in a department. In order to promote self-learning the Company has introduced e-Learning whereby employees can access e-Learning courses from their departmental e-Learning centers. Even unionized employees, by virtue of their technical skill and experience, find gainful engagement after their retirement from the Company.

#### **DIVERSITY AND OPPORTUNITY**

##### **Equal opportunity practices (LA10)**

Tata Steel is an equal opportunity employer. This has been articulated in the Tata Code of Conduct. All advertisements of Tata Steel related to recruitment carry this message. During career progression, equal opportunities are given prominently to all employees. The applications for employment do not carry columns like religion, province, and mother tongue. As a policy towards non-discrimination as per the Tata Code of Conduct, new recruitments through the Graduate Trainee, System Trainee & Trade Apprentices encourage induction of female candidates. Violation of the equal opportunity policy is redressed through the grievance redressal mechanism and Ethics Counsellor.

During the year, the Ethics Counsellor received 13 concerns related to equal opportunity employment violations, out of which four (4) were confirmed on investigation.

In addition, Tata Steel is concerned about protection of female employees from Sexual Harassment in the



Workplace, which is a part of the Code of Conduct Clause of Equal Opportunity employer. The Company has formed a Sexual Harassment complaint Committee, as per the guidelines of the Hon. Supreme Court.

### Equal opportunity performance (LA11)

The male/female ratio at Tata Steel is 93:7 for 05-06 (compared to 95:5 for 04-05). The female employees predominantly represent worker class and a few in the officer's cadre. Presently there are no women in the Board of Directors or among top 10 executives of the Company.

## STRATEGY & MANAGEMENT - HUMAN RIGHTS

### Ensuring human rights (HR1)

Tata Steel has five core values – Trusteeship, Integrity, Respect of Individual, Credibility and Excellence. Based on these values, the Tata Code of Conduct has been created as given in Annexure II. Clause 4 of the Code of Conduct commits Tata Group to be an equal opportunity employer where discrimination of employees based on caste, religion, color etc. should not be done. This clause also emphasizes that the workplace should be free of sexual harassment.

To make the Code of Conduct effective, an Ethics Counsellor has been appointed to listen to the grievances of the employees and any violation, if found, is dealt with through the established disciplinary procedure enumerated in the Works Standing Order 1970.

Tata Steel ensures protection of Fundamental Rights enshrined in the Constitution of India. There is an Employee Grievance Redressal Cell in the Human Resource Management Department, which reviews and addresses grievances. The detailed grievance redressal procedure is furnished in Annexure IV.

On-line grievance raising facilities like HOTMAIL, mail@ethics.com have been provided for employees. The complaints received at all the above facilities are looked into and analyzed and proper action taken. To avoid any harassment and retribution to the employees who have raised grievances, a Whistle Blower Protection Policy has been implemented in the Company (as shown in Annexure III). A Whistle Blower Protection Committee headed by senior management at Dy. MD level has been constituted to discuss these issues and take remedial action.

### Ensuring human rights by suppliers and contractors (HR 2/HR 3)

#### Performance of Supplier & Procedure for Monitoring:

The Procurement Division of Tata Steel has designed and deployed formats for Vendor Registration, which comprehensively captures relevant information on the vendor's processes and its products before the vendor is included in the panel of suppliers. Normally, the vendors are initially included as one time vendors. After the product or services received are found to be acceptable and that the vendor is capable of getting repeat business, only then is the vendor tagged as a long-term vendor. The Procurement Division also captures the financial status (audited balance sheet of last 3 years) of vendors before registration and subsequent information on its economic performance is obtained through various channels e.g. its customers and bankers. If required, a confidential report is obtained from the Vigilance department about the credentials of the vendors before formal registration. It has been made mandatory for vendors to accept the Tata Steel's Code of Conduct. An IT based system exists for "On Line Acknowledgement of CoC" by suppliers on the Internet at the e-procurement site.

Submission of compliance against various clauses of SA 8000 standard has been made mandatory for all vendors. It has been repeatedly conveyed to all vendors that Tata Steel would not like to have a business relationship with those who do not comply to the norms as laid down in the SA 8000 standard. A yearly plan is drawn up for doing sample audits at vendor's premises to check compliance. Written commitment from vendors is taken during vendor registration (it is a part of vendor assessment form for new vendor registration). The vendors are subsequently audited based on a protocol developed by M/s Det Norske Veritas (DNV) and audit findings are translated to scores with maximum rating as 100.

Vendor performance is monitored on Price, Quality, and Delivery parameters for suppliers and an additional parameter on Safety performance is also monitored for the service providers. Safety performance is strictly monitored and punitive action is taken promptly against any lapses. We are designing a system to capture the scores of SA 8000 compliance per vendor during their social assessment done by us or through the help of external agencies. This score will appear along with other parameters as cited above in the vendor performance evaluation.

Close monitoring on the compliance with labour laws as regards contractor's social performance is carried out and defaulters are strictly penalized as per the norms laid out.



In order to sustain the relationship with vendors, the following actions have been taken:

- 1 Training of vendors on safety and environment
- 1 Refresher training on SA 8000 to contractors
- 1 Distribution of pamphlets to contractor workmen about the rights and privileges by contractor cell
- 1 Vendor Meet, chaired by the Senior Management Team to create awareness on safety and environment.
- 1 Involvement of suppliers under "People Development Programme" in the Steering Committee/ Programme Committee & Organizing Committee for the "Labour Training Center".
- 1 Training on basic attitude and safety/environment orientation to labour/supervisors/contractors.
- 1 "On line" data generation and analysis for the contractor performance on price, quality, delivery, safety/ environment on ERP (SAP).
- 1 Development and incorporation of safety/environment criterion in service entry by Works agencies on ERP (SAP).
- 1 Using safety/environment data integrated to Safety Rating to control future business with Tata Steel.
- 1 Tripartite initiative with vendor, ICICI Bank & Tata Steel for "Vendor Financing with ICICI BANK" on a WIN-WIN-WIN process. This improves the working capital for a vendor. Additional bankers are being considered to create more value in the process.
- 1 A new initiative called Supplier Value Management programme ensures a cross-functional approach to building relationships with internal customers and suppliers.

The Procurement Division has also created a "single window" to address vendor's issues. It is a call center based on the Supplier Relationship Management (SRP) concept, designed to address all concerns related to vendors. It is IT enabled and basically addresses concerns/grievances related to payment/changes like E Initiatives etc. for all suppliers.

The Ethics Counsellor & Procurement Division closely monitor adherence to the Tata Steel Code of Conduct by suppliers. Defaulters are penalized as per the norms laid out.

Steps taken by Tata Steel towards social organizations and SSI units for sustainability- in case of social organizations and small-scale industry units, raw materials are issued to the vendors on a 'conversion' basis for the supply of finished goods, spares, and consumables. This will help reduce the burden of 'working capital' management of these small units. As a social responsibility initiative, social organizations and small-scale industries are patronized by giving them preference when placing orders, which otherwise can be serviced by larger units.

#### Employees training on relevant aspects of human rights (HR8)

Human Rights issues are covered during training imparted to the employees on the Code of Conduct. The Jamshedpur Works of Tata Steel is a SA-8000 Certified unit. Human rights issues are covered through SA-8000 training under the following topics:

- 1 No child labour
- 1 No forced labour
- 1 Health & Safety of employees
- 1 Free form of association and collective bargaining
- 1 No discrimination
- 1 Fair disciplinary practices
- 1 Working hours and remuneration as per rules
- 1 Management systems

175 employees were trained in SA 8000 programme during 2005-06. The employees so trained have been facilitating implementation of SA 8000 and related human right aspects in the Company.

#### NON DISCRIMINATION

##### Non discrimination (HR4)

Tata Code of Conduct emphasizes equal opportunities and non-discrimination. The Human Resource Policy of Tata Steel lays stress on recognizing people as the primary source for its competitiveness. The organization is committed to equal opportunities for attracting best available talent and ensuring a cosmopolitan workforce. The quality of life of its employees, developing their talent and maximizing their productivity, and also ensuring transparency, fairness and equity in all its dealings with the employees, is another component of the organization's HR Policy. Tata Steel has created a position of an Ethics Counsellor to monitor any discrimination in its activities, services and products. The concerns monitored and resolved by the Ethics Counsellor during the last three years are presented in "Bribery & Corruption (SO2).

## Employee Concerns related to Equal Opportunity Employer

The number concerns submitted formally related to equal opportunity employer are given below:

1	2001-2002	-	06
1	2002-2003	-	08
1	2003-2004	-	17
1	2004-2005	-	12
1	2005-2006	-	13

## Encouraging freedom of association (HR5)

Freedom of Association is enshrined under the Constitution of India and in the Trade Union Act. The Tata Code of Conduct on regulatory compliance requires Tata Steel to at least comply with all laws of the land and go beyond compliance wherever possible. Honouring the spirit of freedom of association is built into the constitution and Code of Conduct Tata Steel's values.

## NO CHILD LABOUR (HR6)

As per the Factory Act 1948, the minimum age required for employment is 18. Tata Steel engages no child labour. Tata Steel complies with this Act and hence the Code of Conduct also requires compliance with all regulatory requirements. The recruitment process requires furnishing of appropriate proof of age to ensure the age bar is complied with.

The Social Accountability 8000 (SA 8000) clause on Child Labor guides communication and reinforcement to stakeholders on Tata Steel's expectations of their conduct in this regard. The company's SA 8000 Manual (2004) expressly states that no persons below the age of 18 may be engaged by contractors, suppliers or vendors at any point, within or outside the company premises, and in the event of discovery of such a case, liabilities for the education of the child until completion of high school would accrue to the defaulting party. This guideline precedes Government of India rulings restricting the hours of work and kinds of jobs where child labor may be engaged. With the strengthening of the Child Labor Abolition and Control Act of 1986, the penalties stipulated by the State will additionally be upheld. To this effect, information is being disseminated to all our stakeholders.

The Company communicates from time to time with its employees to not engage Child Labor domestically and to actively discourage it. Several programs are supported in the community to educate the children of domestic staff residing in Company accommodation so that their children may seek a better future.

## NO FORCED & COMPULSORY LABOUR (HR7)

There is no forced and compulsory labour in Tata Steel. The Grievance Redressal Committee and Ethics Counsellor adequately monitor violations of this requirement. The grievance redressal procedure is furnished in Annexure-IV.

## DISCIPLINARY PRACTICES

### Disciplinary practices (HR9)

Order#23 of the Works Standing Orders delineates the issues, which may be considered misconduct. Order#24 prescribes the punishment for misconduct and Order#25 explains the procedures for dealing with cases of misconduct. These orders are strictly followed. These orders are in line with the Works Standing Order applicable to our Company.

## Employee grievance management (HR10)

There is an established three tier Grievance Management System in Tata Steel and it ensures that no retaliation takes place in the process after the resolution of the grievance. The process is so effective that there had been no industrial unrest/strike in the past 78 years. For details of the grievance redressal procedure please refer to Annexure-IV.

