

# BUSINESS MODEL

## INPUT

Financial Capital	UOM	FY17
Capex	₹ Cr.	3,173
Revenue Spend <i>(Other than ED, Tax and extraordinary items)</i>	₹ Cr.	44,074

Manufactured Capital	UOM	FY17
Crude Steel production capacity	MnTPA	12.7
Inbound raw materials	MnTPA	~40
Outbound finished goods	MnTPA	>11
Pan India Stockyards	Nos.	18
Finished Goods Inventory	Kt	226

Intellectual Capital	UOM	FY17
Patents filed <i>(Cumulative till FY2017)</i>	Nos.	870
R&D spend <i>(Cumulative since FY11)</i>	₹ Cr.	681

Human Capital	UOM	FY17
Employees on roll	Nos.	34,989
Skilled Manpower	%	~100
Spend on training	₹ Cr.	>50

Relationship Capital	UOM	FY17
Pan India dealers & distributors	Nos.	>12,000
Pan India Sales Offices	Nos.	>25
Application Engineers working jointly with customers	Nos.	~30
Customer facing processes	Nos.	8
Members in customer service teams	Nos.	>100
Supplier base	Nos.	>5,000
Suppliers trained through VCAP*	Nos.	204

Social Capital	UOM	FY17
CSR spend	₹ Cr.	194

Natural Capital	UOM	FY17
Captive Iron Ore	%	100
Captive Coal	%	36
Specific Water Consumption - TSJ	m <sup>3</sup> /tcs	3.83
Specific Water Consumption - TSK	m <sup>3</sup> /tcs	7.66
Energy Intensity - TSJ, TSK	GCal/tcs	5.67, 8.49
Tree plantation	Nos.	4,00,225
Capital Spend on environment	₹ Cr.	605

## BUSINESS ACTIVITIES AND PROCESSES

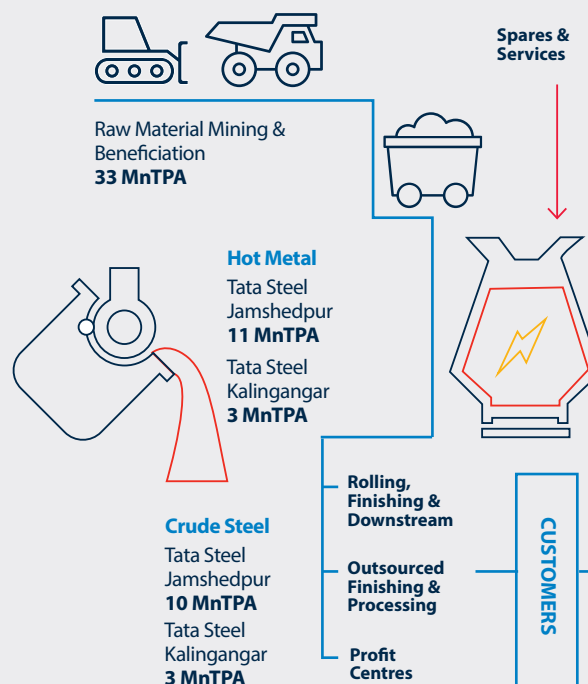
VISION, MISSION, VALUES,  
TATA CODE OF CONDUCT, POLICIES

STAKEHOLDER  
ENGAGEMENT

RISKS AND  
OPPORTUNITIES

STRATEGY AND  
RESOURCE  
ALLOCATION

### KEY WORK SYSTEMS



### SUPPORT FUNCTIONS

SAFETY & ERGONOMICS | CORPORATE ETHICS | HUMAN RESOURCE MANAGEMENT |  
CORPORATE STRATEGY & PLANNING | ENVIRONMENT MANAGEMENT | INDUSTRIAL  
BY-PRODUCTS MANAGEMENT DIVISION | CORPORATE SOCIAL RESPONSIBILITY | FINANCE &  
ACCOUNTS | SHARED SERVICES | INFORMATION TECHNOLOGY SERVICES | PROCUREMENT |  
CUSTOMER SERVICES DEPARTMENT | RAW MATERIAL MANAGEMENT | CORPORATE  
COMMUNICATION | CORPORATE SERVICES | ENGINEERING & PROJECTS |  
RESEARCH & DEVELOPMENT | AUTOMATION | TECHNOLOGY GROUPS

