STEEL AUTHORITY OF INDIA LIMITED



RESULTS

PRESENTATION
FOR
Q4 & FY 2020-21



STEEL AUTHORITY OF INDIA LIMITED

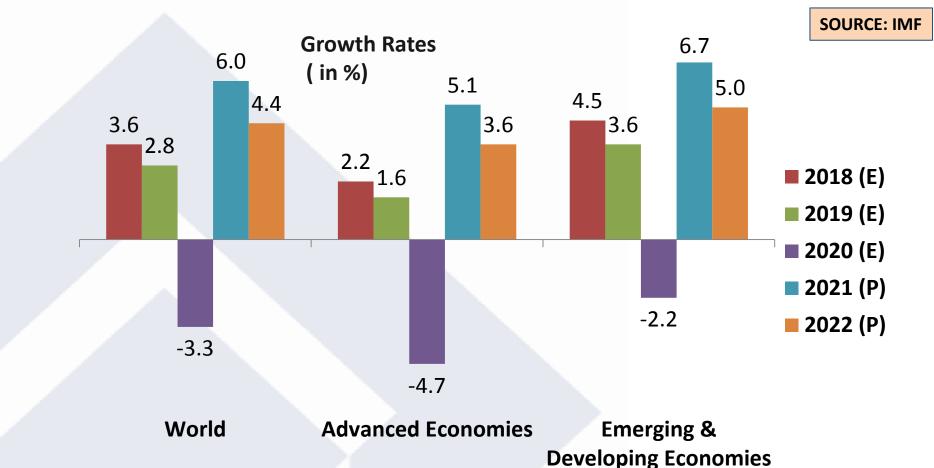


Economic & Steel Scenarios



WORLD ECONOMIC SCENARIO





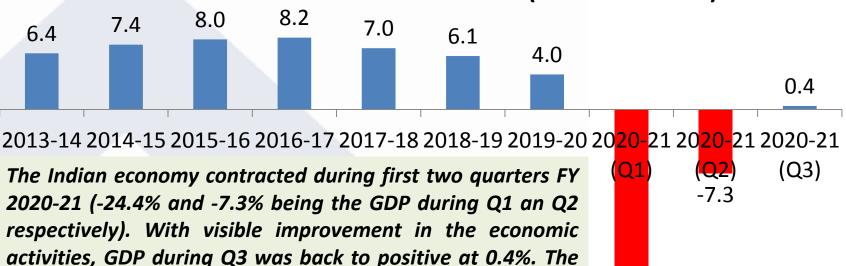
IMF projected the growth for 2020 at 2.9% in its Jan 20 World Economic Outlook (WEO). With the lockdown emanating from COVID19 Pandemic, the projections became negative to almost 4.9%. Though the negative status still remains, the figure has since been revised to more lower 3.3% on the back of better GDP data from economies around the world during H2 2020. The growth projection for 2021 have also been increased to 6.0% which is expected to moderate to 4.4% during 2022.

INDIAN ECONOMIC SCENARIO



SOURCE: CSO, Gol & Economic Survey

GDP Growth % at Constant Prices (2011-12 Prices)



Last available projections from major financial agencies are as follows:

Government is predicting de-growth of 8.0% in GDP for

FY'21.

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Source	Growth Projection
WORLD BANK	8.3% (FY22)
IMF	12.5% (CY21) & 6.9% (CY22)
RBI	10.5% (FY22)

WORLD STEEL SCENARIO

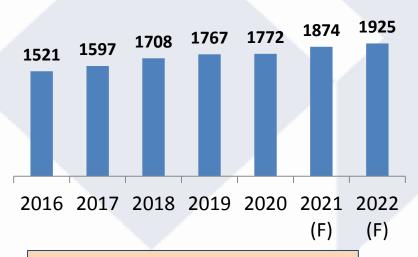


Crude Steel Production (mtpa)





Finished Steel Consumption (mtpa)



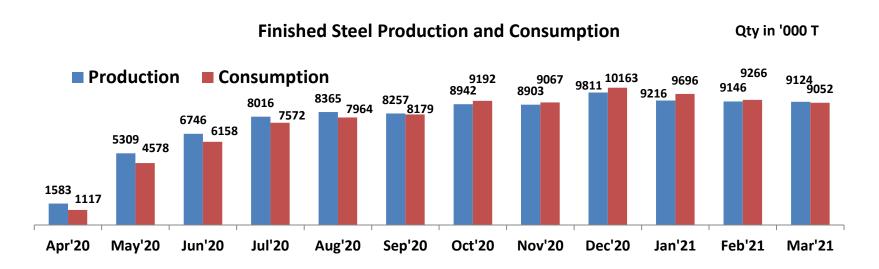
SOURCE: World Steel Association (WSA)

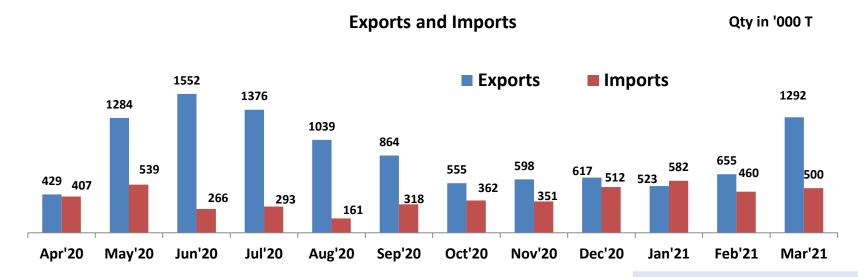
Short Range Outlook (SRO) April'21:

- Global steel demand is expected to increase by 5.8% in 2021 and 2.7% in 2022.
- China's growth is set to go down to 3% in 2021 which will further come down to 1% in 2022.
- The global growth rate excluding China is expected to be 9.3% in 2021 and 4.7% in 2022.
- In the Emerging and Developing Economies excluding China, steel demand is expected to grow by 10.2% in 2021 and 5.2% in 2022.
- The developed economies are expected to see growth in steel consumption at 8.2% in 2021 and 4.2% in 2022.

INDIAN STEEL SCENARIO IN 2020-21







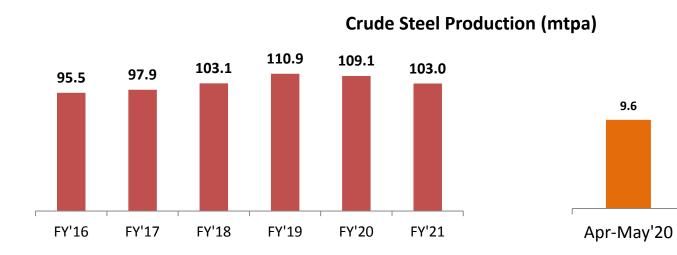
SOURCE: JPC, Ministry of Steel

INDIAN STEEL SCENARIO

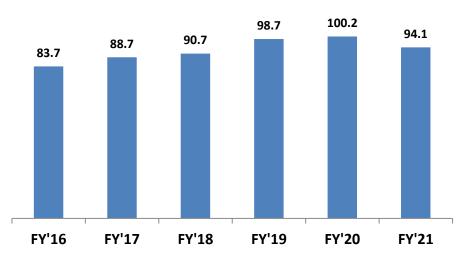


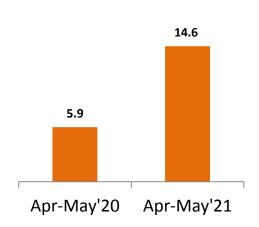
16.8

Apr-May'21









As per the WSA Short Range Outlook of April'21, demand in India is projected to increase by 19.8% in 2021 and 5.9% in 2022.