## HUMAN RIGHTS TRAINING FOR SECURITY PERSONNEL (HR11)

There is a special Training Center dedicated to the training of security personnel on issues such as security practices and human rights. Trained security and district administration trainers impart training to the security personnel. Human rights aspects and various other important aspects on security procedures are covered under the following topics during training:

1	Right of search
1	Right of arrest according to CRPC Sec. 43
1	Safety
1	Weapon handling
1	Rescue (Fire fighting)
1	Motivation & positive attitude

- 1 OSHAS & SA 8000
- 1 How to perform duty & how to behave with the customer
- 1 Customer orientation
- 1 Works Standing order & Domestic enquiry

## INDIGENOUS RIGHTS

### Community and the indigenous people (HR 12)

In line with the Group Purpose and Tata Code of Conduct, Tata Steel returns a fair share of what it earns to society. This evokes trust among consumers, employees, shareholders and the community it serves. Tata Steel has a Community Development & Social Welfare Department to serve communities in Jamshedpur. To implement the Group Purpose, Tata Steel Rural Development Society promoted by Tata Steel in 1979 addresses the needs of the rural community in the areas indicated in Service to Community (SO1).

### Returns to society (HR 14)

The expenditure on social and environmental services during the past three years is furnished below in the Table 6.8.

**Table 6.8 : Return to Society**

Services	02-03	03-04	04-05	05-06
Municipal services	248.30	302.50	264.70	296.30
Community services	45.80	44.70	186.10	187.50
Medical services	70.10	46.10	73.30	97.30
Grants and donations	21.40	20.60	19.30	75.72
TSRDS grants	19.00	38.70	42.00	58.00
Environment	1087.50	1581.4	1362.38	1889.00
Miscellaneous	-	4.0	-	-
TOTAL	1492.10	2038.0	1947.78	2603.82
PAT	10123.10	17462.2	34741.60	35063.8
Ratio (%)	14.70	11.67	5.60	7.39
Gross Revenue	98436.60	119209.60	144895.0	151393.9
Ratio (%)	1.51	1.71	1.34	1.79

### Addressing community grievance (HR 13)

Community Development & Social Services, Tribal Culture Society and Tata Steel Rural Development Society implement the community grievance management system. Local representatives from the community including senior citizens are involved in the Sr. Citizen Forum, Spouses Dialogue, and Joint Community Meeting & Community Need Analysis. The concerns of the members of the society are discussed, prioritized and integrated with the Tata Business Excellence Model of concerned departments.

## COMMUNITY ASSOCIATION (SO1) -

### Corporate initiatives

#### Civic Services

In line with its commitment to develop and maintain the city of Jamshedpur where more than 75% of the population are not employees of the Company, Tata Steel endeavoured to address the most critical of civic amenities, water, to further improve the quality of life of the residents of Jamshedpur and adjoining non-lease areas. It set up a mega water supply project under which filtered water facilities were extended to the residents of Uliyan and Bhatia Bustee. This 32 km pipeline network is a unique concept in Citizen-Private Partnership model benefiting more than 20,000 residents. Tata Steel also set up 116 tube wells benefiting 1800 households in the nearby rural communities and has conducted extensive awareness campaigns for saving and optimizing usage of water and also the use of water harvesting practices amongst the public. The Sukinda Chromite Mines, in Orissa, saw the completion of it 'Operation BULI', a special project which has facilitated the supply of electricity to 20 villages under four gram panchayats, by the construction of an electrical sub station. TSRDS activities in and around Jamshedpur are given in Table 6.9.

**Table 6.9 : TSRDS reach in and around our establishment.**

Our establishment	Villages covered for services	Activities covered in health & hygiene	Income generation	Empowerment
TISCO Works	310	Immunization, Cleft Lip / Palate Correction, Tubectomy, Eye care services, Blood donation, Mobile medical, TB control, Aids awareness, Drinking water projects, low sanitation campaign.	Renewable energy, water shed development, lift irrigation, horticultural services, agricultural extension, poultry, fishery, dairy, goatry, etc.	Self help groups, rural sports, worker education, and youth empowerment.
West Bokaro Collieries	26			
Noamundi Mines	68			
Joda Mines	37			
Jamadoba Collieries	48			
Ranchi State Capital	127			
Sukinda Mines	35			

### Lifeline Express

The Lifeline Express was developed by IMPACT India in collaboration with the Indian Railways and Ministry of Health. Tata Steel has since 1991 conducted 10 such camps to reach out to villages in the vicinity of its operational units. Of these six have been in Jharkhand, three in Orissa and one in West Bengal. The tenth lifeline express camp facilitated by Tata Steel Rural Development Society was held at Sini from December 16, 2005 to January 15, 2006. The surgeries were conducted by specialists from Tata Main Hospital, Jamshedpur. The project was divided into four phases with a complete week each being devoted to Orthopaedic, ENT, Reconstructive Surgery and Eye Ailments as shown in Table 6.10. TSRDS began its awareness and publicity campaign over a month before the arrival of the hospital on rails. During the camp the TSRDS staff assisted the Doctors with both pre-operative and post-operative care as well as provided follow-up advice and check-ups. Patients came from 14 districts of Jharkhand/Bihar/Orissa/West Bengal.

**Table 6.10 : Lifeline Express - Treatment**

Phases	Registered	Operated	Selected for Aids
Orthopaedics	321	24	68
ENT	1407	412	142
Plastic (cleft lip)	261	155	-
Eye	2275	410	-
Total	4264	1001	211

### Health

Furthering its partnership with the Jharkhand Government and its people, Tata Steel is committed to contribute Rs. 25 crores every year, for the next 30 years, to a government run Health Insurance Scheme for the State's Below Poverty Line (BPL) families who would be able to avail a medical insurance umbrella at zero cost.

### Center for Family Initiatives

Tata Steel, through the Tata Steel Family Initiative Foundations (TSFIF), organized a mega AIDS Awareness campaign during the Trucker's Utsav 2005, which touched over 3000 truckers, one of the most vulnerable target groups of society. Continuing its crusade against HIV/AIDS, the Company also conducted health camps to provide checkups and treatments wherein a very large number of truckers came in for health consultations and were treated. Under the HIV/AIDS awareness programmes conducted by the Company, counseling sessions at Sneha Kendras (counseling centers), targeted intervention projects and awareness building programmes were held in rural as well as urban areas. 100% of high-risk population across 22 villages and 100% of high school children in 72 villages were covered under awareness programmes on HIV/AIDS. The Center conducted family welfare programmes, which provided interventions through sterilization, spacing and counseling sessions. Awareness of Reproductive Health was also generated through various programmes amongst adolescents. The Company conducted 12,000 permanent family planning operations.

Tata Steel, through its agency the Tata Steel Rural Development Society (TSRDS), also ensured treatment of one-lakh patients through mobile clinics and immunization of 81.2% children in 197 villages in the period under review. Contributing towards developing the health infrastructure of the rural areas in the State, Tata Steel has constructed an Intensive Care Unit (ICU) at the Government hospital at Bolangir, Orissa at a cost of Rs. 20 lakhs, to provide immediate emergency services for the first time in the area. It has also set up a unit in Ranchi to address the health care needs of the villages in Arki block near Ranchi.

### Training and Education

The TSRDS covered 6500 illiterate adults in peri-urban areas of Jamshedpur in its Adult Literacy Programme. In addition nearly 2000 children from the underprivileged section of society from different bustees who were imparted pre-primary education through Tata Steel's Bal Vikas Classes, in association with the Jharkhand Education Project in FY '05-06. To promote skill development, youths from different bustees around Jamshedpur were imparted training in computers, motor driving, plumbing and electrical jobs. The Company's involvement in the sustained development of Orissa State continued over the financial year through its new education projects. It set up the JN Tata Technical Education Center to impart technical skills among the youth of Orissa so as to improve their employability in industry. Tata Steel, in collaboration with the Government of Orissa, also launched a project for setting up the Institute of Mathematics and Applications to promote the culture of mathematical competence at all levels of society.

### Empowerment

To take the process of development beyond the creation of economic wealth, Tata Steel Rural Development Society (TSRDS) sought to galvanize entire villages towards a better quality of life. The mechanisms used by the Society to sow the seeds of opportunity included Self Help Groups, Early Childhood Educational programmes, Youth Leadership Programmes, Camp Schools for dropout tribal girls, Farm Level Training, Training of Rural Artisans, Marketing Rural Handicrafts, Promotion of Sporting Talents etc. Project UDAY was an important



Empowerment activity launched by the Jamshedpur unit. Villages selected for the project, benefited through Self Help Groups, skill development among the youth, inculcation of the habit of attending school among the village children and improved farming and livestock management techniques.

### Income Generation

Tata Steel strengthened its initiatives in various areas of Income Generation to further the objective of economic value creation and economic self-reliance of the villages in the vicinity of its operational areas. The primary tools used by TSRDS to encourage its target groups to earn a better livelihood were: Irrigation projects, Agri Extension projects, Animal Husbandry, Kruiler Farming, Floriculture, Vocational Training etc. The Company also took up promotion of economically viable industries including rural handicrafts and other cottage Industries among the rural people.

### Tribal Culture

The Tribal Cultural Society (TCS) of Tata Steel continued to support and inculcate the culture and heritage of various tribes of the region among the tribal youth and urbanized tribal communities. It organized all important tribal festivals with their traditional aspects. Tribal dance, drama, music and song competitions were conducted by the tribal communities, thereby giving them an opportunity to develop and sustain the unique richness of their culture.

### Sports

Tata Steel's commitment to sustainable growth as reflected in its Vision 2007 is amply supported by improving the quality of life of the community it serves through sports. It inculcates sports as a way of life right from grass-root level through its academies, training centers, life style management programmes, gymnasiums, sports for school programmes through JOOGA and sports for special children. Sport is seen as an important expression of community spirit and a way to strengthen community health. In consonance with this philosophy, the Company has promoted three residential academies: Tata Football Academy, Tata Archery Academy & Tata Athletics Academy.

Talented youths are spotted and short listed and finally inducted in these academies on the basis of their potential and talent, which is assessed by the coaches. Tata Steel's sports academies continued their excellent performances in FY 2005-06. Several cadets of Tata Football Academy, Tata Archery Academy and Tata Athletics Academy made successful international representations and came out winners in events like Asian Indoor Championship, Bangkok, Athletics Championship, Thailand and the Senior National Archery Championship, Jamshedpur.

### Training Centres

Sports Department has long realised the need to provide sports infrastructure to today's youth to channelise their energies into sports. It runs 9 training centres in different disciplines viz. Athletics, Boxing, Badminton, Basketball, Chess, Cricket, Golf, Handball and Tennis. These training centres are open to local youth where training is imparted to them after school hours. The concept of catching them young has had many success stories. Ms. Aruna Mishra is a top ranked boxer in the world and has won many medals at World and Asian Championships. Over 550 children have undergone training under the Training Centres during the year. Several of these children have gained employment on the basis of their sports achievements.

### Life Style Management

Tata Steel believes in promotion and maintenance of a high degree of physical, mental and social well-being of its employees. Regular programmes are conducted on Stress Management, Dependency Management, Nutrition, Yoga & Meditation amongst employees & their spouses for their well-being. The programme is now being extended to employees, school teachers and school staff to cover a larger spectrum of the community. This activity has also helped in creating enthused and happy employees.

### Programmes for Special Children

This has been an ongoing activity for several years. During the year, 9 Gold, 12 Silver & 19 Bronze medals were won by special children because of sustainable training & specialised coaching. Work has already started to make a Training Centre for Special Children in Jamshedpur, which will be the 1st of its kind in India.

### JOGGA Sports

The Sports Department has brought together almost 40 schools under this project to compete in inter-school sports activity, giving a renewed fillip to sports amongst school children and better interaction between them. Over 8000 school children have participated in events organised by the Sports Department during the year.

### Ladies Fitness Centre

In addition to running three gymnasiums in different locations, there is an exclusive Ladies Fitness Centre, which besides having a gymnasium has yoga and meditation classes.

