



STEEL AUTHORITY OF INDIA LIMITED

PERFORMANCE HIGHLIGHTS

H1 - FY13

Contents

- ✓ **Performance Highlights**
- ✓ **SAIL's Expansion Plan**
- ✓ **JVs & New Strategic Initiatives**
- ✓ **Awards & Accolades and CSR**

Financial Highlights

H1 FY13 vs. H1 FY12

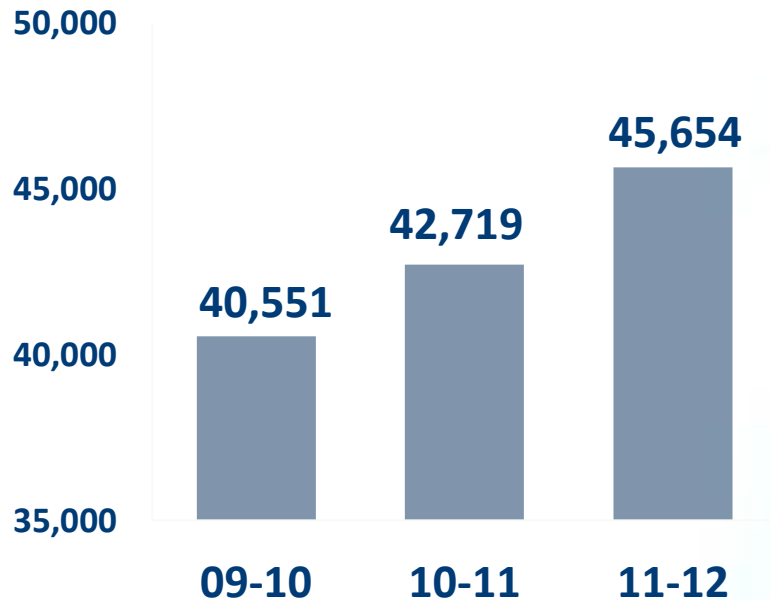
Amount in Rs. Crore

	H1 FY13	H1 FY12	Increase	% change
TURNOVER	23888	23878	10	0.0
EBIDTA	3129	3606	-477	-13.2
PBT	1798	1946	-148	-7.6
PAT	1240	1334	-94	-7.1

EBIDTA for H1 FY 12 and H1 FY 13 is before adjustment of exceptional item of Rs. 520 crore (loss) and Rs 215 crore (loss) respectively.

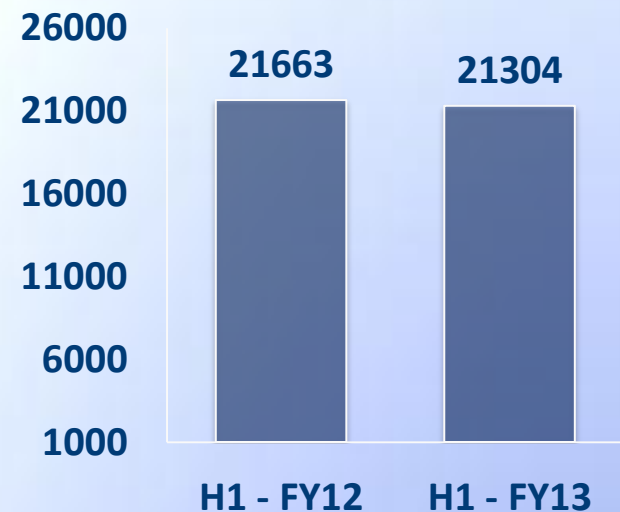
Financial Performance

Net Sales (Rs. Cr.)



**Annual Net Sales Performance
(Apr. - Mar.)**

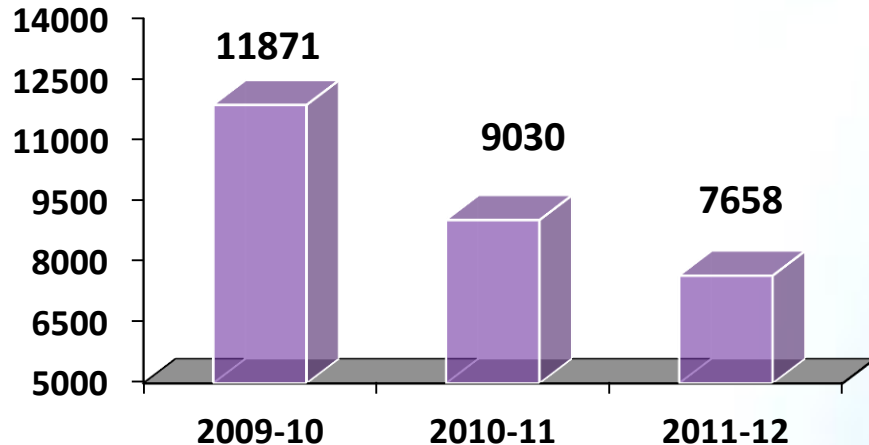
**H1 - FY13 vs. H1 - FY12
(Apr. - Sep)**



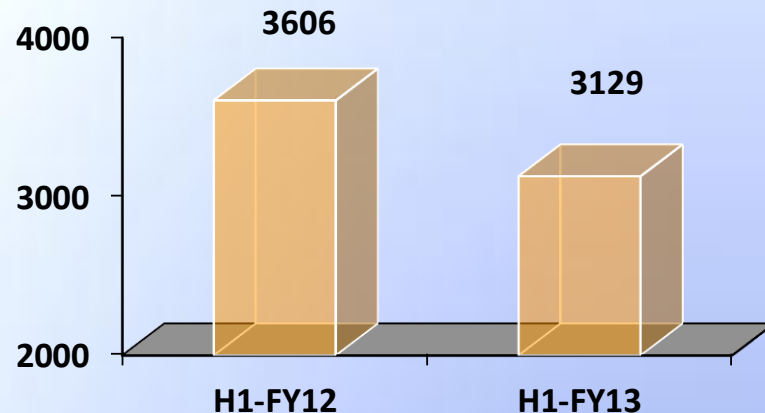
Earning Before Interest Depreciation and Tax (EBIDTA)

Unit : Rs Crore

Annual EBIDTA Performance
(Apr. - Mar.)