Source: WSA

INDIAN STEEL PERFORMANCE



INDICATORS	UNIT	20-21	19-20	% +/- Over CPLY
Growth in Index of Industrial Production ^	%	-8.6	-0.8	-7.80
Production - Finished Steel *	MT	95.12	102.62	-7.3
Imports - Finished Steel *	MT	4.75	6.77	-29.8
Exports - Finished Steel *	MT	10.78	8.36	29.1
Consumption - Finished Steel *	MT	94.14	100.17	-6.0
Real Consumption of Finished Steel *	MT	94.14	100.17	-6.0

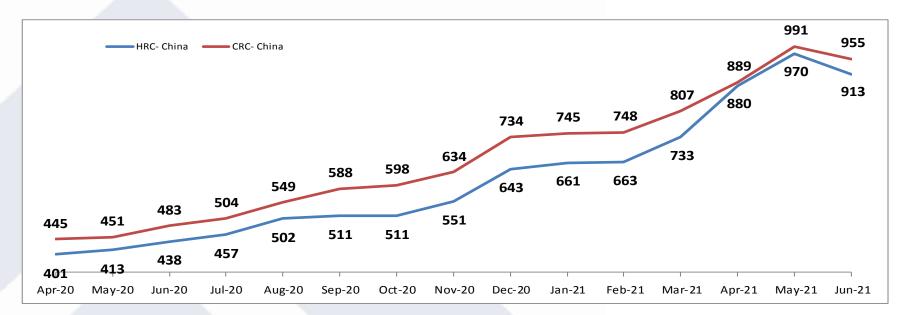
[^] As per CSO Data

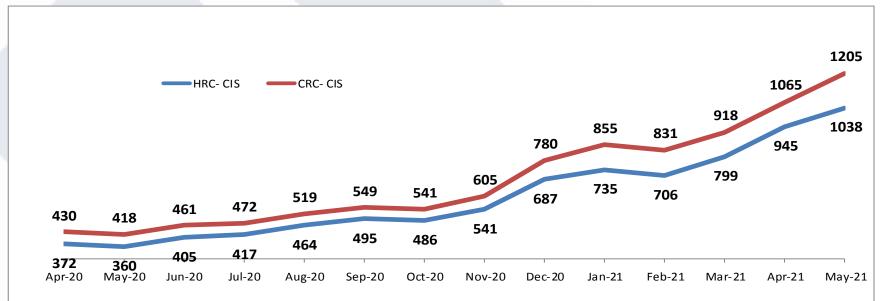
^{*}Source JPC Report

INTERNATIONAL PRICE (FOB) TREND



USD/Tonne





STEEL AUTHORITY OF INDIA LIMITED



Performance Highlights



PERFORMANCE HIGHLIGHTS: FY'21



FINANCIAL PERFORMANCE

❖ Net Sales : Rs. 68452 Crore

❖ EBITDA : Rs. 13740 Crore

❖ PBT : Rs. 6879 Crore

❖ PAT : Rs. 3850 Crore

PRODUCTION & SALES PERFORMANCE

- **❖** Hot Metal Production : 16.582 MT
- Crude Steel Production: 15.215 MT
- **❖** Saleable Steel Production: 14.602 MT
- **❖** Semis component in production : 26.63% of saleable steel
- **❖** Value Added Production : 6.825 MT
- **❖** Production through concast route: 14.733 MT
- **❖** Saleable Steel Sales: 14.937 MT

PERFORMANCE HIGHLIGHTS: Q4 FY'21



FINANCIAL PERFORMANCE

❖ Net Sales : Rs. 23166 Crore

EBITDA : Rs. 6473 Crore

❖ PBT : Rs. 4608 Crore

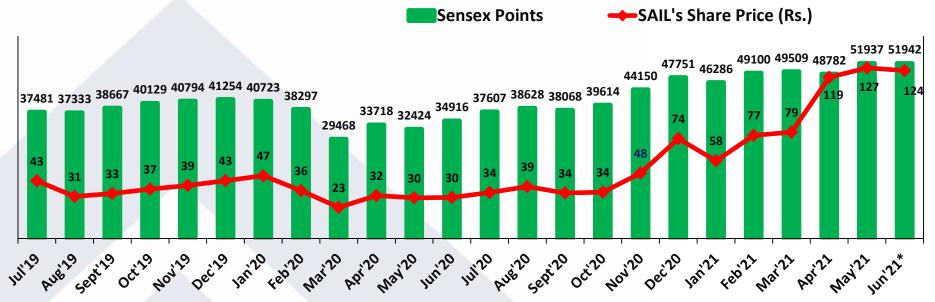
❖ PAT : Rs. 3444 Crore

PRODUCTION & SALES PERFORMANCE

- **❖** Hot Metal Production : 4.976 MT
- Crude Steel Production: 4.557 MT
- **❖** Saleable Steel Production : 4.418 MT
- **❖** Semis component in production : 26.14% of saleable steel
- **❖** Value Added Production : 2.021 MT
- **❖** Production through concast route : 4.374 MT
- **❖** Saleable Steel Sales: 4.345 MT

SAIL STOCK PRICE MOVEMENT





Closing Share Price and Sensex as on the last day of the month

DIVIDEND PAYOUT

	Interim (%)	Final (%)	Total (%)	Dividend (Rs. crore)	Dividend Tax (Rs. crore)
FY 21	10	-	10	413	-
FY 20	-	-	-	-	-
FY 19	-	5	5	206	
FY 18	-	-	-	-	-
FY 17	-	-	-	-	-
FY16	-	-	-	-	-
FY15	17.5	2.5	20	826	165
FY14	20.2	-	20.2	834	142

^{*} As on Jun 9, 2020

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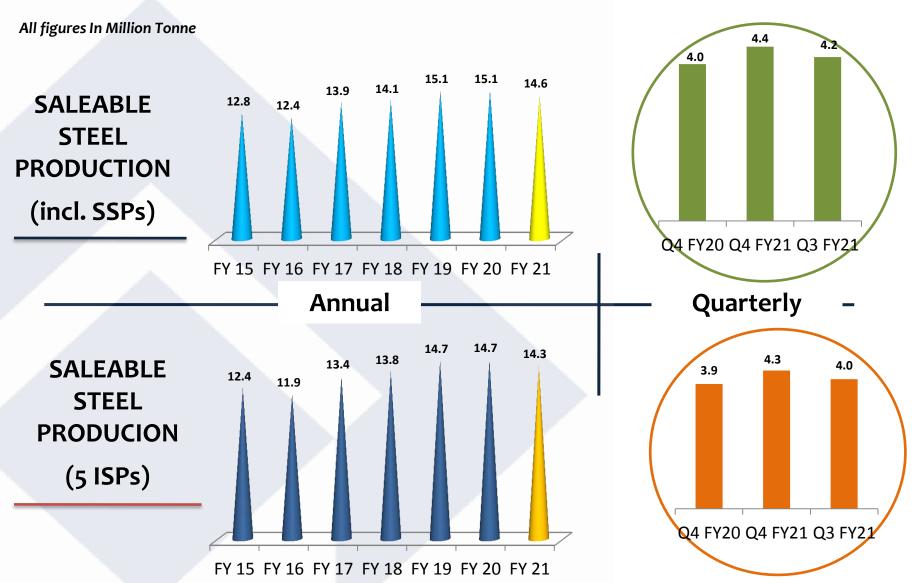