### Adventure Programme

In order to build their confidence, promote self belief and develop a “Can Do Attitude”, Tata Steel Adventure Federation has been conducting adventure programmes from time to time for the visually challenged, the hearing impaired, mentally challenged and the rural people. Regular programmes are conducted for employees, corporate and special children annually.

### Sports for Deaf & Dumb Athletes

Training of deaf & dumb athletes is provided through specialised coaching. These athletes have excelled in their performance by winning 13 Gold, 6 Silver and 7 Bronze medals at the National Athletics Championship of the Deaf held during the year.

### Awards received for social, ethical & environmental performance (SO4)

- 1 Tata Steel conferred CII-ITC Sustainability Awards 2006.
- 1 Tata Steel ranked World's Best Steel Maker for the third time.
- 1 Paper on Redefining Retail of Steel in India wins the prestigious SP Jain Marketing Impact Award.
- 1 Tata Steel takeover of NatSteel wins accolade in The Asset Triple A-Awards.
- 1 Tata Steel Family Initiatives Foundation wins FICCI AWARD.
- 1 Tata Steel – Bearings Division receives the recent Environmental Management System accreditation ISO 14001:2004 version from UL India for its operations.
- 1 Tata Steel conferred CAPEXIL Special Award for Outstanding Chrome Concentrate Exports.
- 1 Maple Leaf International Award for Tata Steel.
- 1 Tata Steel wins MIS ASIA IT EXCELLENCE AWARD 2005 for Best IT Governance.
- 1 Tata Sons Chairman Marks 60 Years of Tata Operations in the United States and receives Distinguished Achievement Award from Global Human Rights Organization.
- 1 Tata Steel's ITS Department awarded “BS:15000 Part-1:2002” Certificate for IT Service Management.
- 1 Tata Steel bagged the CII Productivity Award.
- 1 Tata Tiscon won Gold at The Calcutta Ad Club Awards.

### BRIBERY & CORRUPTION (SO2)

All the officers of Tata Steel have signed the Tata Code of Conduct. Tata Code of Conduct has a specific clause pertaining to bribery and corruption. The organization has issued a Gift Policy, which clearly articulates the Gift Exchange procedures, values etc. The Policy is presented in Annexure-VII. The Company has an Ethics Counsellor to ensure all the issues pertaining to ethics were dealt with as per the Code of Conduct. During the year, 81 concerns were received, out of which about an average of only 25% concerns are valid. A summary is presented in Table 6.11.

Table 6.11 : Concerns received against TCOC Clauses				
COC Clause No.	TCOC Clause	Concerns		
		(03-04)	(04-05)	(05-06)
1	National Interest	Nil	Nil	Nil
3	Competition	Nil	Nil	Nil
4	Equal Opportunity Employer	17	12	13
5	Bribery & Corruption	1	2	1
11	Co-operation of Tata Companies	Nil	Nil	Nil
13	Third Party Representation	7	8	16
17	Ethical Conduct (including Vendor Redressal)	65	15	33
18	Regulatory Compliance	Nil	0	1
19	Concurrent Employment	NIL	2	4
20	Conflict of Interest	Nil	1	4
22	Protecting Companies Assets	14	6	3
Others	Other clauses (2,8,14,16,21,24,25)	22	Nil	6
	<b>TOTAL</b>	<b>125</b>	<b>44</b>	<b>81</b>

With regard to bribery and corruption, the organization has taken very strict action and has asked 9 Officers and 5 Non-Officers to leave the Company. The Vigilance Group of the Company deals with bribery and corruption issues.

### POLITICAL CONTRIBUTION (SO3 & SO5)

Tata Steel doesn't encourage any political lobby or offers contributions to political parties as per the Clause#7 of Tata Code of Conduct. However, as per the group initiative, Tata Steel contributes to Tata Group Trust, which makes contribution to political parties. During the reporting period Tata Steel didn't contribute any amount to the Trust (in 04-05 Rs.35 Million were contributed).

## COMPETITION AND PRICING

### Pertaining to anti-trust and monopoly (SO6)

There is no case pending in any Court pertaining to violation of anti-trust and monopoly regulations.

### Preventing anti-competitive behaviour (SO7)

The organization follows the Tata Code of Conduct and monitors the compliance related to various clauses of the Code of Conduct (Annexure-I). The monitoring results are furnished under SO2.

## CUSTOMER HEALTH & SAFETY (PR1, PR4, PR5 & PR6)

Tata Steel has not instituted any specific procedure for preserving customer health & safety during the use of its products. However, its steel products are environment friendly and do not pose any health or safety hazard as a result of their use. Tata Steel addresses the environmental issues of the products only by carrying out Life Cycle Assessment Studies to reduce the environmental burden during production and mining operations. There was no instance of non-compliance with regulations related to health and safety of its products nor have any fines/penalties been imposed. There were no complaints to this issue during the reporting year.

## PRODUCTS & SERVICES

### Product Information and Labelling (PR2 & PR7)

There are no regulations on product information and labelling other than the standards on physical dimensions and chemical composition on various products manufactured by Tata Steel. Test certificates are issued at the time of delivery to the customers.

No instance of non-compliance with regulations concerning product information and labelling, including any penalties or fines assessed for these breaches occurred in the reporting period.

### Customer Satisfaction (PR8)

Our key processes for determining satisfaction of customers and building relationships for retention are done through "Manage Customer Accounts" and "Measure Customer Satisfaction" processes. Specific customer acquisition plans are drawn up on an annual basis during ABP formulation, which is reviewed periodically. The determination of customer satisfaction is done segment-wise using products/ service attributes as parameters. This is achieved by conducting annual survey through an independent surveyor. The overall results of the customer satisfaction survey are furnished in the Fig. 6.18.

Fig.6.18-Overall Customer Satisfaction Index



## Customers & Competitive Position

The focus segment-wise competition in Flat and Long Products along with the objectives are mentioned below:

### Flat Products

**Automotive:** Enter global automotive markets while maintaining the dominant & preferred supplier status in India. The customers include Tata Motors, Toyota, Maruti, Ford, Hyundai, Ashok Leyland etc. The main competition in this segment is from Essar, Bhushan & Imports.

**Steel Roofing:** Grow the market size of steel roofing segment in India through introduction of new products. The main competition in this segment is from Bhushan Steel, SAIL & JSW.

**General Engg:** Become the preferred supplier among small OEM & Retail customers in India. The main competition in this segment is from Bhushan Steel, SAIL & now Essar.

### Long Products:

**Construction:** Aspire to be the most preferred supplier of steel products to the construction sector and continues to be EVA plus year on year. The customers include HCC, Gammon, L&T, Afcons, Esab & Ador. The main competition in this segment is from SAIL, RINL and secondary producers.

The domestic market share of Tata Steel for flat products & long products is shown in Fig. 6.19 & 6.20.

Figure 6.19 : Domestic Market Share - Flat Products - 2005-06

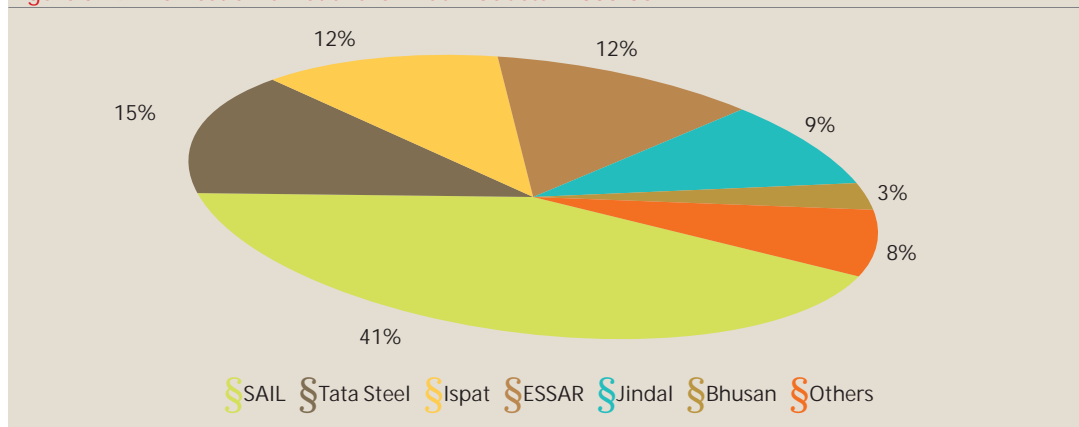
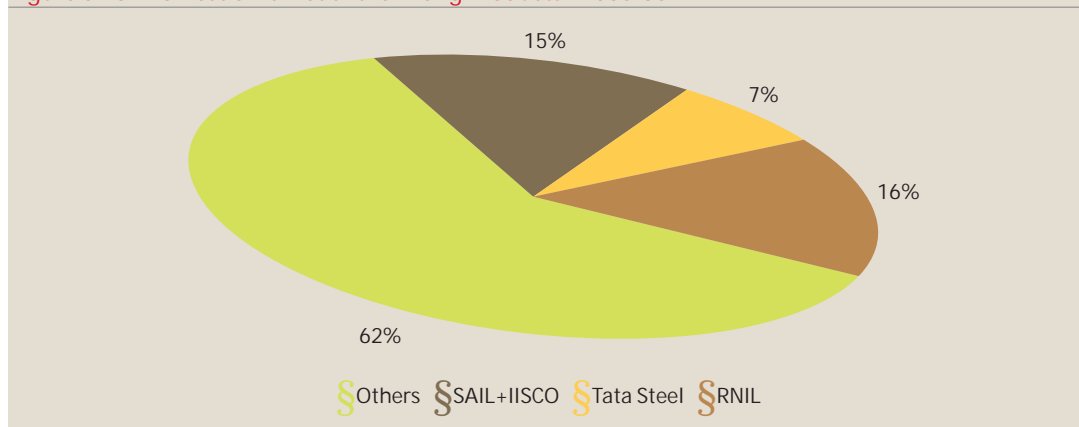


Figure 6.20 : Domestic Market Share - Long Products - 2005-06



#### Tata Steel's position vis-à-vis world steel majors

World Steel Dynamics (WSD) a well known international body studies the competitiveness of the steel plants across the world based on some key parameters of competitiveness such as operating cost, profitability, balance sheet, dominance, market growth, technological revolution, etc. Tata Steel has been amongst the top five steel makers in the world for the last six years and has been in top position in recent consecutive years given in Table 6.12.

Table 6.12: Tata Steel's position vis-à-vis world steel majors

Ranking	2001	2002	2003	2004	2005	2006
1	Tata Steel	Posco	Posco	Posco	Tata Steel	Tata Steel
2	Usnior	Nucor	Bao Steel	Severstal	Posco	Posco
3	Posco	Tata Steel	Tata Steel	Bao Steel	Severstal	Bao Steel
4	Gerdau	Gerdau	Nucor	Tata Steel	Bao Steel	Severstal
5	Nucor	Bao Steel	Gerdau	BlueScope	Mittal	Nucor*
No. of steel makers considered for WSD ranking	12	13	20	21	23	22

*N.B: Position 5 has 2 companies: Nucor, USA and Arcelor.*

#### ADVERTISING ETHICS (PR9 & PR10)

Tata Steel advertises for its corporate image during the reporting year and product promotion. The advertising agencies subscribe to the ethical standards advocated by Advertising Standard Council of India. No breach of advertising and marketing regulations was brought to the notice of Tata Steel during the reporting period.

#### RESPECT FOR PRIVACY (PR3 & PR11)

Privacy related to consumer information, such as, specifications of special products developed for specific consumers are protected through confidentiality agreements.