\* Vendor Capability Advancement Programme

UOM- Unit of Measurement

TSJ- Tata Steel Jamshedpur

TSK- Tata Steel Kalingangar

TSK under ramp-up



## ACTIONS TO ENHANCE/MITIGATE OUTCOMES

### OUTPUT

HOT METAL PRODUCTION  
14 MnTPA

CRUDE STEEL PRODUCTION  
13 MnTPA

### KEY CUSTOMER SEGMENTS & PRODUCTS

**AUTOMOTIVE SEGMENT (OEMs & Auto Ancillaries):**  
CR SHEETS, COILS, TUBES, SPRINGS, BEARINGS

**CONSTRUCTION SEGMENT:**  
TMT REBARS, STEEL HOLLOW SECTIONS, GC ROOFING SHEETS

**GENERAL ENGINEERING SEGMENT:**  
CR SHEETS AND COILS, HR SHEETS AND COILS, COATED PRODUCTS

**INDUSTRIAL SEGMENT:**  
HOT ROLLED COILS, WIRE RODS

### BY-PRODUCTS AND THEIR CONSUMERS

**POWER PLANTS, COKE PLANTS, BRICK KILNS:**  
COAL REJECTS, COAL MIDDLINGS

**CEMENT INDUSTRY:**  
BLAST FURNACE SLAG, LD SLAG

**CONSTRUCTION SECTOR (ROAD):**  
LD SLAG

### OUTCOME

Financial Capital	UOM	FY17
Turnover	₹ Cr.	53,261
EBITDA	%	22
PAT	₹ Cr.	3,445
Savings from improvement projects	₹ Cr.	3,400
Value from by-products	₹ Cr.	2,882
Revenue from new products	%	5
Revenue through services and solutions business	₹ Cr.	~750

Manufactured Capital	UOM	FY17
Coke Rate	Kg/tonne of hot metal	360
Availability of critical manufacturing units	%	>90

Intellectual Capital	UOM	FY16
Patents granted (Cumulative till FY2017)	Nos.	360
New products launched	Nos.	31

Human Capital	UOM	FY17
Safety - LTI	Nos.	80
Safety - Fatalities	Nos.	5
Health Index	Score out of 16	12.59/16
Employee Productivity (TSJ)	tcs/employee/year	720
Diversity - Gender and SC/ST	%	5.8 and 16.9
Attrition Rate	%	4.83
Employees trained	man-days	3,34,050

Relationship Capital	UOM	FY17
Customer satisfaction	%	81.3
Customer complaints	ppm	759
Brand Equity Index - Tata Shaktee	Score out of 10	7
Brand Equity Index - Tata Tiscon	Score out of 10	6.6

Continuing leadership position in chosen segments (Automotive and Construction)		
Loyal (repeat) customers	%	70
Timely environmental clearances without any major issues		

Social Capital	UOM	FY17
Lives impacted through CSR - Health, Education, Livelihood programmes	Nos.	1.1 Million
Economic Value Distributed	%	95.34
Social licence to operate without any major issues		

Natural Capital	UOM	FY17
CO <sub>2</sub> emissions - TSJ, TSK	tCO <sub>2</sub> e/tcs	2.29, 3.08
Effluent discharge - TSJ	m <sup>3</sup> /tcs	1.01
Solid Waste Utilisation - TSJ	%	82.4
Dust emissions - TSJ, TSK	kg/tcs	0.44, 1.3

Biodiversity preservation at raw material locations  
In 2016, the Company entered into phase-II of engagement with IUCN, for mainstreaming biodiversity across all our raw material locations. IUCN is helping in roll-out of Biodiversity Management Plans (BMPs). Specific initiatives based on the BMPs have already been identified which are being implemented for enhancing biodiversity, for e.g. 'Bird Niche Nesting Project.'