Operational Performance



PRODUCTION PERFORMANCE

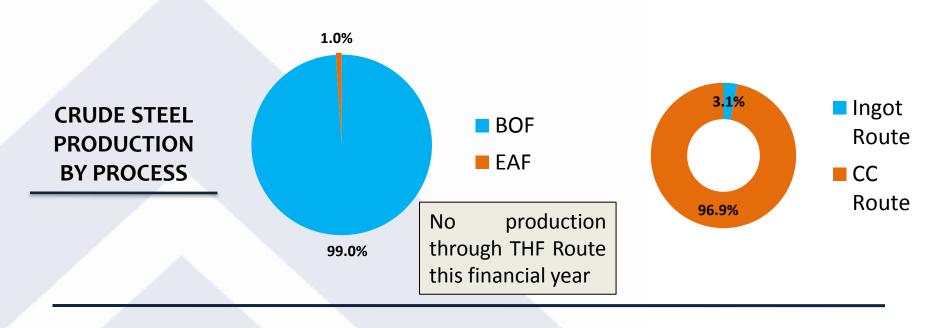




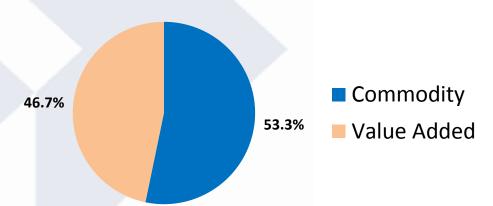
Production had been severely affected on account of COVID-19 impact during Q1 FY21

PRODUCTION PERFORMANCE: FY'21



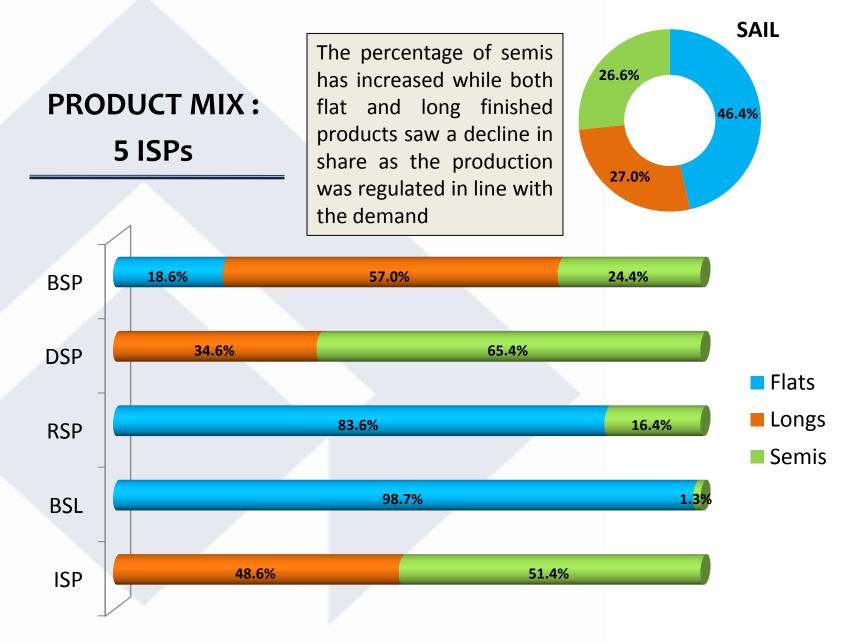






PRODUCTION PERFORMANCE: 9M FY 21



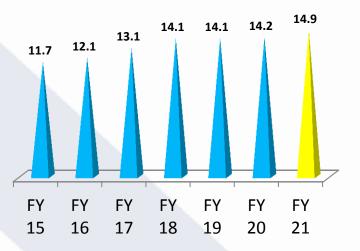


SALES PERFORMANCE



All figures In Million Tonne

(incl. SSPs)

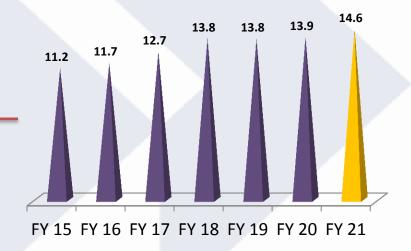


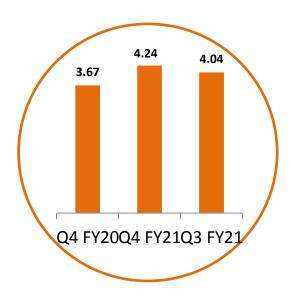


Annual

Quarterly

SALES OF 5 ISPs





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Efficiency & Sustainance Performance



RECENTLY DEVELOPED PRODUCTS

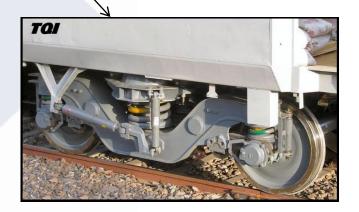


NARRROW PARALLEL FLANGE BEAM 750: USAGE IN CONSTRUCTION INDUSTRY



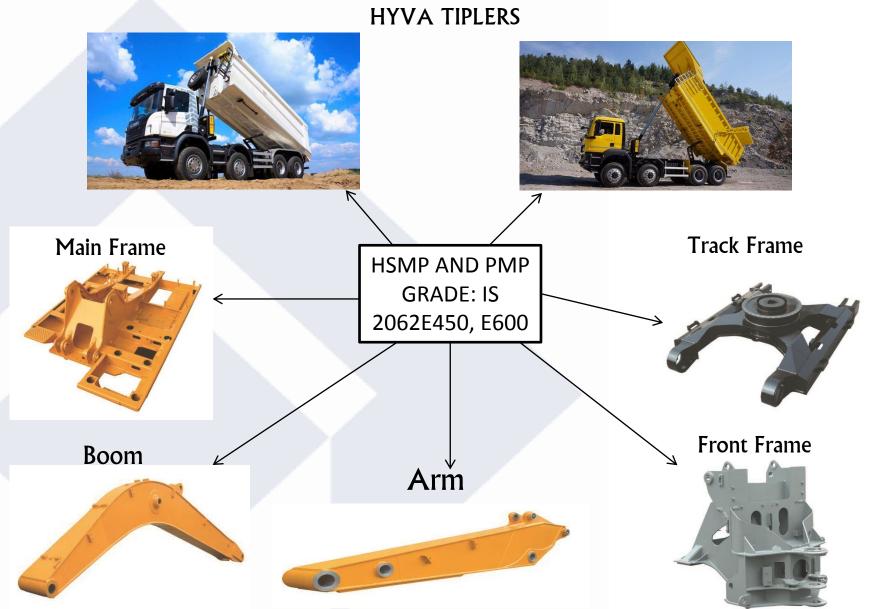
LINKE HOFMANN BUSCH (LHB) WHEELS: USAGE FOR RAILWAYS