There was no substantiated complaint regarding breach of consumer privacy against Tata Steel during the reporting period.



## SECTION - VII

### ANNEXURES

ANNEXURE NO	DESCRIPTION	PAGE NO.
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## Annexure-I

### GLOBAL COMPACT - THE TEN PRINCIPLES

At the World Economic Forum, Davos, on 31st January 1999, UN Secretary-General Kofi A. Annan challenged world business leaders to “embrace and enact” the Global Compact, both in their individual corporate practices and by supporting appropriate public policies. These principles now cover human rights, labour, environment and anti-corruption.

#### Human Rights

The Secretary-General asked world business to:

- 1 support and respect the protection of international human rights within their sphere of influence; and
- 2 make sure their own corporations are not complicit in human rights abuses.

#### Labour

The Secretary-General asked world business to uphold;

- 3 freedom of association and the effective recognition of the right to collective bargaining;
- 4 the elimination of all forms of forced and compulsory labour;
- 5 the effective abolition of child labour, and
- 6 the elimination of discrimination in respect of employment and occupation.

#### Environment

The Secretary-General asked world business to:

- 7 support a precautionary approach to environmental challenges;
- 8 undertake initiatives to promote greater environmental responsibility; and
- 9 encourage the development and diffusion of environmentally friendly technologies.
- 10 The Secretary-General stressed that the business should work against all forms of corruption, including extortion and bribery.

## Annexure II

TATA CODE OF CONDUCT (adopted across the Tata Group in 1998-99)

(visit [www.tatasteel.com](http://www.tatasteel.com) for complete CoC)

Clauses pertaining to sustainability from Tata Code of Conduct (25 numbers total) are highlighted below:

### National Interest (Clause#1)

A Tata Company shall be committed in all its actions to benefit the economic development of the countries in which it operates and shall not engage in any activity that would adversely affect such objective. It shall not undertake any project or activity to the detriment of the Nation's interests or those that will have any adverse impact on the social and cultural life patterns of its citizens. A Tata Company shall conduct its business affairs in accordance with the economic development and foreign policies, objectives and priorities of the Nation's government and shall strive to make a positive contribution to the achievement of such goals at the international, national and regional levels as appropriate.

### Competition (Clause#3)

A Tata Company shall fully strive for the establishment and support of a competitive open market economy in India and abroad and shall co-operate in the efforts to promote progressive and judicious liberalization of trade and investment by a country.

Specially, a Tata Company shall not engage in activities, which generate or support the formation of monopolies, dominant market positions, cartels and similar unfair trade practices.

A Tata Company shall market its products and services on its own merits and shall not make unfair and misleading statements about competitors' products and services. Any collection of competitive information shall be made only in the normal course of business and shall be obtained only through legally permitted sources and means.

### Equal-Opportunities Employer (Clause#4)

A Tata Company shall provide equal opportunities to all its employees and all qualified applicants for employment without regard to their race, caste, religion, colour, ancestry, marital status, sex, age, nationality, disability and veteran status. Employees of a Tata Company shall be treated with dignity and in accordance with the Tata Policy to maintain a work environment free of sexual harassment, whether physical, verbal or psychological. Employee policies and practices shall be administered in a manner that would ensure that in all matters equal opportunity is provided to those eligible and the decisions are merit-based.

### Gifts & Donations (Clause#5)

A Tata Company and its employees shall neither receive nor offer or make, directly or indirectly, any illegal payments, remuneration, gifts, donations or comparable benefits which are intended to or perceived to obtain business or un-competitive favours for the conduct of its business. However, a Tata Company and its employees may accept and offer nominal gifts, which are customarily given and are of commemorative nature for special events. Policy summarized in Annexure VII.

### Political Non-Alignment (Clause#7)

A Tata Company shall be committed to and support a functioning democratic constitution and system with a transparent and fair electoral system in India. A Tata Company shall not support directly or indirectly any specific political party or candidate for political office. The Company shall not offer or give any company funds or property as donations, directly or indirectly, to any specific political party, candidate or campaign.

### Health, Safety and Environment (Clause#8)

A Tata Company shall strive to provide a safe and healthy working environment and comply, in the conduct of its business affairs, with all regulations regarding the preservation of the environment of the territory it operates in. A Tata Company shall be committed to prevent the wasteful use of natural resources and minimize any hazardous impact of the development, production, use and disposal of any of its products and services on the ecological environment.

### Quality of Products and Services (Clause#9)

A Tata Company shall be committed to supply goods and services of the highest quality standards backed by efficient after sales service consistent with the requirements of the customers to ensure their total satisfaction. The quality standards of the Company's goods and services should at least meet the required national standards and the Company should endeavor to achieve international standards.

#### Corporate Citizenship (Clause#10)

A Tata Company shall be committed to be a good corporate citizen not only in compliance with all relevant laws and regulations but also by actively assisting in the improvement of the quality of life of the people in the communities in which it operates with the objective of making them self reliant. Such social responsibility would comprise, to initiate and support community initiatives in the field of community health and family welfare, water management, vocational training, education and literacy and encourage application of modern scientific and managerial techniques and expertise. This will be reviewed periodically in consonance with national and regional priorities. The Company would also not treat these activities as optional ones but would strive to incorporate them as integral part of its business plan. The Company would also encourage volunteering amongst its employees and help them to work in the communities. Tata Companies are encouraged to develop social accounting systems and to carry out social audit of their operations.

#### Public Representation of the Company and the Group (Clause#12)

The Tata Group honours the information requirements of the public and its stakeholders. In all its public appearance with respect to disclosing company and business information to public constituencies such as the media, the financial community, employees and shareholders, only specifically authorized directors and employees shall represent a Tata Company or the Tata Group. It will be the sole responsibility of these authorized representatives to disclose information on the Company.

#### Ethical Conduct (Clause#17)

Every employee of a Tata Company, which shall include whole-time Directors and the Managing Director, shall deal on behalf of the Company with professionalism, honesty, integrity as well as high moral and ethical standards. Such conduct shall be fair and transparent and be perceived to be as such by third parties. Every employee shall be responsible for the implementation of and compliance with the Code in his professional environment. Failure to adhere to the Code could attract the most severe consequences including termination of employment.

#### Regulatory Compliance (Clause#18)

Every employee of a Tata Company shall, in his business conduct, comply with all applicable laws and regulations, both in letter and in spirit, in all the territories in which he operates. If the ethical and professional standards set out in the applicable laws and regulations are below that of the Code then the standards of the Code shall prevail.

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## Annexure-III

### CoRE SUSTAINABILITY CHARTER

#### Objective of the Charter

To express support publicly for these principles and to provide a basis for pursuing environmental improvements at the corporate level.

#### Principles

##### *Corporate Priority:*

To recognize environmental management as among the highest corporate priorities and as a key determinant to sustainable development; to establish policies, programs and practices for conducting operations in an environmentally sound manner.

##### *Process of Improvement:*

To continue to improve corporate policies, programs and environmental performance, taking into account technical development, scientific understanding, consumer needs and community expectations, with legal regulations as a starting point.

##### *Integrated Management:*

To integrate these policies, programs and practices into each business as an essential element of management in all its functions.

##### *Employee Education:*

To educate, train and motivate employees to conduct their activities in an environmentally responsible manner.

##### *Prior Assessment:*

To assess environmental impacts before starting a new activity or project and before decommissioning a facility or leaving a site.

##### *Products and Services:*

To develop and provide products or services, those have no undue environmental impacts and are safe in their intended use, that are efficient in their consumption of energy and natural resources, and that can be recycled, reused, or disposed of safely.

##### *Customer Advice:*

To advise and, where relevant, educate customers, distributors and the public in the safe use, transportation, storage and disposal of products provided; and to apply similar considerations to the provision of services.

##### *Facilities and Operations:*

To develop, design and operate facilities and conduct activities taking into consideration the efficient use of energy and materials, the sustainable use of renewable resources, the minimization of adverse environmental impact and waste generation, and the safe and responsible disposal of residual wastes.

##### *Research:*

To conduct or support research on the environmental impacts of raw materials, products, processes, emissions and wastes associated with the enterprise and on the means of minimizing such adverse impacts.

##### *Precautionary Approach:*

To modify the manufacture, marketing or use of products or services or the conduct of activities, consistent with scientific and technical understanding, to prevent serious or irreversible environmental degradation.

##### *Contractors and Suppliers:*

To promote the adoption of these principles by contractors acting on behalf of the enterprise, encouraging and, where appropriate, requiring improvements in their practices to make them consistent with those of the enterprise, and to encourage the wider adoption of these principles by suppliers.

##### *Emergency Preparedness:*

To develop and maintain, where significant hazards exist, emergency preparedness plans in conjunction with the emergency services, relevant authorities and the local community, recognizing potential trans-boundary impacts.



*Transfer of Technology:*

To contribute to the transfer of environmentally sound technology and management methods throughout the industrial and public sectors.

*Contributing to the common effort:*

To contribute to the development of public policy and to business, governmental and inter-governmental programs and educational initiatives that will enhance environmental awareness and protection.

*Openness to concerns:*

To foster openness and dialogue with employees and the public, anticipating and responding to their concerns about the potential hazards and impacts of operations, products, wastes or services, including those of trans-boundary or global significance.

*Compliance and Reporting:*

To measure environmental performance; to conduct regular environmental audits and assessments of compliance with Company requirements, legal requirements and these principles; and periodically to provide appropriate information to the Board of Directors, shareholders, employees, the authorities and the public.

*{Drawn from ICC's (International Chamber of Commerce)  
Business Charter for Sustainable Development}*

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## Annexure-IV

### GRIEVANCE REDRESSAL PROCEDURE

- 1 The Grievance Procedure aims at settlement of grievances of permanent employees, other than supervisors and fresh employees on probation, in the shortest possible time and at the lowest possible level. It is a three-stage procedure with an appropriate grievance form for each stage.
- 1 Individual grievances and complaints shall not be discussed at any level other than that specified in this procedure except that, if the Trade Union so desires, such cases may be put up for discussion at the Central Works Committee.
- 1 Policy matters and their interpretation shall not be discussed at any level except with the top management. The Union, however, can take up such matters at the Central Works Committee.
- 1 Representations for the redressal of grievances from employees to the various authorities either directly or through the Union, when their cases are pending with any Works Committee, are not conducive to the working of those committees. Hence, no representation will be entertained for discussion at any level of the management if the case is already referred to and pending with any Works Committee, until the same is either disposed of or withdrawn from the Works Committee.
- 1 In exceptional cases, however, involving grievances of a number of workmen other than routine grievances or questions of principle or policy or any other important matter where immediate action is necessary, the Union may take up the case with the appropriate level of management. In cases of importance the President or the General Secretary of the Union may ask the management for a joint enquiry.

The following subjects come under the purview of this procedure;

1 Acting	1 Misconduct
1 Amenities and/or facilities	1 Nature of job
1 Continuity of service	1 Promotion (excluding selection by interview)
1 Compensation	1 Safety appliances
1 Discharge/dismissal	1 Suspension
1 Fines	1 Transfer
1 Increment	1 Victimization
1 Leave	1 Warning letter
1 Medical	

#### Stage One:

If an employee has a grievance, he should meet his shift-in-charge or equivalent and talk it over with him. In case of appeal against punishments excluding suspension, discharge or dismissal, the employee should meet his General Foreman or equivalent. If necessary he should obtain a copy of Grievance Form-I. This should be filled in and submitted within one week of the date on which he knew the facts, on the basis of which the grievance has arisen, except that in the case of promotions a time limit of six weeks from the date of the promotion in question will be allowed.