H1 - FY13 vs. H1 - FY12
(Apr. - Sep)



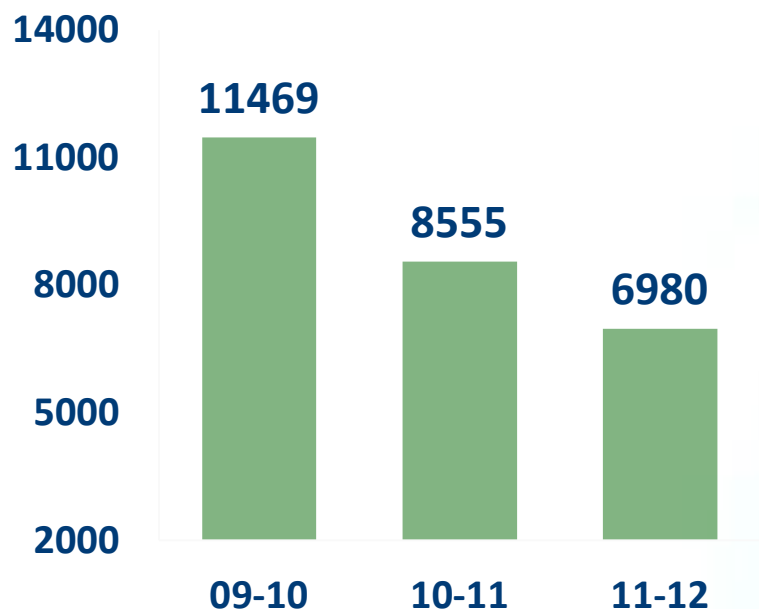
***EBIDTA for H1 FY 12 and H1 FY 13 is before adjustment of exceptional item of Rs. 520 crore (loss) and Rs. 215 crore (loss) respectively.**

Financial Performance

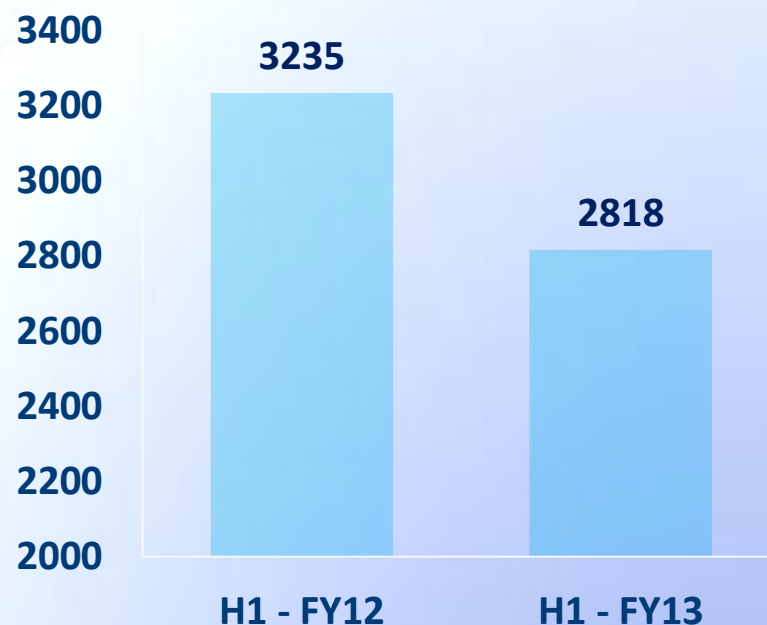
Cash Profit

Unit : Rs Crore

Annual Cash Profit Performance
(Apr. - Mar.)



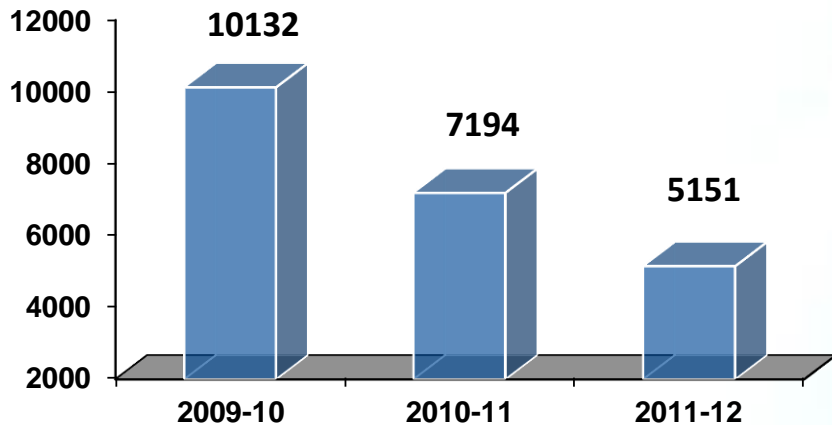
H1 - FY13 vs. H1 - FY12
(Apr. - Sep)



*Cash profit for H1 FY 12 and H1 FY 13 is before adjustment of exceptional item of Rs. 520 crore (loss) and Rs. 215 crore (loss) respectively.

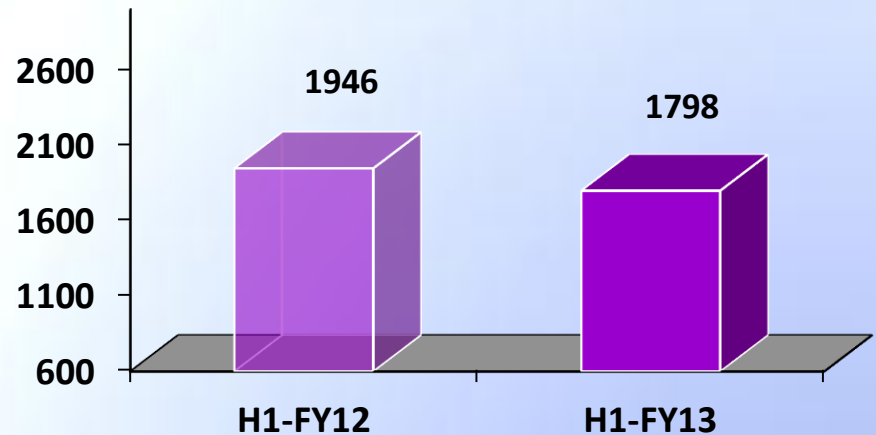
Financial Performance

PBT (Rs. Cr.)



Annual PBT Performance
(Apr. - Mar.)

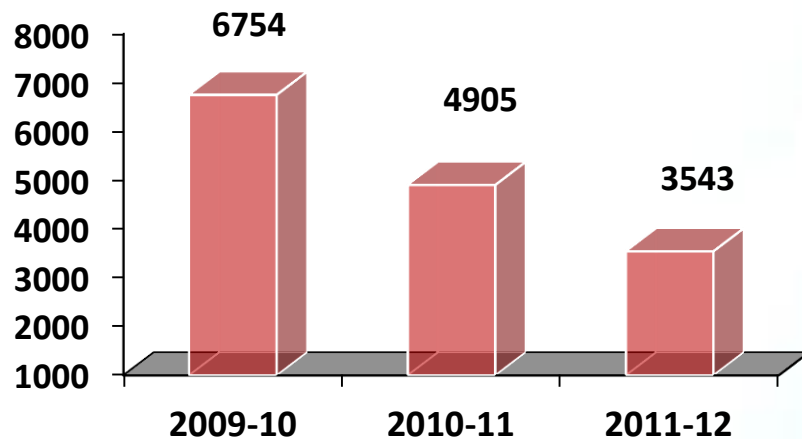
H1 - FY13 vs. H1 - FY12
(Apr. - Sep)



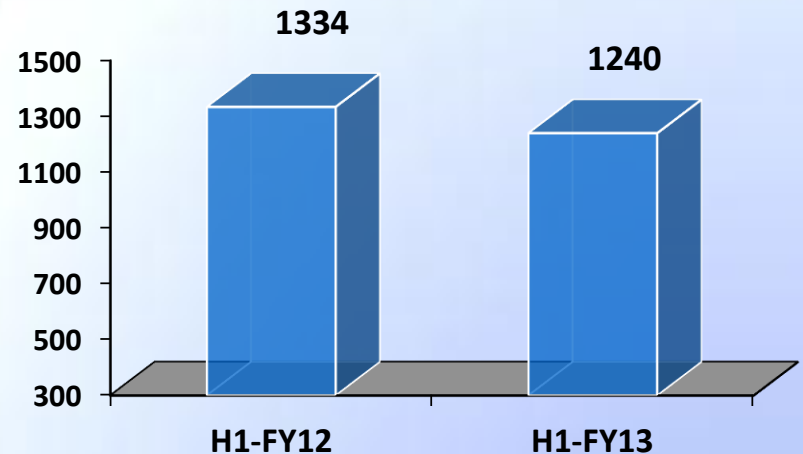
Financial Performance

PAT (Rs. Cr.)