PRODUCT CUSTOMISATION FOR END USERS





PRODUCT CUSTOMISATION FOR END USERS



ASHOK LEYLAND

U TRUCK U 2518T



HRC PMP GRADE: IS5986, ISH500, LAHFQ450





PRODUCT CUSTOMISATION FOR END USERS



Rear Axle Beam developed using HRC SAILFORMING 410 / 450 grades





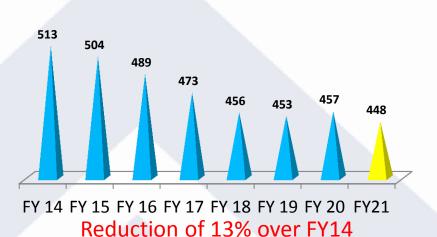
Dummy Axle Beam



TECHNO-ECONOMIC PARAMETERS







CDI Rate: kg/thm 78 76 60 49 FY 14 FY 15 FY 16 FY 17 FY 18 FY 19 FY 20 FY21

Increase of 129% over FY14

Specific Energy Consumption: GCal/tcs



Reduction of 2% over FY14

BF Productivity: T/m3/Day

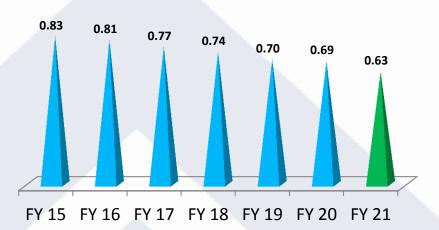


Improvement of 15% over FY14

SUSTAINANCE PARAMETERS







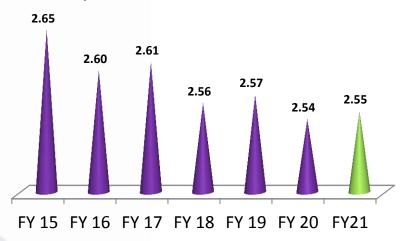
Reduction of 24% over FY15

Solid Waste Utilisation (%)



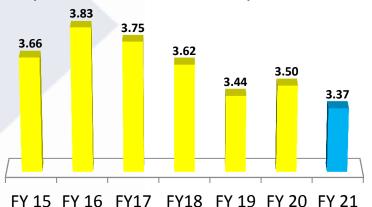
Increase of 6% over FY15

Specific CO2 Emission: T/tcs



Reduction of 4% over FY15

Specific Water Consumption: m3/tcs

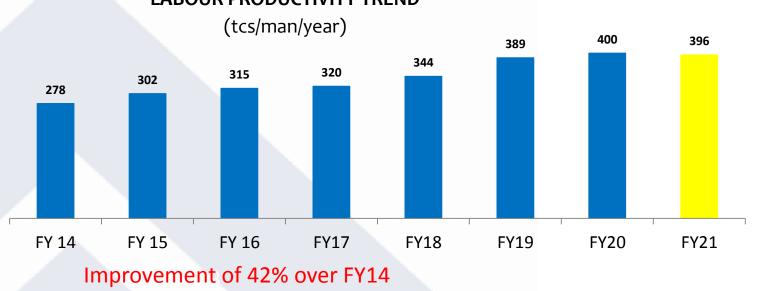


Reduction of 8% over FY15

MANPOWER PERFORMANCE







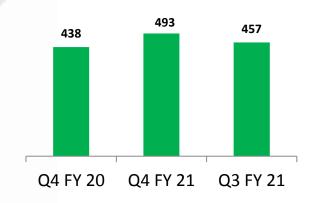
MANPOWER

Total manpower as on 01.04.2021: **65564**

Reduction in FY 21: 3815

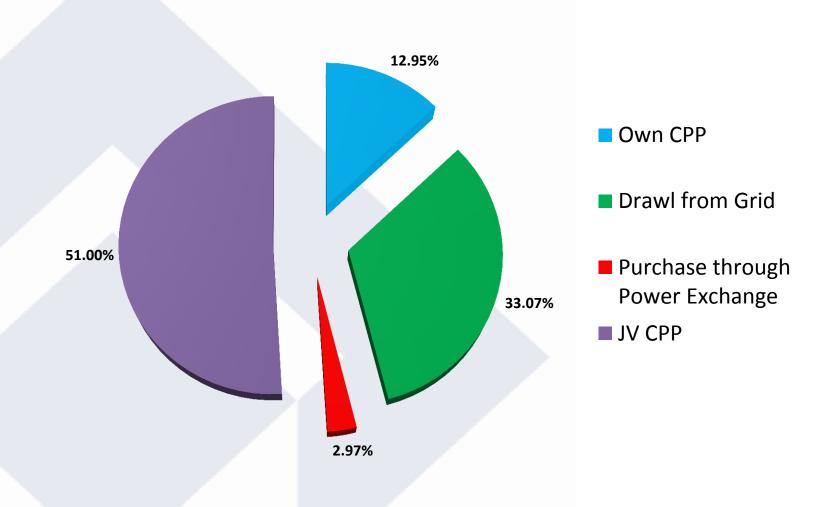
À-VIS CPLY AND PREVIOUS QUARTER

(tcs/man/year)



POWER CONSUMPTION – FY 21





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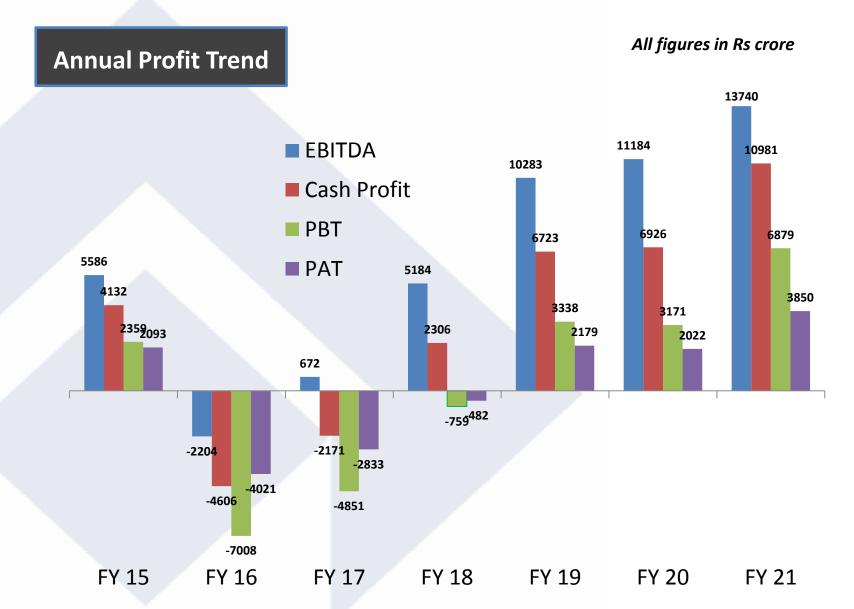