- 1 The grievance form should be handed over to the shift-in-charge, General Foreman or equivalent, as the case may be, who will arrange to issue an acknowledgement receipt. He will make the necessary enquiries and return the form to the employee concerned with his remarks in the space provided for this purpose or, with the remarks of the head of the department (where the matter is beyond the jurisdiction of the General Foreman or the shift-in-charge or equivalent), within the next two working days from the receipt of the form. In cases requiring reference to higher authorities this time limit will be relaxed. If necessary, the employee can discuss the case further with the supervisor concerned in the light of his remarks. If so desired, the employee can take the help of the Union representative in presenting or discussing the case at this and/or the next stage.

#### Stage Two:

- 1 If the employee is not satisfied with the reply at stage one, he may obtain from the General Foreman or the shift-in-charge or equivalent, as the case may be, a copy of Grievance Form-II, enter therein the reasons for reconsideration of the case, and submit this Form to the head of his department within three working days of the receipt of the reply at Stage One and obtain an acknowledgement receipt thereof.
- 1 Appeals against suspension should be addressed to the head of the department on Grievance Form-II or on ordinary paper, within seven days of the receipt of orders or after the last date of suspension, whichever is later, and these will be considered at Stage Two, in the first instance. If the appeal is time-barred, it must be clearly mentioned in the reply.
- 1 The head of the department will discuss the issue with the employee and the supervisor concerned and return this Form with his remarks within three working days of receipt of the Form. In cases requiring reference to higher authorities or to another department this time limit will be relaxed.

#### Stage Three:

- 1 If the employee is still not satisfied with the reply, he may appeal to the Chairman of the Zonal Works Committee concerned, on Grievance Form-III, within seven working days of the receipt of the reply at stage two.
- 1 Appeals against orders of discharge or dismissal should be addressed to the Chairman of the Zonal Works Committee concerned, on Grievance Form-III (copies of which are available at the Employment Bureau), or on ordinary paper, and these will be considered at Stage Three, in the first instance. This should be done within six weeks of the receipt of the orders, except that in cases where employees discharged or dismissed are out of Jamshedpur at the time the order is issued, the time limit should be three months from the date of issue of such orders.
- 1 The decision reached by the Management after due consideration of the recommendations of the Zonal Works Committee will be communicated to the employee on Grievance Form-III through proper channels. The Zonal Works Committee's unanimous recommendations, to which the Management or the Union raises no objection within 10 days of the receipt of such recommendations, shall be final.
- 1 Where such recommendations are not unanimous or have not been accepted by the Management or the Union, the Zonal Works Committee will refer the case to the Central Works Committee or the Special Central Works Committee for consideration.

#### Grouping of Zonal Works Committees:

Zonal Works Committee # I	Blast Furnace (A-F), Coke Plant, "G" Blast Furnace, Improvement Group, Raw Material Handling and Sinter Plant
Zonal Works Committee # II	CRM, Rings & Agrico, FPTG, FP Planning, HSM, LD#2 & SC, Ring Plant, R&D, Scientific Services (Chemical Lab/ Met Lab/ Physical Lab, CRMT & Stewards) & RTG.
Zonal Works Committee # III	LD Shop #1, LPTG, Merchant Mill, Re- Bar Bill, Refractories Production Department, WRM, Canteen Services & Supply Management Department.
Zonal Works Committee # IV	Automation, Environment, Blower & Pump House, PH#3, PH#4, PH#5, Electrical Power (T&D), IGD, MSG (Elect.), MED (Elec.), Fuel Mgmt., Telecom, MTG, Occupational Health, Gas Safety, Works General Office, SMD, Spare Planning & Outsourcing, MED (Mech.), MSG (Mech.), Equipment Maintenance Services, Engineering Services (including CMG), WRP (including SGDP) & Services Pool.
Zonal Works Committee # V	ST Mills, PT Mills, Shared Services, & Tube Services.

## Annexure-V

### ABBREVIATIONS & GLOSSARY

A/c	Accounts
A&IG	Aspire and Improvement Group
ABP	Annual Business Plan (all operations of Tata Steel)
AES	Application Engineering Support (products)
AGM	Annual General Meeting (Shareholders)
AIWC	All Indian Women's Conference
AQUIP	Annual Quality Improvement Plan (a document prepared by each department by March end for the next financial year)
ASSOCHAM	Associated Chamber of Commerce
BAH	Booz Allen Hamilton
BE	Business Excellence
BHP	Broken Hill Property
BIS	British Institute of Standards
BIS	Bureau of Indian Standards
Bl. Fce.	Blast Furnaces
BM	Bar Mill
BOC	British Oxygen Company
BOD	Biological Oxidation Plant
BOD	Board of Directors
BSC	Balance Score Card (Statement of objectives and targets in line with corporate strategy and objectives for each managerial function & Department)
CAPEX	Capital Expenditure (5-plan document on capital expenditure approved by BOD)
CAS	Consignment Agent(s)
CCI	Corporate Citizenship Index (details are attached)
CEDEP	European Center for Continuing Education, France
CFC	Chloro Floro Carbon
CFI	Center for Family Initiatives
CGL	Continuous Galvanizing Line
Chief (CC)	Chief, Corporate Communication
CIDA	Canadian International Development Agency
CII	Confederation of Indian Industry
CIO	Chief Information Officer
CIP	Continuous Improvement Project (part of AQUIP document)
CITU	Center of Indian Trade Unions
CMR	Child Mortality Rate
CO	Carbon Monoxide
COB	Committee of Board
COC	Tata Code of Conduct
COD	Cost of Debt {Interest cost x (1-tax rate)}
COMS	Customer Order Management System
CoRE	Corporate Round Table on Environment & Sustainable Development
CRC (W)	Cold Rolling Complex (West)
CRE	Chief Resident Executive
CRM	Cold Rolling Mill
Crore	One Crore is ten Million
CS	Corporate Services
CSD	Customer Service Division
CSI	Customer Satisfaction Index (Points 1 to 5 scale based on customer feedback on issues like delivery compliance, service quality, product quality, etc.)
CSMS	Corporate Sustainability Management System
CVM	Customer Value Management
CVR	Customer Visit Report
CV	Calorific Value
DEP	Department
DER	Debt Equity Ratio (Debt/Equity; Equity = Equity Share Capital + Free Reserves)
DIV	Dividend / Division
DMD	Deputy Managing Director
DO	Dissolved Oxygen (in water, mg/l)
DS	Desulpharisation Compound



Dy.	Deputy
Dy. MD	Deputy Managing Director
EAF	Electric Arc Furnace
EBIT	Earning Before Income Tax
EHS	Environment Health & Safety
EIC	Executive Incharge
EMS	Environmental Management System
Engg.	Engineering
EP Act	Environment Protection Act
EPA	External Processing Agent
EVA	Economic Value Addition {(Return on Invested Capital – Weighted Average Cost of Capital) x Capital Employed}
EXIM	Export-Import
FAMD	Ferro Alloys & Minerals Division
FAP	Ferro Alloys Plant
FICCI	Federation of Indian Chamber of Commerce & Industry
FP Plg.	Flat Product Planning
FP	Flat Product
FPTG	Flat Product Technology
GAAP	General Accounting & Audit Protocol
GDR	Global Depository Receipt
GHG	Green House Gas (CO <sub>2</sub> , Methane, CFCs, N <sub>2</sub> O, etc.)
GM	General Manager
GP	Gate Pass
HRC	Hot Rolled Coils
HRM	Human Resource Management
HR/IR	Human Resource / Industrial Relations
HSM	Hot Strip Mill
ICC	Indian Chamber of Commerce / International Chamber of Commerce
IDBI	Industrial Development Bank of India
IFC	International Finance Corporation
IIM	Indian Institute of Management
IISI	International Iron & Steel Institute
ILO	International Labour Organization
IMA	Indian Medical Association
IMRB	Indian Market Research Bureau
IMTG	Iron Making Technology Group
INMF	Indian National Mazdoor Federation
INTUC	Indian National Trade Union Congress
IR	Industrial Relations
IRQS	Indian Register Quality Shipping
ISO	International Standards Organization
IT	Information Technology
ITD	International Trade Division
ITW	International Trade Wing
JAMIPOL	Jamshedpur Injection Power Limited
JCCM	Joint Committee of Consultative Management
JDC	Joint Departmental Council
JMA	Jamshedpur Management Association
JRDQV	JRD Tata Quality Value
JWC	Joint Works Council
JWQC	Joint Works Quality Council
KM Index	Knowledge Management Index (points accumulated by individuals based on the quality, usefulness, originality, relevance of the knowledge piece contributed to the knowledge management website)
KM	Knowledge Management
KPM	Key Performance Measures (the Balance Score Card applicable to the Departmental Head)
KRA	Key Results Area (the performance contract signed by individuals related to the commitment for the financial year)
KWH	Kilo Watt Hours
Lakh	Ten Lakhs equal to One Million
LCA	Life Cycle Assessment (only from cradle (mines) to the gate of the Steel Works)
LD	Linze Donawitz

LD#2&SC	Steel Melting Shop#2 and Slab Caster
LDO	Light Diesel Oil
LIC	Life Insurance Corporation
LM/CM	Long Member / Cross Member
LP	Long Products
LPTG	Long Product Technology Group
LT	Long Term
MAKE	Most Admired Knowledge Enterprise
M&S	Marketing & Sales
Maint.	Maintenance
MBA	Master of Business Administration
MC/HC	Medium Carbon / High Carbon
MCM	Management Committee Meetings
MGD	Million Gallon Per Day – 4.54 Million Litres/day
Mktg.	Marketing
MNC	Multinational Companies
MM	Merchant Mill
MOR	Men on Roll
MOU	Memorandum of Understanding
MR	Management Representative
MRO	Maintenance, Repair and Operational Groups
MTP	Million Tonne (Metric Tonne) Production
NA	Not Applicable
NE	Non Employee – those who do not work as permanent employees of Tata Steel
NED	Non Executive Directors (the directors on the board who are not the employees of Tata Steel)
NEDO	New Energy Development Organization, Japan
NEERI	National Environmental Engineering Research Institute
NGO	Non Governmental Organization
No.	Number(s)
NOx	Oxides of Nitrogen
NT	Not Traceable
NTTF	Nettur Technical Training Federation
OG	Order Generation
OH&E	Occupational Health, Safety Audit System
OHSMS	Occupational Health & Safety Management System
OM&E	Ore Mines & Quarries
OPPRESS	Online Properly Projection System
OPR	Officers' Pay Roll
P/E	Price to Earning Ratio (Market price Per Share / Earning Per Share)
PAN	Permanent Account Number (related to Income Tax Payment)
PAT	Profit After Tax
PDP	Personal Development Plan
PEO	Principal Executive Officer
PH	Power House
PLD	Percent Leaking Door
PLL	Percent Leaking Lids
PLO	Percent Leaking Offtakes
PM	Particulate Matter
PPM	Parts Per Million
PQI	Product Quality Index {composite score on 1 to 5 scale, designed to provide extra to the delivery conditions of a product "agreed by the customer" (e.g. quality, quantity, productivity, etc.)
QC	Quality Circle
QMS	Quality Management System
QIP	Quality Improvement Projects
R&A	Rings & Agrico
R&D	Research & Development
RCMS	Rashtriya Colliery Mazdoor Sangh
ROIC	Return on Invested Capital = {Net Operating Profit after Tax / Invested Capital} or (Profit after Tax + Interest adjusted for Tax) / Invested Capital}