H1 - FY13 vs. H1 - FY12
(Apr. - Sep)

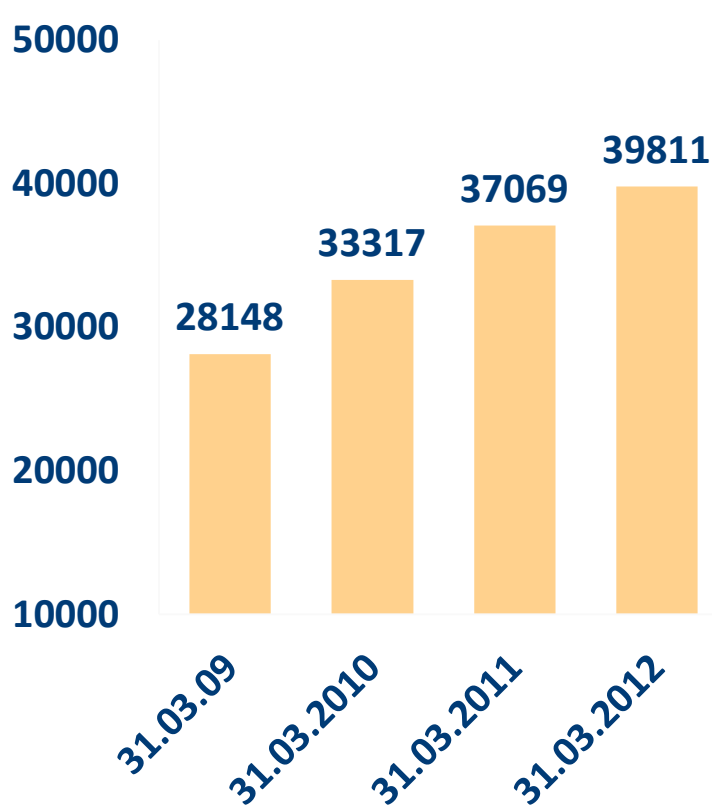


Annual PAT Performance
(Apr. - Mar.)



Financial Performance

Net Worth (Rs. Cr.)