Financial Performance

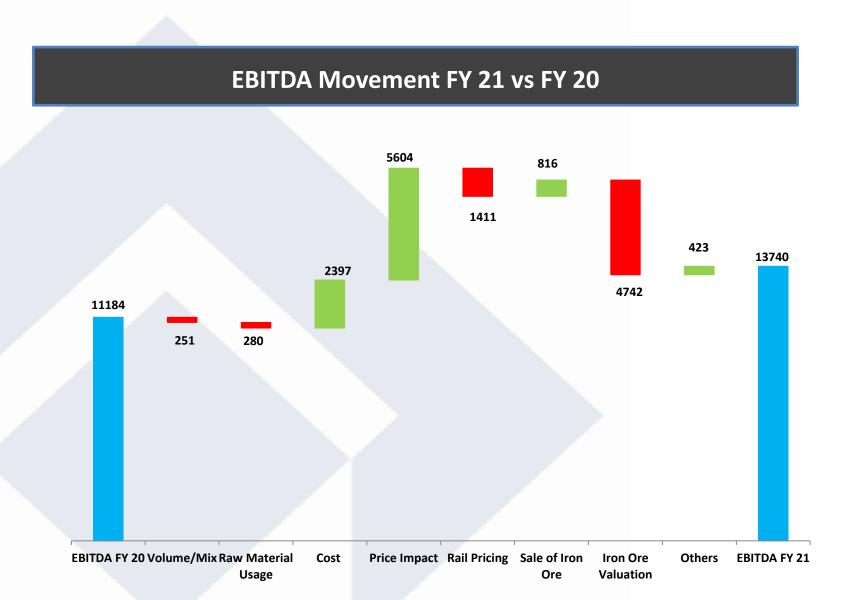


Rs. Crore (INDAS Compliant figures)	FY 21	FY 20	Q3 FY 21	Q4 FY 21	Q4 FY 20
Sales	68452	61025	19614	23166	16024
EBITDA	13740	11184	5294	6473	6917
Depreciation	4102	3755	981	1158	1055
Finance Cost	2817	3487	670	540	909
PBT Before Exceptional Items	6821	3942	3642	4775	4953
Exceptional/Abnormal Items (VRS/Suspended Operations)	-58	772	-2	166	772
PBT After Exceptional Items	6879	3171	3645	4608	4181
Тах	3029	1149	2361	1165	1456
Profit After Tax	3850	2022	1283	3444	2725





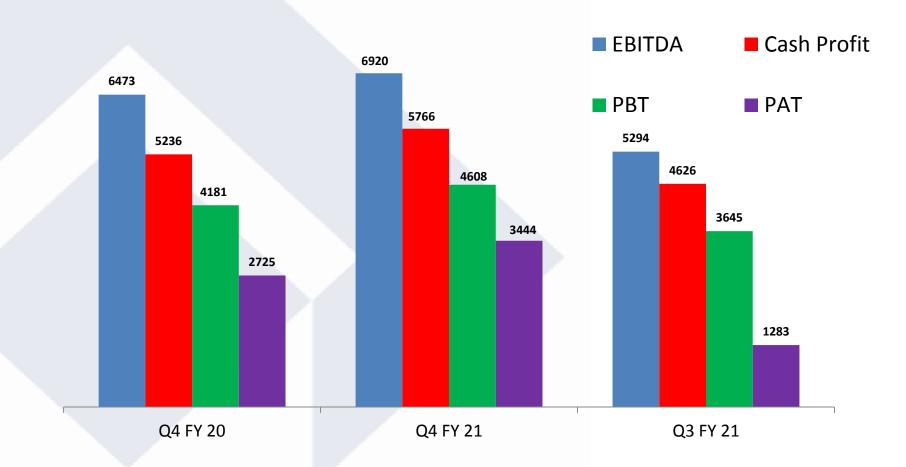






Quarterly Performance
Q2 FY 20 vs Q2 FY 21 vs Q1 FY 21

All figures in Rs crore







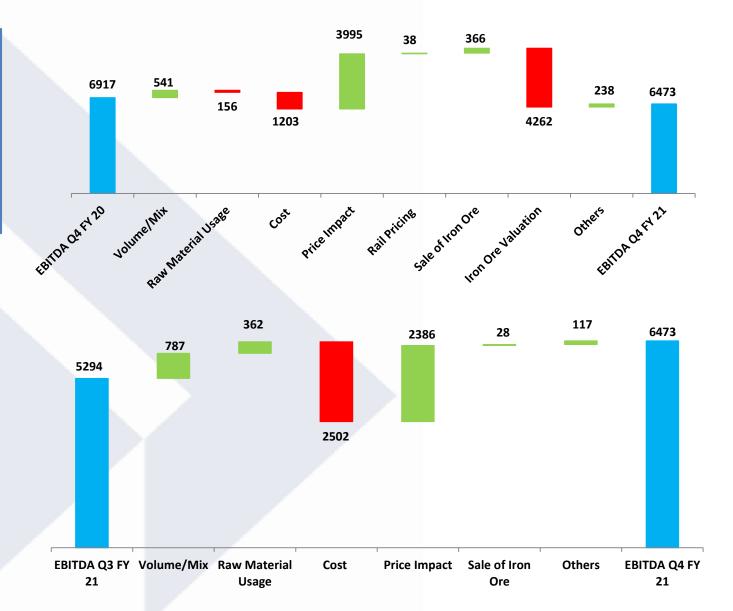
All figures in Rs crore

EBITDA

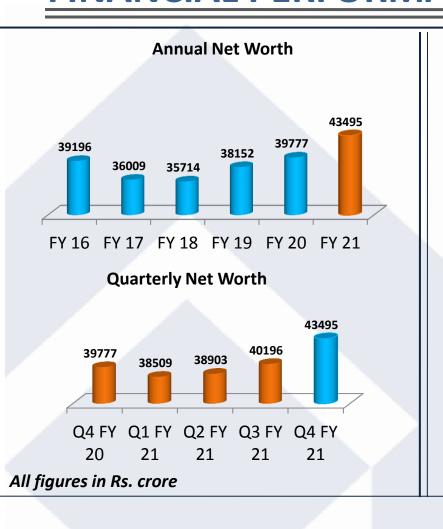
Movement

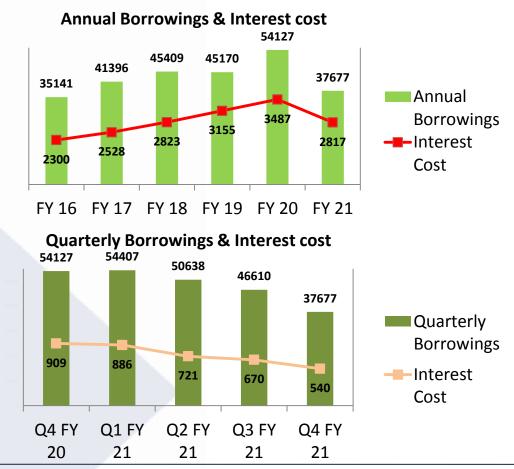
Q4 FY 21 vs

Q3 FY 21









Debt Equity Ratio								
31/3/16	31/3/17	31/3/18	31/3/19	31/3/20	30/6/20	30/9/20	30/12/20	31/3/21
0.90	1.15	1.27	1.18	1.36	1.41	1.30	1.16	0.87