RM	Raw Material
RMH	Raw Material Handling
ROM	Run of Mines
RPD	Refractories Production Department
SAL	Saleable
SAP	System, Analysis and Products for Data based Management
SBU	Steel Business Unit
SC/ST	Scheduled Cast / Scheduled Tribe
Sc. Svc.	Scientific Services
SEBI	Stock Exchange Board of India
SE	South East
SHE	Safety Health Environment
SHG	Self Help Groups
SIS	Safety Information System
SMS	Steel Melting Shops
SNTI	Shavak Nanavati Technical Institute
SP	Sinter Plant
SPM	Skin Pass Mill / Suspended Particulate Matter
SPACM	Strategic Planning & Corporate Marketing
Sr.	Senior
SRP	Supplier Relationship Management
SS&FI	Social Services & Family Initiatives
SSI	Supplier Satisfaction Index (point on 1-5 scale from feedback from suppliers, on issues like timely payment, material rejects, etc.)
tcs	tonnes of crude steel
Tata GA Sheet	Tata Galvanized Sheet
TBEM	Tata Business Excellence Model
TCCI	Tata Council for Community Initiatives
TCTF	Thermal Coal Task Force
TERI	The Energy Research Institute
TGS	Tisco Growth Shop
TH	Total Hardness
TKM	Tata Korf Maritime
TMDC	Tata Management Development
TMH	Tata Main Hospital
TCS	Tribal Culture Society
TFA	Tata Football Academy
TQMS	Tata Quality Management System
TOP	Total Operating Program
TPD	Tonnes Per Day
TPL	Tata Projects Limited
TPM	Total Productivity Management
tss	tonnes saleable steel
TQM	Total Quality Management
TRF	Tata Robinson Fraser
TRL	Tata Refractories Limited
TSFIF	Tata Steel Family Initiatives Foundation
TSRDS	Tata Steel Rural Development Society
ULC/LC	Ultra Low Carbon / Low Carbon
UN	United Nations
UNIDO	United Nations Industrial Development Organization
UTI	Unit Trust of India
VP	Vice President
WACC	Weight Average Cost of Capital = {Weighted cost of Debt + Weighted cost of Equity} / {Debt + Equity}
WRM	Wire & Rod Mill
WHO	World Health Organization

## Annexure-VI

### CORPORATE CITIZENSHIP INDEX

Area	Initiatives	Measures	Agency	Weightage	Target Index
Health Care	Immunization of children in areas where the Company operates	% of children	JUSCO	10%	1
	Rural immunization program	No. of children covered	SS&FI	10%	1
Training for gainful employment	Employment oriented training	% Employed (post training)	SS&FI (TCS / TSRDS) CD&SW	10%	1
Promoting economic growth in rural & urban areas	Savings generated through SHG Bank linkage	Rs. Lakhs	SS&FI	10%	1
Sports & Adventures	Beneficiaries under community based and sports programs	Nos.	CD&SW	10%	1
EMS beyond compliance	Recycling of wastes at Jubilee Park	%	JUSCO	10%	1
Promoting Art & Culture	Children/Adults trained at Jamshedpur School of Arts	Nos.	CD&SW	5%	0.5
Civic amenities	Rural area pani panchayat	Acreage brought under 2nd crop	SS&FI	10%	1
Education	Scholarships				
	For High School Students	Number of students	TCS	5%	0.5
	For college students	Number of students	TCS	5%	0.5
	Excellence in education	No. of schools facilities at Jamshedpur	SE	5%	0.5
Natural Calamities	Relief work	Construction of 11 school buildings for flood victims of Orissa/ Tsunami relief / rebuilding of homes after hailstorm in Jamshedpur	TRC	10%	1
TOTAL					10

## Annexure-VII

### GIFT POLICY

Tata Steel recognises that exchange of gifts with people with whom we do business with is not unusual and is considered acceptable. The receipt and giving of gifts is part of normal social exchange. Such exchange is neither irregular nor is it unusual.

However, the need is recognised for a stated policy setting caps on the value of such gifts and for defining circumstances under which it would be acceptable or not acceptable to retain gifts. The cardinal principle would be that gifts should not be given or received either to obtain favours / preferential treatment or in return for favours/ preferential treatment.

The policy will apply to all employees of Tata Steel as well as its subsidiary and associate companies.

1. Gifts could be either solicited or unsolicited. The Company, regardless of the circumstances, does not permit the soliciting of gifts. This policy defines the circumstances under which unsolicited gifts received either in India or abroad can be accepted and retained.
2. The circumstances under which gifts might be received fall into various categories.
  - a. Gifts received on New Year and other festive occasions.
  - b. Gifts received only on occasions of wedding of self or children.
  - c. Gift vouchers / gift cheques received in recognition of a professional contribution made by the recipient, such as for making a presentation, conducting a training programme/workshop for a professional and academic institution etc.
  - d. Gifts received on the occasion of a terminal event such as a transfer or on cessation of employment.
  - e. Gifts of any value received for any other reason (not stated in [i] to [iv], approval to be taken from Ethics Counsellor or PEO.
3. Declaration regarding receipt of gift:  
In all instances, the recipient of a gift of more than the approved value, will make a declaration stating the description of the gift that has been received, the estimated value of the gift and the circumstances under which the gift was received and particulars of donor. Such declaration should be submitted in the office of Ethics Counsellor within 15 days of the receipt.
4. Kind of Gift
  - a. List of the kinds of gifts that might be received is provided below:
  - b. Articles of only an edible nature for festive occasions in item 2 [i].
  - c. Articles of use in an office such as table clocks, stationery, desk accessories on New Year only with Company's logo in item 2 [i].
  - d. Gift worth up to Rs.1000/- for wedding only in item 2[ii].
  - e. Gift vouchers / Gift cheques only in the case of professional contribution in item 2[iii].
5. Circumstances under which gifts can be accepted:
  - a. Receipt of Cash Gift: Only in the case of retirement or cessation of employment. Cash gift of Rs.1,000/- and more can be retained by employees.
  - b. However, in the case of transfers, collective gift in kind can be received. The value limit is not applicable in such cases.
6. Gifts received in recognition of a professional contribution made by the recipient, such as for making a presentation, conducting a training programme/workshop for a professional and academic institution etc.

Where the receipt of gift is in gift vouchers and gift cheque and more than Rs.1,000/-, the recipient will be permitted to retain the full amount received, if prior permission is taken from the Company. However, information to the Ethics Counsellor should be given. No cash to be received.

Where the Company has borne expenses, such as travel or lodging, related to the event and such expenses are reimbursed by the organisers, all such reimbursements will be surrendered to the Company.

7. Receipt of gift from parties having business relationship with the Company including gifts from subordinates  
Gifts received from a donor where the donor has a business relationship with the Company and could derive benefits from the recipient should only be of a value up to Rs.1,000/-. Illustrative categories of parties with business relationships with the Company would be vendors, dealers, contractors, consultants and customers etc. However, all such gifts should have donor's Company's logo or business identity.



8. No gifts should be accepted from any person or party who is in default of the Company in any manner. By way of illustration, parties in default would be parties from whom monies are overdue or parties with whom the Company is engaged in litigation and parties against whom disciplinary action has been taken.

It is desirable that the recipient should check the status of the parties from Chief (Procurement) and Chief Financial Controller (Corporate) to make sure that the provisions of the above clause are not contravened.

9. It is recognised that at times gift exceeding the value caps contained in this policy are to be received as the return of these gifts may cause embarrassment. This situation may occur special during overseas visit of our officers where sometimes expensive gifts are given by the overseas hosts. In this situation the recipient should surrender the gift at the earliest. The Company will decide the procedure for utilisation of such gifts.
10. The Company considers it good practice to share gifts of a nature, which an employee is permitted to receive, such as gifts of an edible nature, with fellow employees. The nature of the gift permitting, it would also be good practice to use gifts in the office.
11. Where an employee received gifts exceeding the value caps contain in this policy, it would be advisable to return the gift to donor with a covering letter thanking the donor for the same and quoting the relevant provision of this policy. The draft of the letter as and when required may be obtained from the office of the Ethics Counsellor.
12. In case of any clarification / interpretation of this policy the employee should contact the office of Ethics Counsellor, Tata Steel.
13. The policy will become effective with immediate effect.



B Muthuraman

## 1. Preface

- a) The Company believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behavior. Towards this end, the Company has adopted the Tata Code of Conduct ("the Code"), which lays down the principles and standards that should govern the actions of the Company and their employees. Any actual or potential violation of the Code, howsoever insignificant or perceived as such, would be a matter of serious concern for the Company. The role of the employees in pointing out such violations of the Code cannot be undermined. There is a provision under the Code requiring employees to report violations, which states:

"25. Reporting Concerns every employee of a Tata Company shall promptly report to the management any actual or possible violation of the Code or an event he becomes aware of that could affect the business or reputation of his or any other Tata Company."

- b) Clause 49 of the Listing Agreement between listed companies and the Stock Exchanges has been recently amended which inter alia, provides for a non-mandatory requirement for all listed companies to establish a mechanism called 'Whistle Blower Policy' for employees to report to the management instances of unethical behavior, actual or suspected, fraud or violation of the Company's code of conduct or ethics policy.
- c) Accordingly, this Whistle Blower Policy ("the Policy") has been formulated with a view to provide a mechanism for employees of the Company to approach the Ethics Counsellor / Chairman of the Audit Committee of the Company.

## 2. Definitions

The definitions of some of the key terms used in this Policy are given below. Capitalized terms not defined herein shall have the meaning assigned to them under the Code.

- a) "Audit Committee" means the Audit Committee constituted by the Board of Directors of the Company in accordance with Section 292A of the Companies Act, 1956 and read with Clause 49 of the Listing Agreement with the Stock Exchanges.
- b) "Employee" means every employee of the Company (whether working in India or abroad), including the Directors in the employment of the Company.
- c) "Code" means the Tata Code of Conduct
- d) "Investigators" mean those persons authorized, appointed, consulted or approached by the Ethics Counsellor/Audit Committee and include the Vigilance Dept, auditors of the Company and the police.
- e) "Protected Disclosure" means any communication made in good faith that discloses or demonstrates information that may evidence unethical or improper activity.
- f) "Senior Management" means personnel of the company who are members of its management/ operating council (i.e. core management team excluding independent directors). This would also include all members of management one level below the executive directors.
- g) "Subject" means a person against or in relation to whom a Protected Disclosure has been made or evidence gathered during the course of an investigation.
- h) "Whistle Blower" means an Employee making a Protected Disclosure under this Policy.
- i) "Whistle Blower Protection Committee" means a Committee constituted under the Chairmanship of Dy. Managing Director (Corporate Services) to examine the grievances of Whistle Blower about the victimization allegedly suffered by him/her.

### 3. Scope

- a) This Policy is an extension of the Tata Code of Conduct. The Whistle Blower's role is that of a reporting party with reliable information. They are not required or expected to act as investigators or finders of facts, nor would they determine the appropriate corrective or remedial action that may be warranted in a given case. Whistle Blowers provide initial information related to a reasonable belief that an improper or unethical practice has occurred.
- b) Whistle Blowers should not act on their own in conducting any investigative activities, nor do they have a right to participate in any investigative activities other than as requested by the Ethics Counsellor or the Audit Committee or the Investigators.
- c) Protected Disclosure will be appropriately dealt with by the Management / Ethics Counsellor / Audit Committee, as the case may be.