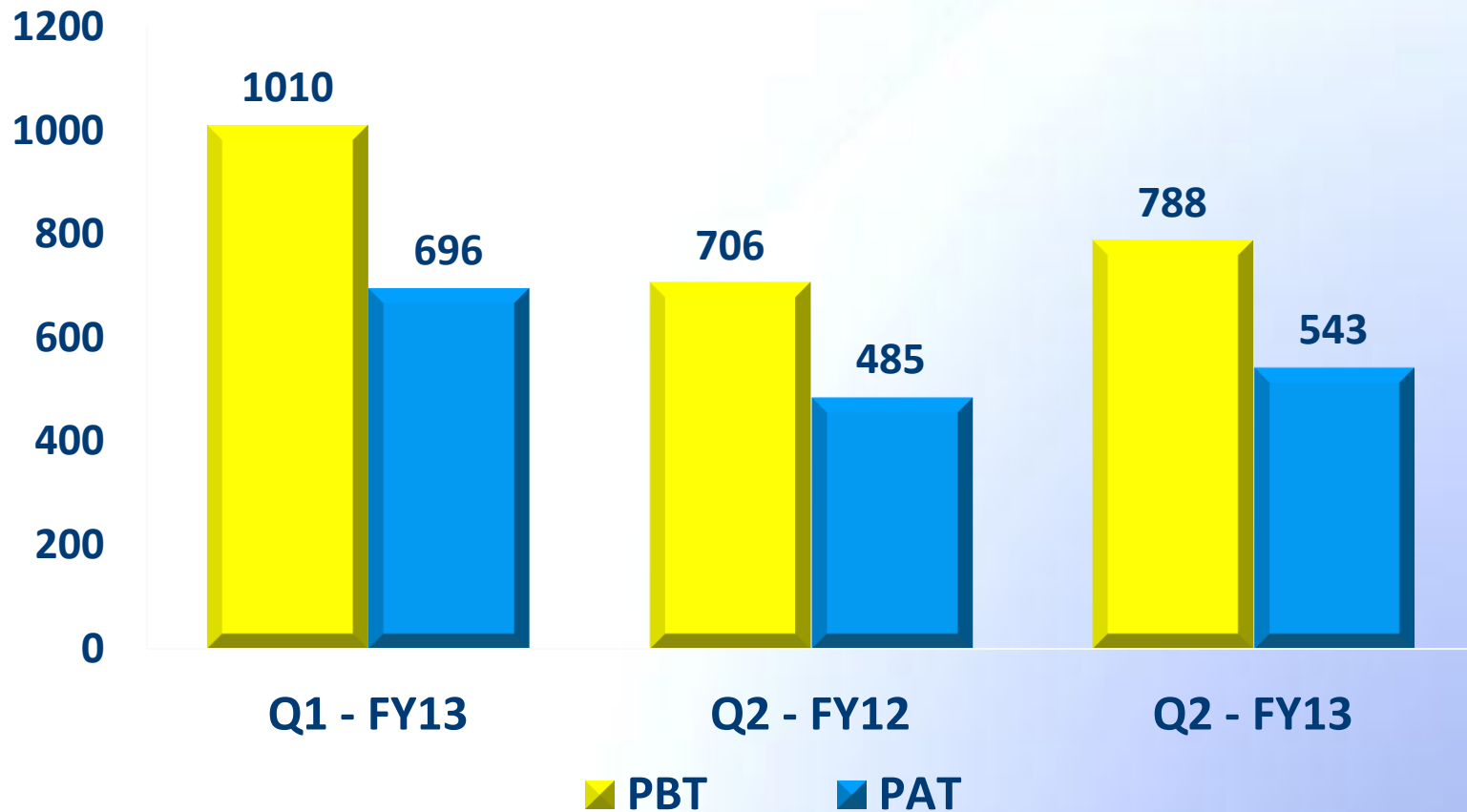
Annual Net Worth Status



Net Worth Status

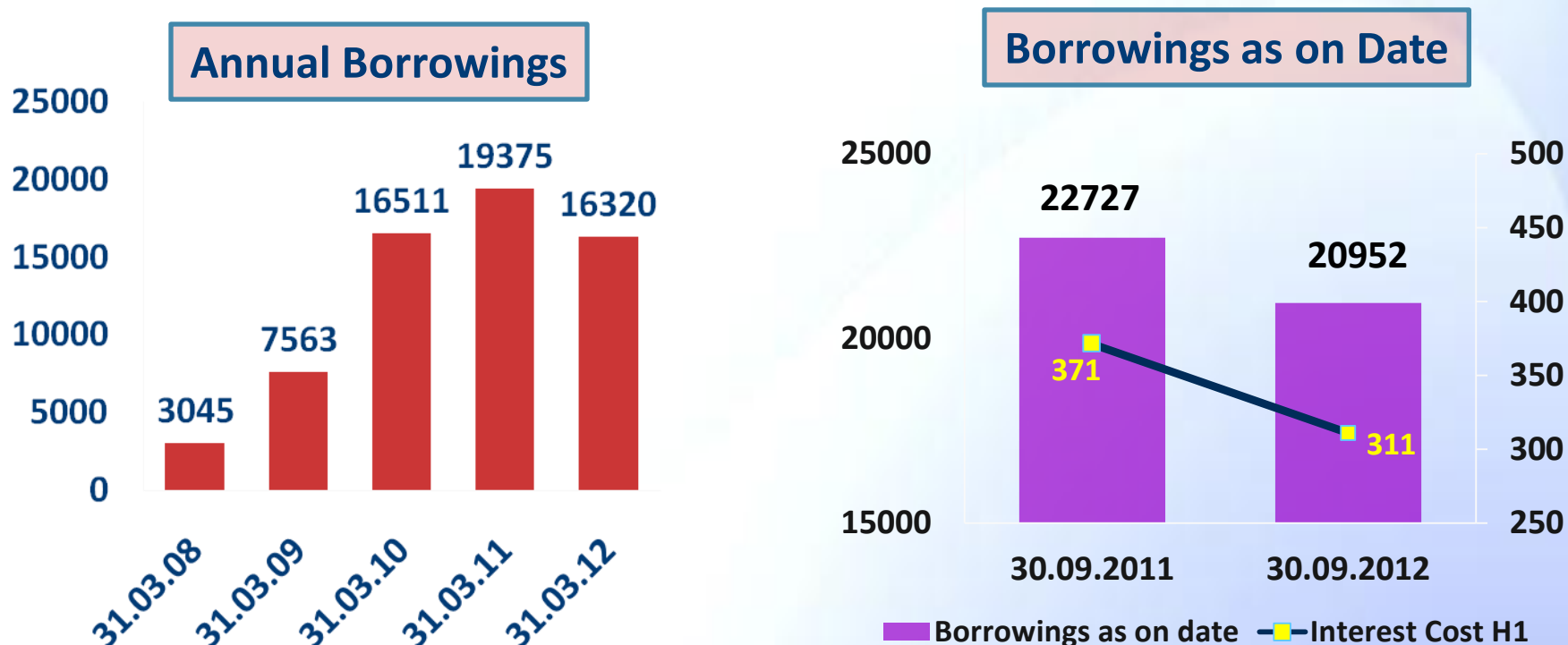
Financial Performance

Quarter - wise Profits (Rs. Crore)



Financial Performance

Borrowings (Rs. Crore)



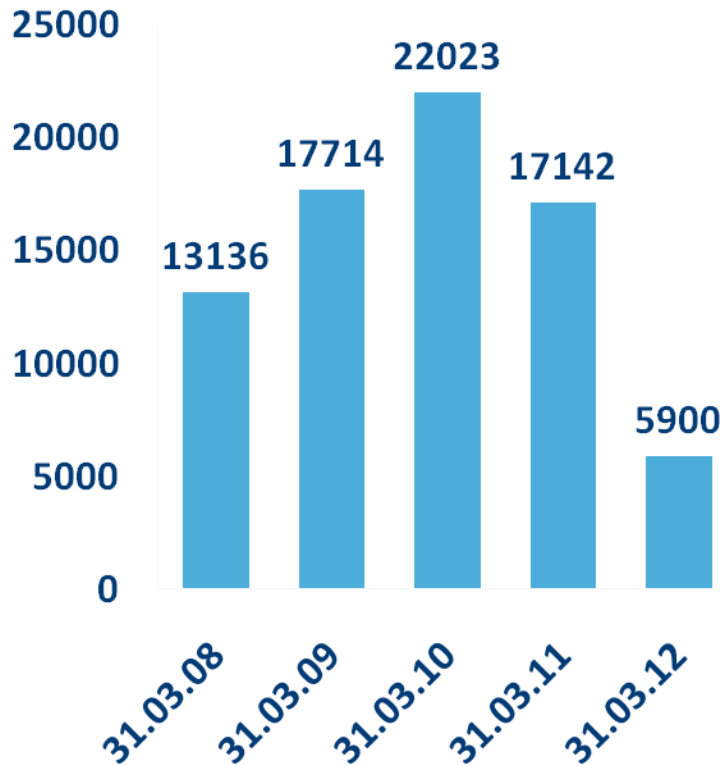
The ongoing CAPEX is being financed through Debt-Equity Ratio of 1:1

Year	31/03/2011	30/09/2011	31/03/2012	30/06/2012	30/09/2012
D/E Ratio	0.52	0.59	0.41	0.45	0.51

Financial Performance

Short Term Investments in Banks

(Rs. Crore)



Investments as on date

Interest Earned H1

Performance Highlights – H1 - FY 13

- ✓ Sales of 5.1 million tones
- ✓ Semis component 20.5 % of saleable steel production
- ✓ Saleable steel production of 6.2 million tones
- ✓ Hot Metal production of 7.2 million tonnes
- ✓ Crude steel production of 6.8 million tones
- ✓ Special Steel Production - 2.5 million tones
- ✓ Production through Concast - 4.7 million tones