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Capacity

Building

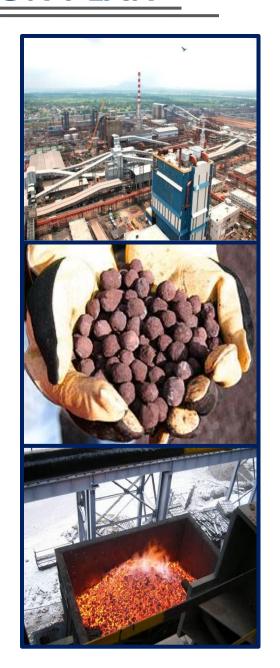


SAIL'S MODERNISATION & EXPANSION PLAN

Million Tonne	Actual Production 2020-21	Capacity After On-going Expansion
Crude Steel	15.215	21.4
Saleable Steel	14.602	20.2

Technological Shift

Technology	Before Expansion	After Expansion
BOF Steel Making	79%	100%
CC Route	71%	94%
Pelletisation Plant	No	Yes
Coke Dry Quenching	Partial	Yes
Top Pressure Recovery Turbine	No	Yes
Auxiliary Fuel Injection in BF	Partial Coverage	Full Coverage
Desulphurization of Hot Metal	Partly	100 %
Beam Blank Casting	No	Yes
Coupled Pickling & Tandem Mill	No	Yes
Beneficiation Plant	Partial	Full



MODERNISATION & EXPANSION PLAN

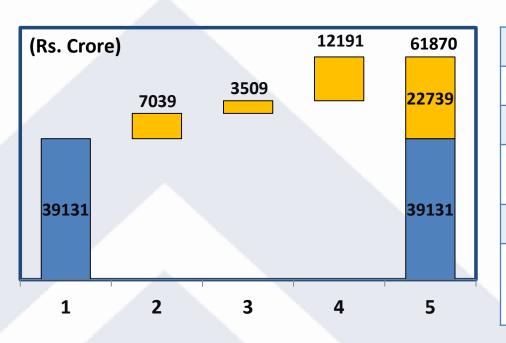
EXPECTED OUTCOME

- Production through twin-hearth furnace (THF) route to be replaced by BOF-LD converter route.
- Production through Ingot teeming route to be replaced with continuous cast production route.
- ➤ Enhancement of Production volume by addition of 2 new 4060 m³ Blast Furnaces and one Blast Furnace of 4160 m³.
- Increased Market Share.
- World class technology and products.
- > Improved Product Mix / proportion of value added products to increase.
- > Enhanced Pollution Control measures, with Environmental Conservation.

PRODUCTS BEING ADDED:

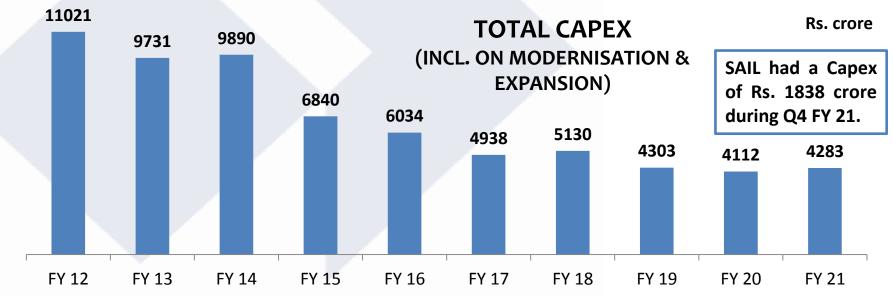
- ➤ Auto grade CR Products, Galvanized Coils /Sheets.
- > Plates / Pipes to meet up to API 100 Grade specification.
- ➤ Universal Beams/Heavy Beams to support increasing Infrastructural requirements.
- Rails for Metro Railways and Dedicated Freight Corridors.
- ➤ Increased production of Rails and Wheels to meet the increasing requirements of Indian Railways.
- Quantum jump in Rounds and Structural production.
- Wider Plates in the size of 4300 mm.

ONGOING PROJECTS (CAPEX)



- 1 Expansion of existing capacity
- **2** Value-addition / Product-mix improvement
- **3** Technological up gradation / Modernization
- Sustenance including de-bottlenecking, AMR & Environment
- 5 Total Estimated Cost

In addition, a Capex Plan of Rs. 10264 crore has been made for augmentation of Raw material facilities.

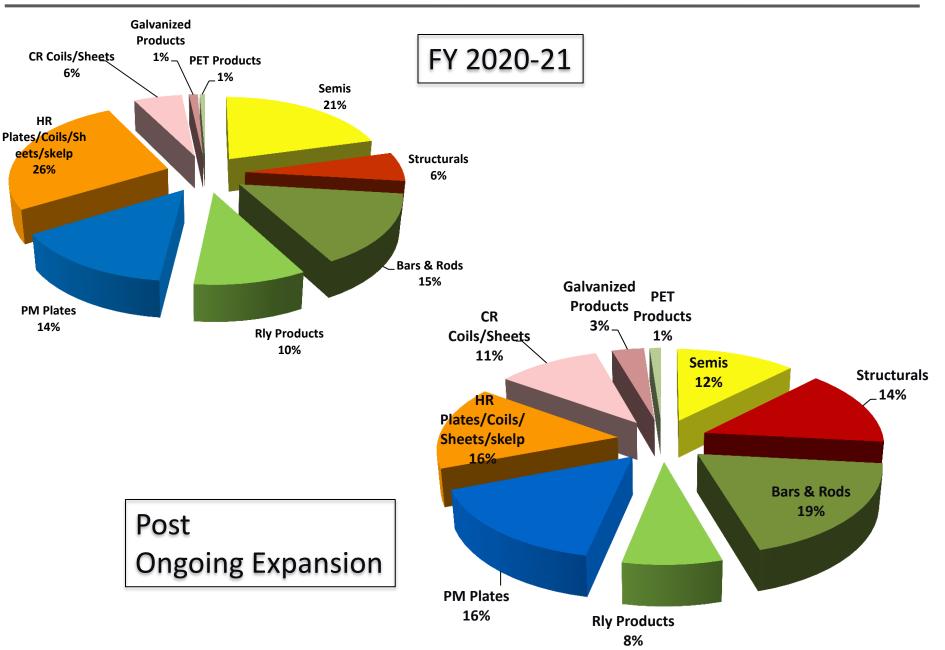


CAPACITY AFTER EXPANSION

Plant	Hot Metal (MTPA)		Crude Steel (MTPA)		Saleable Steel (MTPA)	
1 lanc	2020-21	After Expansion	2020-21	After Expansion	2020-21	After Expansion
BSP	4.60	7.5	4.24	7.0	3.96	6.6
DSP	2.27	2.5	2.09	2.2	2.03	2.1
RSP	3.83	4.5	3.50	4.2	3.21	4.0
BSL	3.79	5.8	3.38	4.6	3.24	4.2
ISP	2.09	2.9	1.85	2.5	1.82	2.4
VISL	0.00	0.3	0.00	0.2	0.02	0.2
ASP	-		0.06	0.5	0.07	0.4
SSP	-	-	0.10	0.2	0.26	0.3
TOTAL	16.58	23.5	15.22	21.4	14.60	20.2