### 4. Eligibility

- a) All Employees of the Company are eligible to make Protected Disclosures under the Policy. The Protected Disclosures may be in relation to matters concerning the Company.

### 5. Disqualifications

- a) While it will be ensured that genuine Whistle Blowers are accorded complete protection from any kind of unfair treatment as herein set out, any abuse of this protection will warrant disciplinary action.
- b) Protection under this Policy would not mean protection from disciplinary action arising out of false or bogus allegations made by a Whistle Blower knowing it to be false or bogus or with a malafide intention.
- c) Whistle Blowers, who make three or more Protected Disclosures, which have been subsequently found to be mala fide, frivolous, baseless, malicious, or reported otherwise than in good faith, will be disqualified from reporting further Protected Disclosures under this Policy. In respect of such Whistle Blowers, the Company/Audit Committee would reserve its right to take/recommend appropriate disciplinary action.

### 6. Procedure

- a) All Protected Disclosures concerning financial / accounting matters should be addressed to the Chairman of the Audit Committee of the Company for investigation.
- b) In respect of all other Protected Disclosures, those concerning the Ethics Counsellor and employees at the levels of Vice Presidents and above should be addressed to the Chairman of the Audit Committee of the Company and those concerning other employees should be addressed to the Ethics Counsellor of the Company.
- c) The contact details of the Chairman of the Audit Committee and of the Ethics Counsellor of the Company are as under:

Mr. P.K. Kaul, House No. 225, Sector 15-A, Noida (UP) 201 301.

Mrs. Rekha Seal, Ethics Counsellor, Tata Steel Ltd. Jamshedpur 831 001.

E-mail add: ethics.counsellor@tatasteel.com and mail@ethics.com

- d) If a protected disclosure is received by any executive of the Company/Vigilance Group of the Company other than Chairman of Audit Committee or Ethics Counsellor, the same should be forwarded to the Company's Ethics Counsellor for further appropriate action. They must take appropriate care so that the identity of the Whistle Blower does not get divulged in the process.
- e) Protected Disclosures should preferably be reported in writing so as to ensure a clear understanding of the issues raised and should either be typed or written in a legible handwriting in English, Hindi or in the regional language of the place of employment of the Whistle Blower.
- f) If the protected disclosure is received by the Chairman of the Audit Committee, he shall detach the covering letter and forward only the Protected Disclosure to the Ethics Counsellor of the Company for investigation.

- g) Protected Disclosures should be factual and not speculative or in the nature of a conclusion, and should contain as much specific information as possible to allow for proper assessment of the nature and extent of the concern and the urgency of a preliminary investigative procedure.
- h) The Whistle Blower must disclose his/her identity in the covering letter forwarding such Protected Disclosure.

## 7. Investigation

- a) All Protected Disclosures reported under this Policy will be thoroughly investigated by the Ethics Counsellor/Audit Committee of the Company in accordance with the normal procedure. The Ethics Counsellor/Audit Committee may at its discretion, consider the involvement of any investigators/Vigilance group of the Company for the purpose of investigation.
- b) The decision to conduct an investigation is not an accusation and is to be treated as a neutral fact-finding process. The outcome of the investigation may not support the conclusion of the Whistle Blower that an improper or unethical act was committed.
- c) The identity of a Subject will be kept confidential to the extent possible given the legitimate needs of law and the investigation.
- d) Subjects will normally be informed of the allegations at the outset of a formal investigation and have opportunities for providing their inputs during the investigation.
- e) Subjects shall have a duty to co-operate with the Ethics Counsellor / Audit Committee or any of the Investigators during investigation to the extent that such co-operation will not compromise self-incrimination protections available under the applicable laws. .
- f) Subjects have a right to consult with a person or persons of their choice, save and except Ethics Counsellor / Investigators and/or the Audit Committee and/or the Whistle Blower. This may involve representation including legal representation. Subjects shall be free at any time to engage counsel at their own cost to represent them in the investigation proceedings.
- g) Subjects have a responsibility not to interfere with the investigation. Evidence shall not be withheld, destroyed or tampered with, and witnesses shall not be influenced, coached, threatened or intimidated by the Subjects. If they are found indulging in any such actions they will make themselves liable for disciplinary actions. Under no circumstances, subjects should compel investigator to disclose the identity of the Whistle Blower.
- h) Unless there are compelling reasons not to do so, Subjects will be given the opportunity to respond to material findings contained in an investigation report. No allegation of wrongdoing against a Subject shall be considered as maintainable unless there is good evidence in support of the allegation.
- i) Subjects have a right to be informed of the outcome of the investigation. If allegations are not sustained, the Subject should be consulted as to whether public disclosure of the investigation results would be in the best interest of the Subject and the Company.
- j) The investigation shall be completed normally within 45 days of the receipt of the Protected Disclosure.

## 8. Protection

- a) No unfair treatment will be meted out to a Whistle Blower by virtue of his/her having reported a Protected Disclosure under this Policy. The Company, as a policy, condemns any kind of discrimination, harassment, victimization or any other unfair employment practice being adopted against the Whistle Blowers. Complete protection will be given to the Whistle Blowers against any unfair practice. The Company will take steps to minimize difficulties, which the Whistle Blower may experience as a result of making the Protected Disclosure. Thus, if the Whistle Blower is required to give evidence in criminal or disciplinary proceedings, the Company will arrange for the Whistle Blower to receive advice about the procedure, etc.
- b) The Whistle Blower shall be protected from any retaliation, threat or intimidation of termination/suspension of service, disciplinary action, transfer, demotion, refusal of promotion, or the like including any direct or indirect use of authority to obstruct the Whistle Blower's right to continue to perform his duties/functions including making further Protected Disclosure.
- c) The identity of the Whistle Blower shall be kept confidential to the extent possible and permitted under law. Whistle Blowers are cautioned that their identity may become known for reasons outside the control of the Ethics Counsellor /Audit Committee (e.g. during investigations carried out by Investigators).

- d) Any other Employee assisting in the said investigation shall also be protected to the same extent as the Whistle Blower.

#### Whistle Blower Protection Committee

The Company has constituted the Whistle Blower Protection Committee under the Chairmanship of Dy. Managing Director (Corporate Services) as under:

Mr. A N Singh Dy. Managing Director (Corp. Services) Chairman  
 Mr. D Sengupta VP (Shared Services) Member  
 Mr. A D Bajjal VP (RM & IM) Member  
 Mr. Abanindra M. Mishra VP (HRM) Member  
 Mrs. Rekha Seal Ethics Counsellor Convener

In case a Whistle Blower feels that he/she has been victimized in employment related matters because of reporting about the violation of the Code, he/ she can submit a 'Grievance' to the Ethics Counsellor, giving specific details of nature of victimization allegedly suffered by him/her. All such grievances will be examined by the aforesaid committee. The Committee will meet at regular intervals and examine the grievances on their merits. The Committee will also conduct necessary investigation of the concern and recommend appropriate action as the case may be.

While Management is determined to give appropriate protection to the genuine Whistle Blower, the employees at the same time are advised to refrain from using this facility for furthering their own personal interest. If proved, such cases may be referred to the Whistle Blower Protection Committee for disciplinary action.

### 9. Investigators

- a) Investigators are required to conduct a process towards fact-finding and analysis related to alleged improper or unethical activities. Investigators shall derive their authority and access rights from the Company/Audit Committee when acting within the course and scope of their investigation.
- b) Technical and other resources may be drawn upon as necessary to augment the investigation. All Investigators shall be independent and unbiased both in fact and as perceived. Investigators have a duty of fairness, objectivity, thoroughness, ethical behavior, and observance of legal and professional standards.
- c) Investigations will be launched only after a preliminary review, which establishes that:
  - i. the alleged act constitutes an improper or unethical activity or conduct, and
  - ii. either the allegation is supported by information specific enough to be investigated, or matters that do not meet this standard may be worthy of management review, but investigation should not be undertaken as an investigation of an improper or unethical activity.

### 10. Decision

If an investigation leads the Ethics Counsellor/ Audit Committee to conclude that an improper or unethical act has been committed, the Ethics Counsellor/Audit Committee shall recommend to the management of the Company to take such disciplinary or corrective action as they deem fit. It is clarified that any disciplinary or corrective action initiated against the Subject as a result of the findings of an investigation pursuant to this Policy shall adhere to the applicable personnel or staff conduct and disciplinary procedures.

### 11. Reporting

The Ethics Counsellor shall submit a report on a quarterly basis to the Audit Committee regarding total number of disclosures received in previous quarter, nature of complaint, outcome of investigation, actions recommended by the Ethics Counsellor/Audit Committee and implementation of the same. The EC should also report to the AC the concern raised for victimization for employment related matters by the Whistle Blower and action taken by the Whistle Blower Protection Committee.

Such Reports on the above shall be reviewed and recorded by the Audit Committee.

### 12. Retention of documents

All Protected Disclosures in writing or documented along with the results of investigation relating thereto shall be retained by the Company for a minimum period of seven years.

### 13. Amendment

The Company reserves its right to amend or modify this Policy in whole or in part, at any time without assigning any reason whatsoever. However, no such amendment or modification will be binding on the Employees unless the same is notified to the Employees in writing.

This supersedes our earlier Whistle Blower Policy (Ref. no. AO/2725/04 dated 11.01.2004)