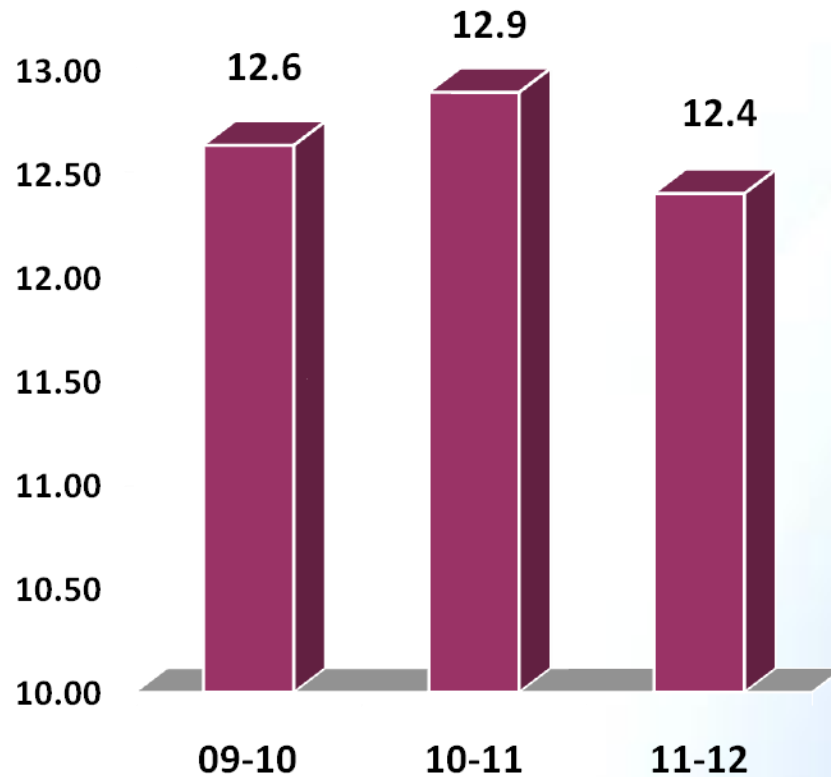
Performance Highlights – H1 - FY 13

Major Techno Economic Parameters

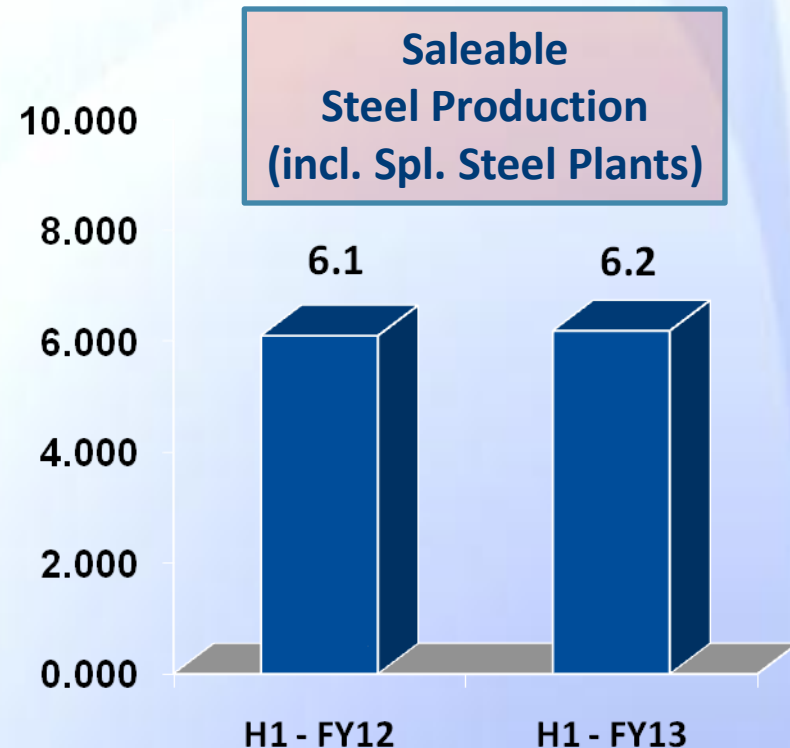
- ✓ **Coke Rate at 513 kg/T - 2 % lower as compared to CPLY**
- ✓ **Fuel Rate at 569 (kg/THM) – same as compared to CPLY**
- ✓ **Energy Consumption 6.69 (GCal/TCS) –lower by 3 % over CPLY**
- ✓ **BF Productivity 1.55 (T/m³/Day) – 4% higher as compared to CPLY.**

Production Performance

Saleable Steel (in Million Tons)