MODERNISATION & EXPANSION PLAN - SALEM STEEL PLANT



Facilities added:

- •Steel melting Shop Electric Arc Furnace (55 T); AOD Converter (60 T); Ladle Furnace (60 T); Single Strand Slab Caster.
- Roll Grinder for Hot Rolling Mill
- Cold Rolling Mill Complex

ltem	2020-21 (Actual)	After Expansion
Crude Steel	0.10	0.18
Saleable Steel	0.26	0.34

MODERNISATION & EXPANSION PLAN - IISCO STEEL PLANT



Facilities Completed:

- Raw Material Handling System
- New Coke Oven Battery (0.88 Mtpa, 7 m tall)
- Coke Dry Cooling Plant
- Sinter Machines (3.88 Mtpa gross sinter production, 2x204 m²)
- Blast Furnace 4160 m3 volume (2.7Mtpa)
- 3 nos. of 150 T BOF Converters
- 2x6 Strand Billet Casters (1.67 Mtpa)
- 1x4 Strand Bloom-cum-Beam Blank Caster (0.83 Mtpa)
- Wire Rod Mill (0.55 Mtpa)
- Bar Mill (0.90 Mtpa)
- Universal Section Mill (0.85 Mtpa)

Item	2020-21 (Actual)	After Expansion
Crude Steel	1.85	2.50
Saleable Steel	1.82	2.39

Current Progress of Expansion at IISCO Steel Plant















MODERNISATION & EXPANSION PLAN- BOKARO STEEL PLANT



Facilities Completed:

- Re-building of Coke Oven Battery #1 & #2.
- Up-gradation of Blast Furnace #2 and Stoves Up-gradation of #5
- Auxiliary Fuel Injection (CDI) in Blast Furnaces #2 & #3.
- Turbo-Blower-8.
- New CRM Complex (1.2 Mtpa)
- Up-gradation of HSM with augmentation of Roughing Facility (4.5 MTPA).

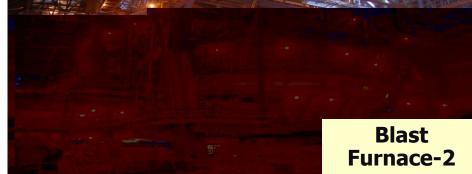
ltem	2020-21 (Actual)	After Expansion
Crude Steel	3.38	4.61
Saleable Steel	3.24	4.18

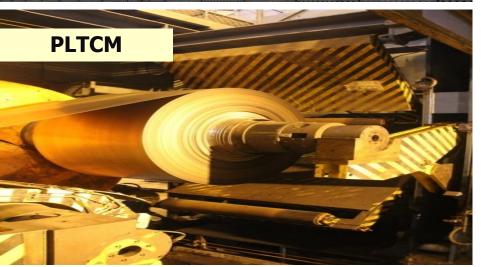


Current Progress of Expansion at Bokaro Steel Plant















MODERNISATION & EXPANSION PLAN-BHILAI STEEL PLANT



Facilities Already Completed:

- Ore Handling Plant part-A
- Second Sinter Machine in Sinter Plant-3 (3.7 MTPA)
- New Coke Oven Battery No. 11 (7 m tall, Capacity 0.881 mtpa)
- Oxygen Plant (BOO basis)
- Universal Rail Mill (1.2 MTPA) and Rail Welding Line
- Bar and Rod Mill (0.9 MTPA)
- Blast Furnace 4060 m3 (2.8 Mtpa)
- New Steel Melting Shop (SMS-3) with Converter-1 &2 and New Billet Casters (2x6) and New Billet-cum-Bloom Caster (1X6).
- Convertor 3, LF -3, Argon Rinsing Station-3 in SMS -3.

ltem	2020-21 (Actual)	After Expansion
Crude Steel	4.24	7.0
Saleable Steel	3.96	6.56

Current Progress of Expansion at Bhilai Steel Plant















MODERNISATION & EXPANSION PLAN- ROURKELA STEEL PLANT

Facilities Completed:

- New Coke Oven Battery -6 (7 m tall, 1 x 67 ovens)
- New Sinter Plant -3 (1 x 360m²)
- New Blast Furnace -5, useful volume 4060 m³
- New 3rd Single Strand Slab Caster (1.5 MTPA)
- New Oxygen Plant 2x700 tpd on BOO basis
- New 3rd BOF (150 T) Convertor
- New 4.3 meter Wide Plate Mill

ltem	2020-21 (Actual)	After Expansion
Crude Steel	3.50	4.20
Saleable Steel	3.21	3.99

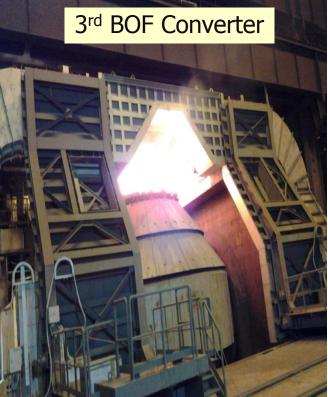
Current Progress of Expansion at Rourkela Steel Plant













MODERNISATION & EXPANSION PLAN-DURGAPUR STEEL PLANT



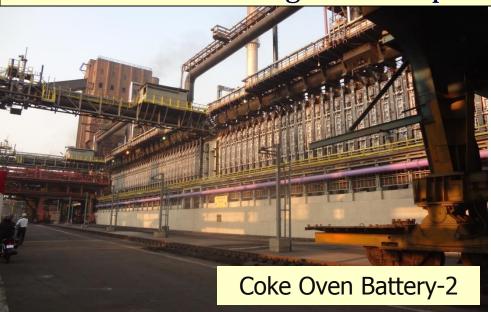
Facilities Completed:

- Rebuilding of Coke Oven Battery no-2
- New Ladle Furnace (125T)
- Coke Sorting & Coal Handling Plant
- New Dolomite Plant (300tpd)
- Bloom-cum-Round Caster 1X4 (0.75 Mtpa)
- New Medium Structural Mill (1.0 Mtpa)

ltem	2020-21 (Actual)	After Expansion
Crude Steel	2.09	2.20
Saleable Steel	2.03	2.12