## Annexure - IX

### Training programmes run by the Technical Training Institute of the Company.

Automobiles	1 Centrifugal blowers and fans	Electrical General and switch gear
1 Training on safe driving for contractors' employees	1 PT fuel system	1 EOT crane operation (cabin control)
Cluster manning	1 Engine trouble shooting	1 EOT crane operation (remote control)
1 Digital drive	1 Belt conveyor maintenance	1 Motpro relay
1 I.E. Rules	1 Valve operation and maintenance	1 Operation & maintenance of power transformer
1 Induction motor protection and trouble shooting	1 Heavy Mobile equipment operation	1 Earthing practices
1 Maintenance of EOT cranes	1 Earthing	1 Orientation programme (electrical power module)
1 Electrical protection & protective device	1 Atlas Copco compressor(screw type)	Electronics & Process control
1 Shop floor management	1 Maintenance & operation of centrifugal pumps	1 Modern power devices
1 Computer training	1 Reading of drawings	1 LAN & connectivity
1 EMS at shop floor	1 Lubrication types & selection	1 SMART Transmitters
1 Operation & maintenance of air compressor	1 Welding joints and symbols	1 Instrumentation for integrated circuits
1 Gear box maintenance	1 Electrodes & Maintenance of gas cutting equipment	1 TDC-3000 operation
1 Vibratory screens & Feeders	1 Dismantling & rectification of simple faults in equipment related work	1 TDC-3000 implementation
1 Limits, Fits & Tolerance	1 Welding machines and welding defects	1 Allen Bradley PLC
1 Alignment of fluid coupling & maintenance	1 Electric cables and insulator	1 Electronic earthing
1 Balancing of blowers and fans	1 Shutdown procedures	1 Allen Bradley HMI RS View 32
1 Lubrication system	1 Trouble shooting and failure analysis of electrical equipment	1 Simatic S7-300 PLC
1 Levelling, Alignment, Plumbing & Balancing	1 Instrumentation & process control	1 Siemens HMI software WINCC
1 Maintenance of screw compressors	1 Protection of electrical equipment	1 Modicon PLC (Premium series)
1 MIG/MAG (CO <sub>2</sub> ) welding	1 Basics of AC/DC drives	1 Controllogix PLC with Rslugix
1 Distortion control in welding	Computer	Failure based programme
1 TIG welding	1 Office automation	1 Failure analysis of motors
1 Air & water pollution	1 Operation of e-mail, Intranet & Internet	1 Failure analysis of LD-1 vessel tilting drive
1 Water treatment	1 MS Word & Excel	1 Failure analysis of bearings
1 Pump performance & characteristics	1 Preliminary course on MS access	1 Failure analysis of gear boxes
1 Electrical safety for non electrical employees	1 Power point presentation	1 Failure analysis of pumps
1 Electrical safety for electrical employees	1 Visual Basics with data base	Fluid power (Hydraulics)
1 Circuit breaker	1 Visual Basics	1 Industrial hydraulics
1 Panel maintenance	1 Overview of C language	1 Hands-on hydraulic circuits
1 Maintenance welding	1 Know your computer	1 Electro hydraulics
1 Safety (Electrical)	1 Advance MS-Excel	1 Advance hydraulics
1 Electrical drawings	1 Awareness programme on e-learning	1 Hydraulics for operators
1 Lubrications	1 Computer net working	Fluid power (Pneumatics)
1 Planning, Distribution, Coordination, Service records & Spares	1 Oracle with D2K	1 Industrial pneumatics
1 Fitting, Assembly and Failure analysis	Electrical drives	1 Electro – pneumatics
1 Basics of Fluid power	1 ADD 32 digital drive regulator	1 Pneumatics for operators
1 CNC PART programming	1 AVTRON drive Module I	Refractory
1 Precision measurement, Limit, Fit, Tolerance and mating components	1 AVTRON drive Module II	1 Refractory brick cutting and laying practices
1 Mechanical drawings	1 AVTRON drive Module III	1 Fundamental principal of bricks
1 Manuals, Service records and Reports	1 Direct torque control AC drives Module I	Safety, Hazard prevention and First Aid
1 Dismantling assembly and fault findings	1 Direct torque control AC drive Module II	1 Incident analysis – Du Pont
1 Welding theory	1 Awareness of AC drive	1 Safety observation programme for workers
1 Arc welding	1 Fundamentals of modern electrical drive - Module I to IV	1 Safety observation programme for line supervisors
1 Gas cutting	1 Siemens DC digital Module I & II	1 First Aid certification programme
1 Leveling & alignment	1 Drives on ABB DTC	SAP
1 Fitting and maintenance of coupling	1 Siemens master drive	1 SAP project system (PS refresher module)
1 Bearing fundamentals	1 AC drive maintenance	1 SAP project system (PS advance module)
1 Overhauling of centrifugal pumps	1 IEM drives module for supervisors	1 SAP overview
1 Maintenance of centrifugal pumps	1 Preparatory training on electrical drives	Trade testing
1 Maintenance of pipe lines	Environment management	1 Use of precision measuring instruments (basics)
1 Industrial hydraulics	1 Awareness on pollution control	Quality management
1 Cummins engine	1 EMS at Shop floor	1 Half day workshop on problem solving and decision making
	1 Environmental legislation & hazards and waste management	

## TATA STEEL

### MISSION

Consistent with the vision and values of the founder Jamsetji Tata, Tata Steel strives to strengthen India's industrial base through the effective utilisation of staff and materials. The means envisaged to achieve this are high technology and productivity, consistent with modern management practices.

Tata Steel recognises that while honesty and integrity are the essential ingredients of a strong and stable enterprise, profitability provides the main spark for economic activity.

Overall, the Company seeks to scale the heights of excellence in all that it does in an atmosphere free from fear, and thereby reaffirms its faith in democratic values.

## TATA STEEL

### VALUES

- 1 Trusteeship
- 1 Integrity
- 1 Respect for the individual
- 1 Credibility
- 1 Excellence

## TATA STEEL

### KEY ENTERPRISE PROCESSES

- 1 Leadership
- 1 Strategic Planning & Risk Management
- 1 Market Development
- 1 Investment Management
- 1 Human Resources
- 1 Improvement & Change Management
- 1 Order Generation
- 1 Operation & Fulfilment
- 1 Supply Management
- 1 Research & Development
- 1 Information Management
- 1 Social Responsibility & Corporate Services

## TATA STEEL

### QUALITY POLICY

Consistent with the group purpose, Tata Steel shall constantly strive to improve the quality of life of the communities it serves through excellence in all facets of its activities.

We are committed to create value for all our stakeholders by continually improving our systems and processes through innovation, involving all our employees.

This policy shall form the basis of establishing and reviewing the Quality Objectives and shall be communicated across the organisation. The policy will be reviewed to align with business direction and to comply with all the requirements of the Quality Management Standard.



**B. MUTHURAMAN**  
MANAGING DIRECTOR

17th April, 2002

## ENVIRONMENTAL POLICY

Tata Steel's Environmental responsibilities are driven by our commitment to preserve the environment and are integral to the way we do business.

1. We are committed to the efficient use of natural resources & energy; reducing and preventing pollution; promoting waste avoidance and recycling measures and product stewardship.
- 1 We will identify, assess and manage our environmental impact.
- 1 We will regularly monitor, review & report publicly our environmental performance.
- 1 We shall develop & rehabilitate abandoned sites through afforestation, landscaping and shall protect and preserve the biodiversity in the areas of our operations.
- 1 We will enhance awareness, skill and competence of our employees and contractors so as to enable them to demonstrate their involvement, responsibility and accountability for sound environmental performance.
2. We are committed to continual improvement in our environmental performance.
- 1 We will set objectives-targets, develop, implement and maintain management standards and systems, and go beyond compliance with relevant industry standards, legal and other requirements.
3. We will truly succeed when we sustain our environmental achievement and are valued by the communities in which we work.



**B. MUTHURAMAN**  
MANAGING DIRECTOR

21st May, 2005

## TATA STEEL

### Safety & Occupational Health (S & OH) Policy

Tata Steel's safety and occupational health responsibilities are driven by our commitment to ensure zero harm to people we work with and society at large and are integral to the way we do business.

1. Our fundamental belief is that all injuries can be prevented. This responsibility starts with each one of us.
  - 1 We will identify, assess and manage our S & OH hazard/risks.
  - 1 We will regularly monitor, review the progress and report.
  - 1 We will ensure WILL and SKILL buildup among employees/contractor partners to demonstrate their involvement, responsibility and accountability to achieve sound S & OH performance.
2. We are committed to continual improvement in our S & OH performance.
  - 1 We will set objectives-targets, develop, implement and maintain management standards and systems, and go beyond compliance of the relevant industry standards, legal and other requirements.
3. We will truly succeed when we achieve our Safety and Occupational Health goals and are valued by the communities in which we work.



B. MUTHURAMAN  
MANAGING DIRECTOR

21st May, 2005

## ENERGY POLICY

Tata Steel reaffirms its commitment to conserve scarce energy resources and shall endeavour to

- 1 Comply with national and international regulations.
- 1 Adopt best available technology for energy efficiency.
- 1 Implement world-class operating practices.
- 1 Conduct regular Energy Audit for continual improvement.
- 1 Promote energy efficiency through mass awareness.



MANAGING DIRECTOR

April 1, 2004

## TATA STEEL

### HUMAN RESOURCE POLICY

Tata Steel recognises that its people are the primary source of its competitiveness.

It is committed to equal employment opportunities for attracting the best available talent and ensuring a cosmopolitan workforce.

It will pursue management practices designed to enrich the quality of life of its employees, develop their potential and maximise their productivity.

It will aim at ensuring transparency, fairness and equity in all its dealings with its employees.

Tata Steel will strive continuously to foster a climate of openness, mutual trust and teamwork.



B. MUTHURAMAN  
MANAGING DIRECTOR

1st October, 2001

## TATA STEEL

### CORPORATE SOCIAL RESPONSIBILITY POLICY

Tata Steel believes that the primary purpose of a business is to improve the quality of life of people.

Tata Steel will volunteer its resources, to the extent it can reasonably afford, to sustain and improve healthy and prosperous environment and to improve the quality of life of the people of the areas in which it operates.



B. MUTHURAMAN  
MANAGING DIRECTOR

1st February, 2003

## TATA STEEL

### SOCIAL ACCOUNTABILITY POLICY

Tata Steel, in accordance with its founding principles, will continue to improve the quality of life of its employees and the communities it serves.

Tata Steel will conduct its business ever mindful of its social accountability, respecting applicable laws and with regard for human dignity.

Tata Steel will positively impact and influence its partners in fostering a sense of social commitment for their stakeholders.



B. MUTHURAMAN  
MANAGING DIRECTOR

20th December, 2003

## TATA STEEL

### HIV/AIDS Policy

Tata Steel is committed to contribute to the global effort towards halting and reversing the course of HIV/AIDS. The Company would take measures to actively disseminate information & education regarding HIV/AIDS within our workplace and surrounding communities, with the objective to reduce its transmission.

The Company would ensure a safe working environment, confidentiality and non-discrimination of affected employees, if any.

The Company would provide appropriate medical management for all affected employees and their families.



B. MUTHURAMAN  
MANAGING DIRECTOR

1st September, 2005

## TATA STEEL

### ALCOHOL AND DRUGS POLICY

Tata Steel believes that the loyalty and commitment of its employees depend upon the quality of life they are offered at work and at home.

We recognise that indiscriminate use of alcohol and drugs is injurious to the well-being of individuals, their families and the community as a whole. We acknowledge that the misuse of these psychoactive substances is a major health and safety hazard. Tata Steel is therefore committed to creating an alcohol and drug-free environment at the workplace. This would be achieved through the involvement of all employees and the Joint Departmental Councils in spearheading appropriate initiatives. The initiatives would include :

- 1 Raising awareness, through the dissemination of information, education and training and by promoting healthy lifestyles among our employees and their families.
- 1 Motivating those employees who have an alcohol/drug problem, to seek assistance, while maintaining confidentiality about such cases.



B. MUTHURAMAN  
MANAGING DIRECTOR

1st October, 2001

## TATA STEEL

### Tata Steel Affirmative Action Policy

Tata Steel recognises that diversity in the workplace positively impacts business. The Company will ensure equal employment opportunities and provide training to develop the socially disadvantaged.

Tata Steel will volunteer its training resources to the extent possible to improve employability of disadvantaged sections of society. The Company will encourage business entrepreneurs from socially disadvantaged communities through monitoring and inclusion in supply chain on the basis of equal merit.

Tata Steel will assist in upward mobility of talented youth from marginalized communities by increasing their access to quality higher education.

Tata Steel will report Affirmative Action initiatives in its annual sustainability report.



B. MUTHURAMAN  
MANAGING DIRECTOR

21st November, 2006

## TATA STEEL

### RESEARCH POLICY

Tata Steel believes that research provides the foundation for sustained, long-term, stakeholder delight. Tata Steel shall nurture and encourage innovative research in a creative ambience to ensure that the competitive advantage in its overall business is retained and surpassed. Towards this goal, the Company commits itself to providing all necessary resources and facilities for use by motivated researchers of the highest calibre. Research in Tata Steel shall be aligned to the technological initiatives necessary to evolve and fulfil the overall business objectives of the Company.



B. MUTHURAMAN  
MANAGING DIRECTOR

1st January, 2002

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TATA STEEL  
ALCOHOL AND DRUGS POLICY

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B. MUTHURAMAN  
MANAGING DIRECTOR

1st October, 2001

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B. MUTHURAMAN  
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21st November, 2006

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B. MUTHURAMAN  
MANAGING DIRECTOR

1st January, 2002

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**TATA STEEL LIMITED**