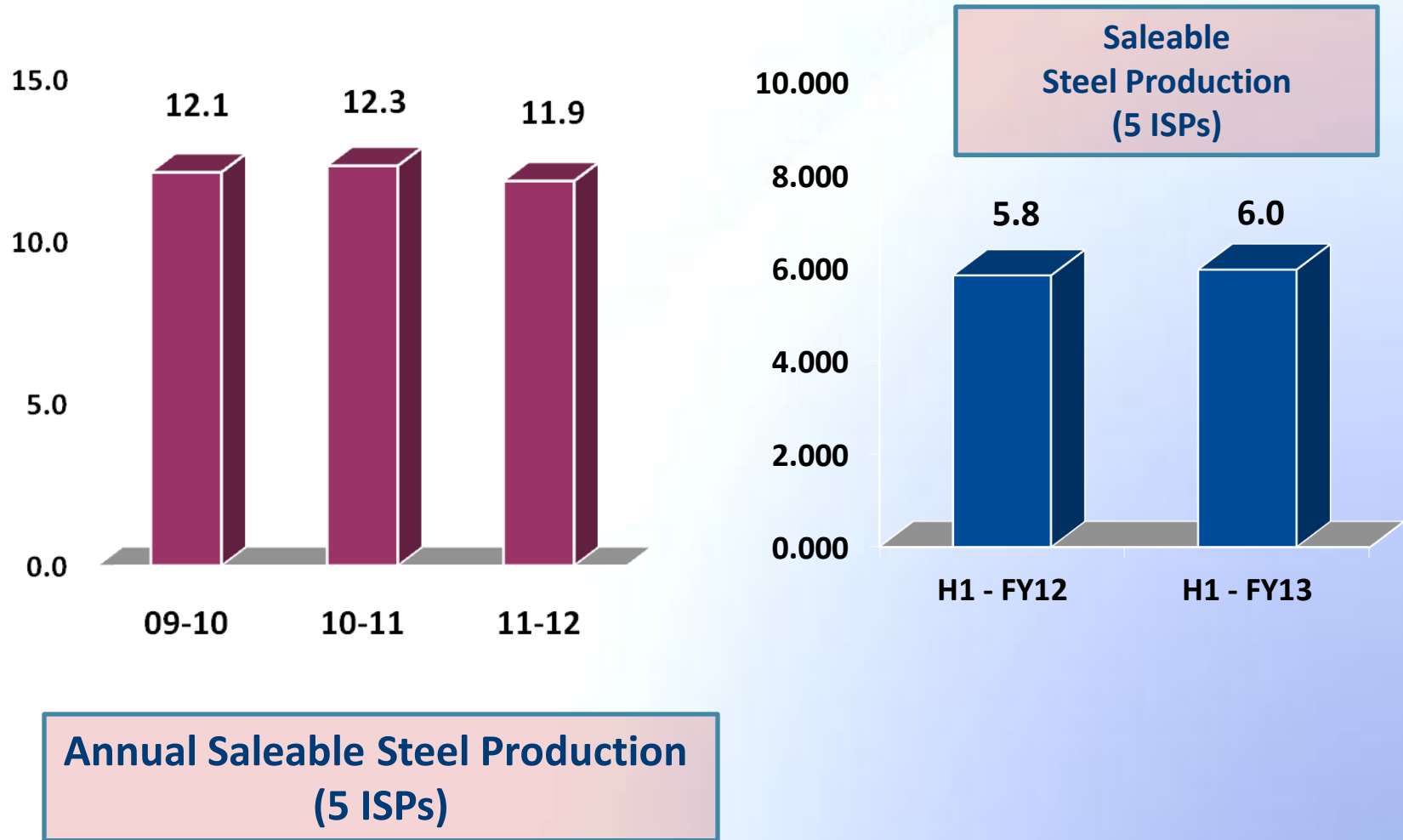


**Annual Saleable Steel Production
(incl. Spl. Steel Plants)**



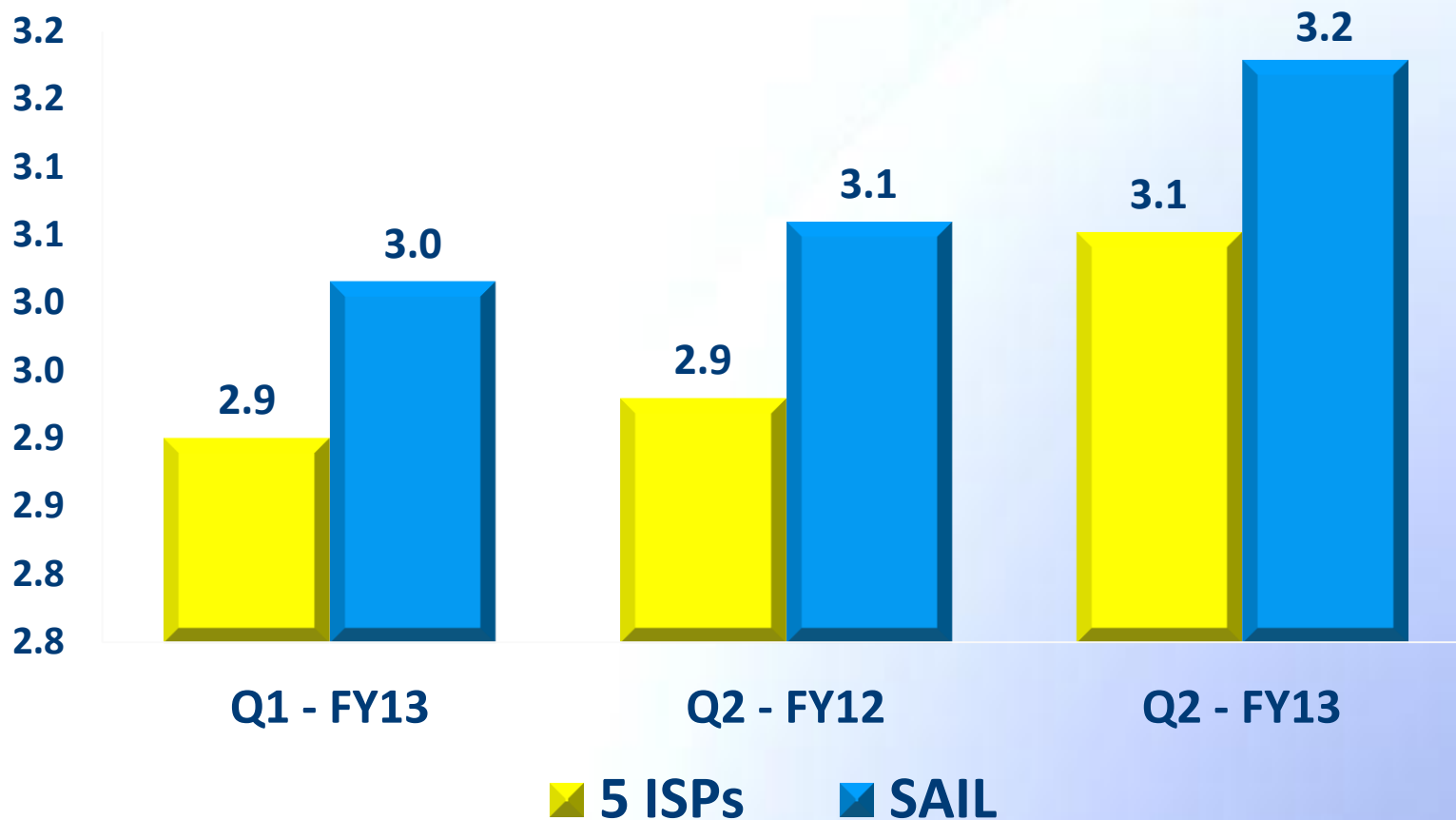
Production Performance

Saleable Steel from 5 ISPs (in Million Tons)



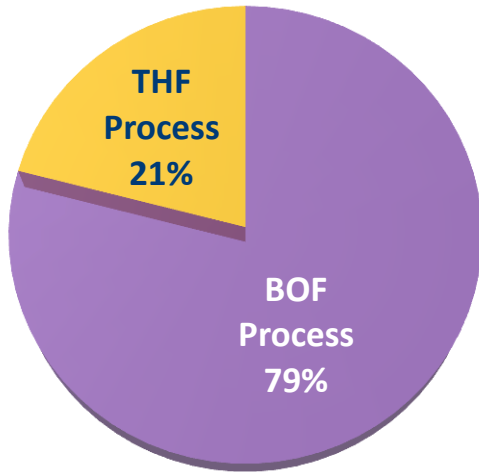
Production Performance

Quarter – wise Saleable Steel Production (in million tonnes)

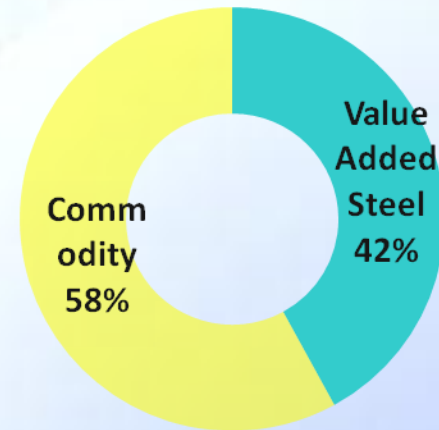


Production by Process & Sales Mix: H1 FY13

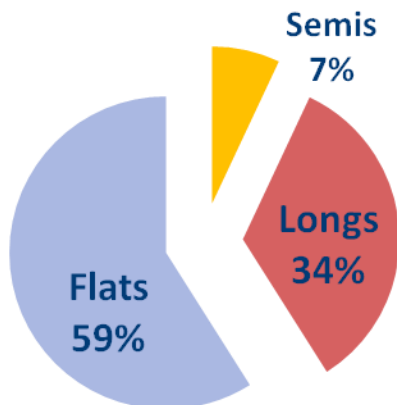
Crude Steel Production by process



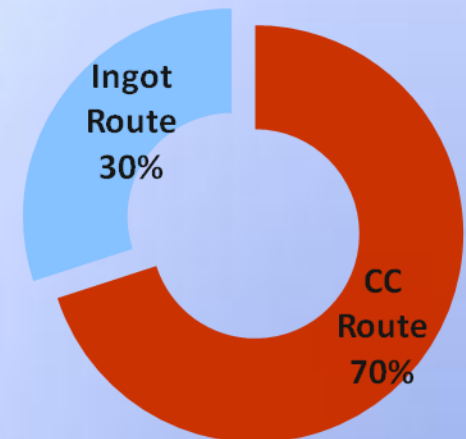
Production of Value Added Steel (5 ISPs)



Sales of Saleable Steel (5 ISPs)