Current Progress of Expansion at Durgapur Steel Plant











RAW MATERIALS



Year	Hot Metal (mtpa)	Iron Ore Consumption (mtpa)	Linkages of Iron Ore
2020-21	16.582	27.355	Existing Mines
Post Expansion	23.46	39	The capacity of existing mines at Kiriburu, Meghahatuburu, Bolani & Gua are being ramped up to meet the requirement of Iron Ore for post ongoing phase of expansion New Pellet Plants - 4 MTPA capacity at Gua, 1 MTPA at Dalli and 2 MTPA at RSP has been planned for utilization of accumulated Iron Ore Fines & Generated Fines In addition to the above, new mechanised Iron Ore Mines are being developed at Rowghat and Taldih

RAW MATERIALS – Iron Ore



Mine	Existing Capacity* (mtpa)	Capacity* after ongoing expansion (mtpa)	Remarks
Kiriburu	5.50	5.50	Expansion at Kiriburu has already been completed
Meghathaburu	5.00	6.50	whereas Meghathaburu is being ramped up to meet the requirement of the ongoing expansion plan.
Bolani	7.00	10.00	• At Bolani, processing plant has been upgraded to 7.0
Gua	4.00	10.00	mtpa and is under stabilization.
Rajhara, Dalli	8.70	7.00**	 At Gua, FC/EC are now in place. Capacity augmentation may take about 40 months from award of contract. **Depleted resources and quality constraints
Barsua, Kalta, Taldih	7.00	ROM-16.00	Expansion through MDO route for Taldih mines for 7 MTPA under progress. Process for grant of EC for 16 MTPA RoM (Barsua-4 + Taldih-8- + Kalta-4) is under progress.
Rowghat	-	12.00	 MDO has been engaged w.e.f. 25.09.2017 for development of 14 MTPA mine. Interim mining to the tune of 3 lakh Tonne Per annum started on 05.02.2021
Chiria	0.75	ROM-7/15	Capacity to be expanded contractually to 1.5 MTPA after availability of FC for Sukri. Further expansion will be taken up after availability of lease extension/Forest Clearance

^{*} Finished Product capacity unless specified

[■] The entire requirement of the increased capacity is planned to be met through captive mines

RAW MATERIALS – Coal



Year	Hot Metal (mtpa)	Coking Coal Requirement (mtpa)	Linkages of Coking Coal
2019-20	17.438	15.854	 Import Component – 90% Indigenous: 10% Domestic coal is largely sourced from Coal India Ltd.
Post Expansion	23.46	19.5	 Long term / Quarterly contracts cover 95% of Import requirements Tasra captive coal mine being developed to produce 4 mtpa of ROM (1.8 mtpa washed coal) New linkages / acquisitions are being explored. Request has been made to Ministry of Coal for allocation of new potential coking coal blocks in line with recommendations of NITI Aayog.

STEEL AUTHORITY OF INDIA LIMITED



Strategic

Partnerships



MAJOR JOINT VENTURES



FOCUS AREA

ALLIANCE PARTNER

REMARKS

STEEL





A Special Purpose Vehicle, namely, 'Chhattisgarh Mega Steel Limited' has been formed for setting-up an Ultra Mega Steel Plant (UMSP) in Bastar area of Chhattisgarh.

DOWNSTREAM
STEEL PROCESSING
UNITS





- SAIL Bansal Service Center Limited A JV with Bansal Metal Works Ltd. for a Flat Product service centre at Bokaro.
- SAIL SCL Kerala Limited A JV with Govt. of Kerala for producing TMT Bars at Kozhikode.
- Prime Gold SAIL JVC Limited A JV with M/s Prime Gold for producing TMT Bars at Gwalior.
- VSL SAIL JVC Limited A JV with M/s Velagapudi Steel
 Ltd. for producing TMT Bars at Ujjain.

FNFRGY





- JV with NTPC for operating and managing CPPs of Bhilai, Durgapur and Rourkela.
- JV with DVC for operating & managing CPP of Bokaro.

MAJOR JOINT VENTURES



FOCUS AREA	ALLIANCE PARTNER	REMARKS
TECHNOLOGY	KOBELCO KOBE STEEL GROUP	SAIL Kobe Iron India Pvt. Ltd. – A Joint Venture Company has been formulated for setting up a 0.5 mtpa capacity Plant for producing iron nuggets based on ITmk3 technology.
RAW MATERIALS	TATA STEEL	 International Coal Ventures Pvt. Ltd., a SPV of 5 leading PSUs incorporated (SAIL, RINL, CIL, NTPC & NMDC) for acquisition / operation of coal assets in overseas territories. M/s S&T Mining Company Pvt. Ltd. formed with Tata Steel for developing coking coal mines in India. M/s SAIL & MOIL Ferro Alloys (Pvt.) Ltd. formed with MOIL for production of Ferro-alloys at Bhilai.
CEMENT	JAYPEE	 Bhilai Jaypee Cement LtdSlag based cement plant of 2.2 million tonne per annum capacity with grinding unit at Bhilai & clinkering unit at Satna.

MAJOR JOINT VENTURES



FOCUS AREA	ALLIANCE PARTNER	OBJECTIVE
WAGON MANUFACTURE	TRITES THE INFRASTRUCTURE PEOPLE	 SAIL RITES Bengal Wagon Industry Pvt. Ltd. – A Joint Venture Company has been formed with M/s RITES for setting up Wagon Manufacturing Factory at Kulti, West Bengal.
E-PORTAL	TATA STEEL	 JV with Tata Steel to promote e-commerce activities in steel and related areas

Abbreviations used



	•	BF	Blast Furnace	•	FOB	Freight On Board
	•	SMS	Steel Melting Shop	•	JPC	Joint Plant Committee
	•	BOF	Basic Oxygen Furnace	•	Kg/thm	Kilo Gram Per Tonne of
	•	THF	Twin Hearth Furnace			Hot Metal
1	•	EAF	Electric Arc Furnace	•	Tpd	Tonnes Per Day
	•	BSP	Bhilai Steel Plant	•	MT	Million Tonne
	•	DSP	Durgapur Steel Plant	•	Mtpa	Million Tonne Per Annum
	•	RSP	Rourkela Steel Plant	•	EBITDA	Earnings Before Interest,
	•	BSL	Bokaro Steel Limited			Taxes, Depreciation &
	•	SSP	Salem Steel Plant		DAT	Amortization.
	•	VISL	Visvesvaraya Iron & Steel		PAT	Profit After Tax
			Plant	•	PBT	Profit Before Tax
	•	ASP	Alloy Steels Plant	•	RINL	Rashtriya Ispat Nigam Limited
	•//	CPLY	Corresponding Period	•	CS	Crude Steel
			Last Year			
	•	G.Cal/tcs	Giga Calories per tonne of	•	CDI	Coal Dust Injection
			Crude Steel	•	CC	Continuous Casting
	•	ISP	Integrated Steel Plant	•	ВОО	Build-Own-Operate
	•	HDGL	Hot Dip Galvanizing Line	•	Gol	Government of India
	•	CR	Cold Rolled	•	MOEF	Ministry of Environment
	•	HR	Hot Rolled			& Forests

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