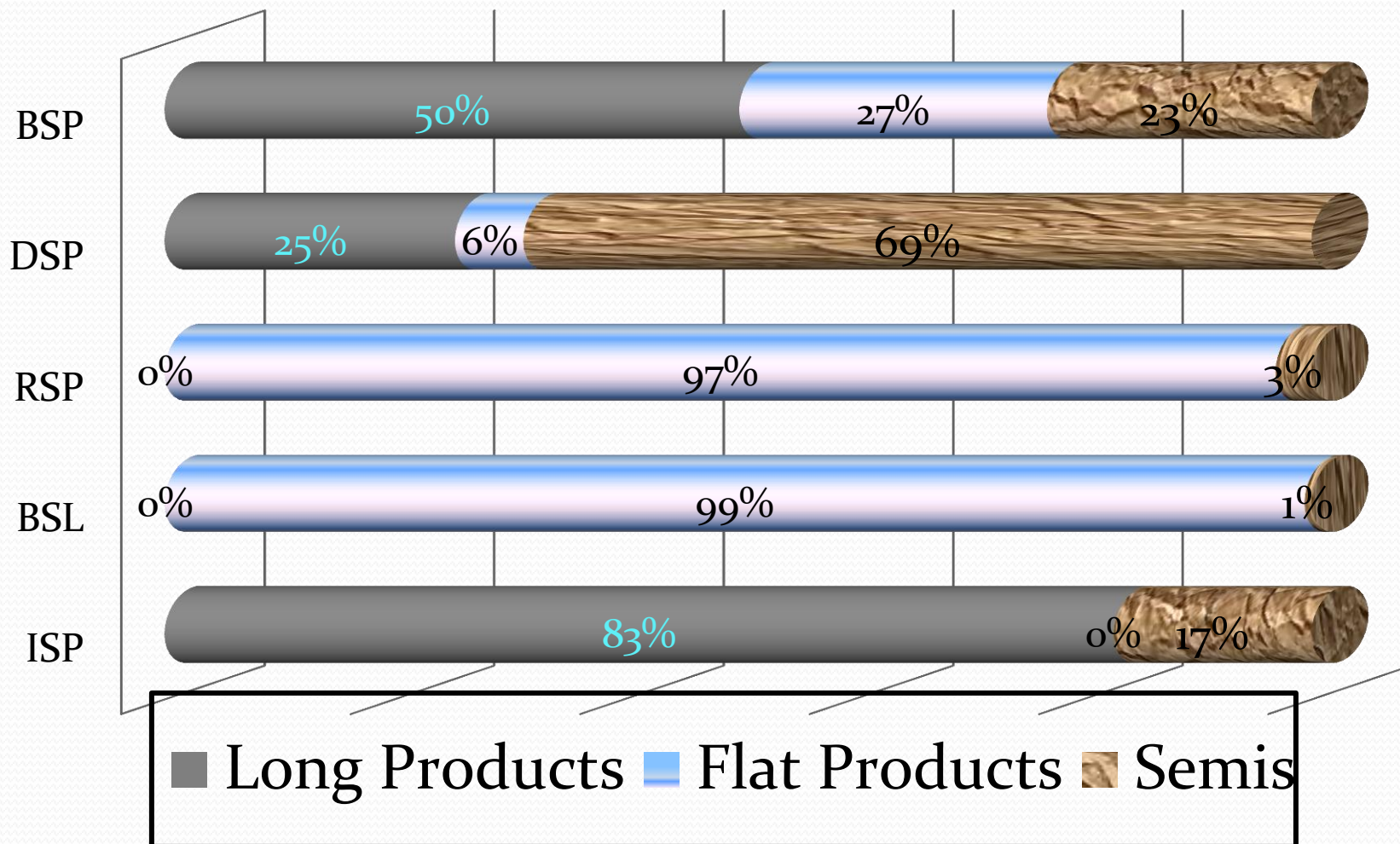


Production of Value Added Steel



Product Mix: Production Five Integrated Steel Plants: H1 FY13

In percentage

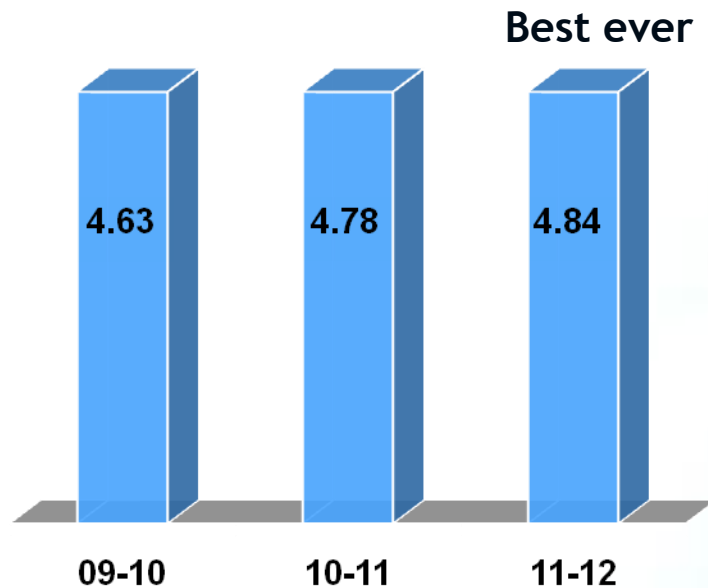


SAIL : Semis 20.5%; Flats 55.2 %; Longs 24.3%

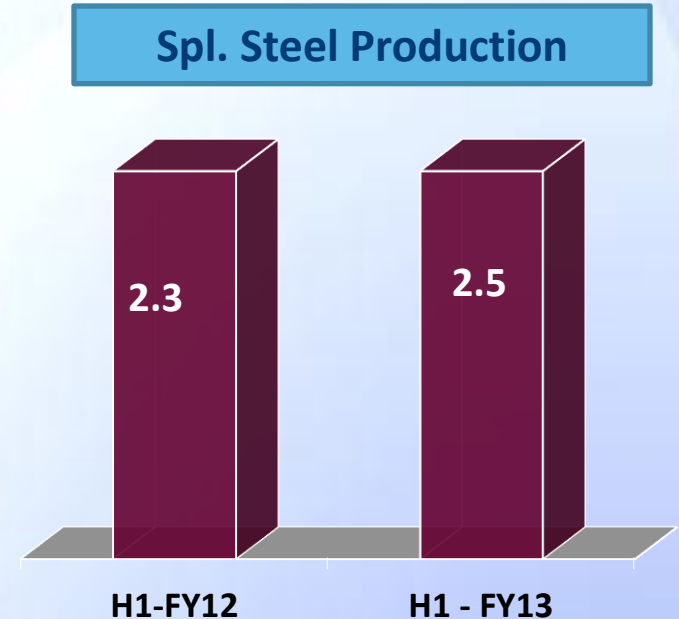
Special Steel Production

(in Million Tonnes)

Production of Value added materials



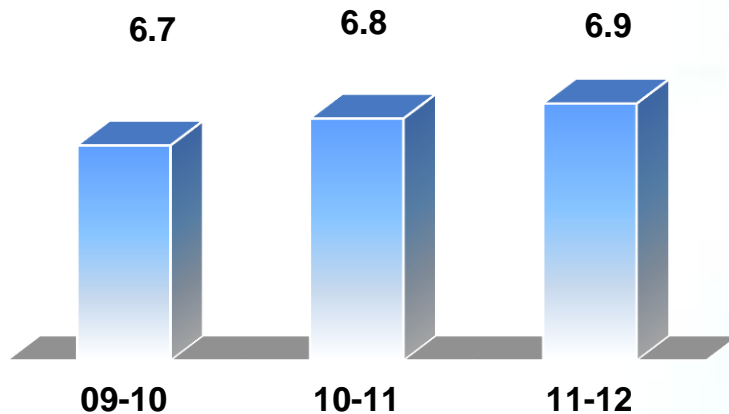
Annual Spl. Steel Production



8.6% increase in production of Value Added Products

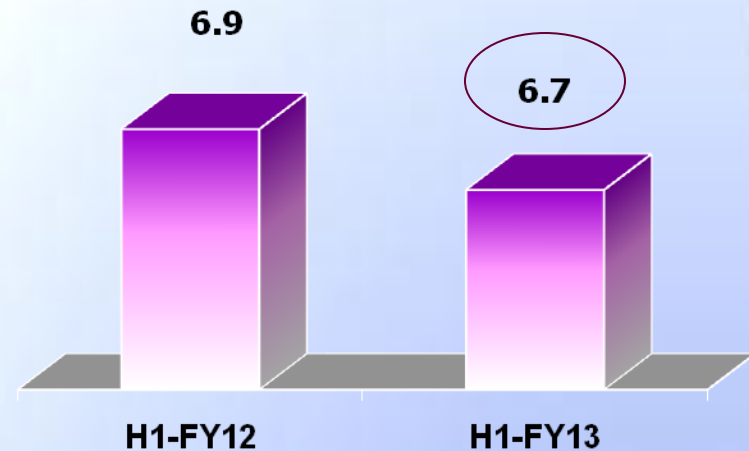
TE Parameters

Specific Energy Consumption (Gcal/TCS)



Annual Sp. Energy Consumption
Performance
(Apr. - Mar.)

Sp. Energy Consumption
Performance
(Apr. - Sep)

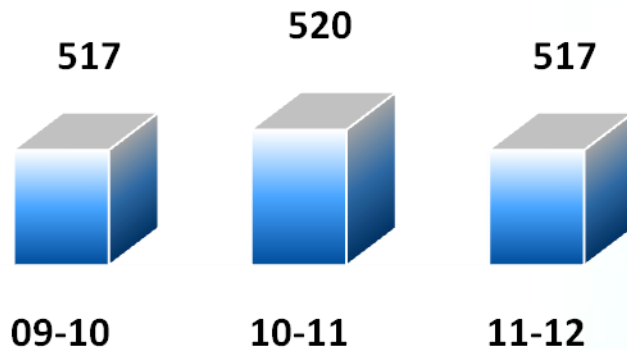


**2.9 % Decline in Energy
Consumption**

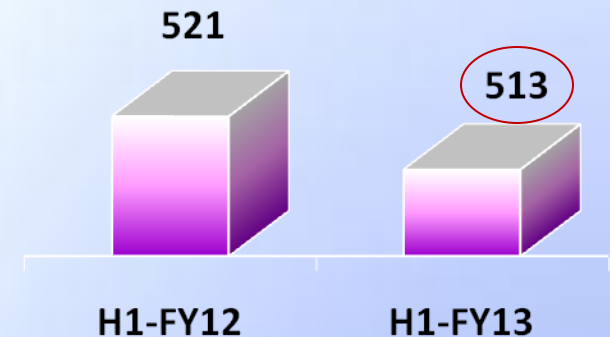
TE Parameters

Coke Rate (Kg/THM)

Annual Coke Rate Performance
(Apr. - Mar.)



Coke Rate Performance
(Apr. - Sep)

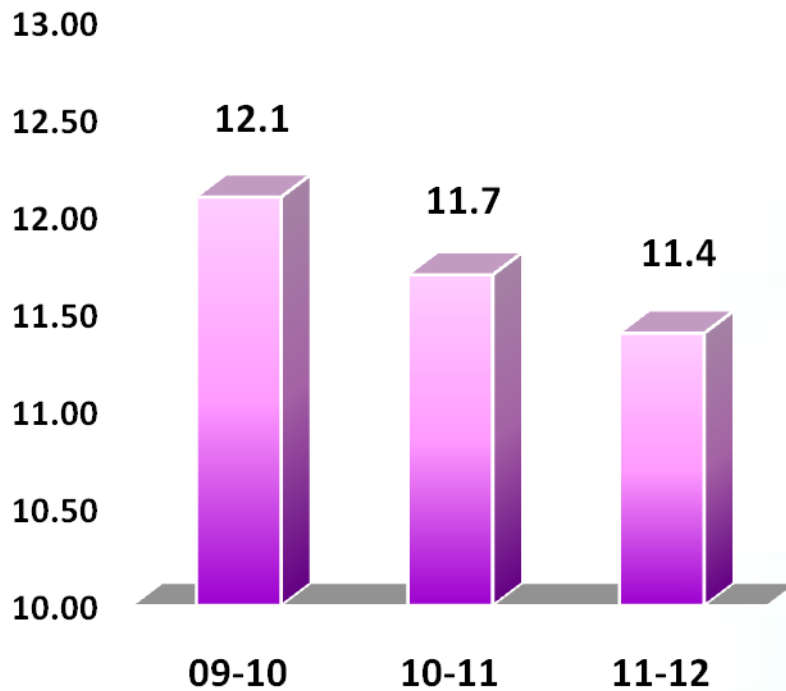


Continuous efforts to contain
coke rate

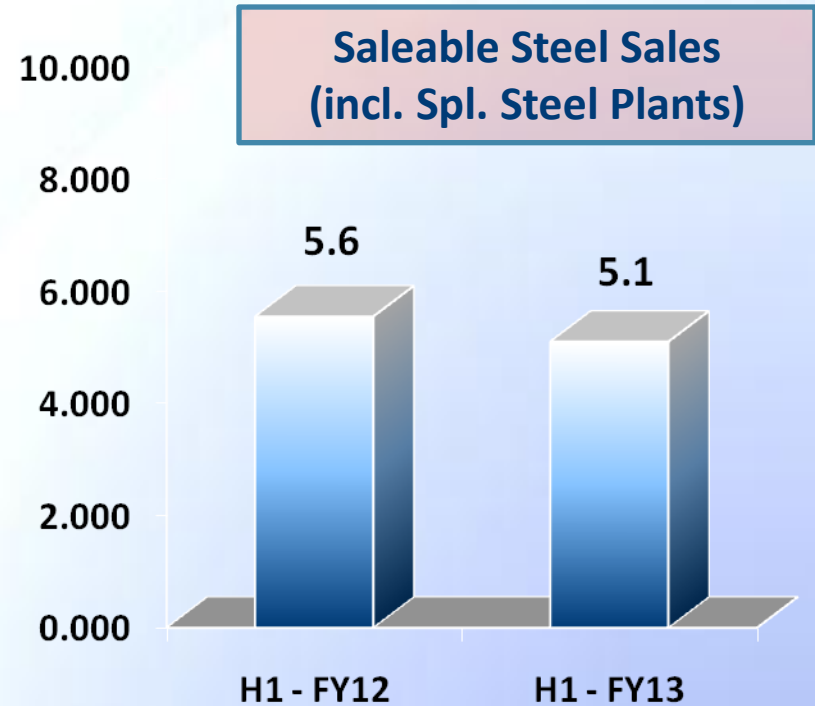
Coke Rate at 513 kg/T - lower by 2%
over CPLY

Sales Performance

Saleable Steel (in Million Tons)



**Annual Saleable Steel Sales
(incl. Spl. Steel Plants)**



**Saleable Steel Sales
(incl. Spl. Steel Plants)**

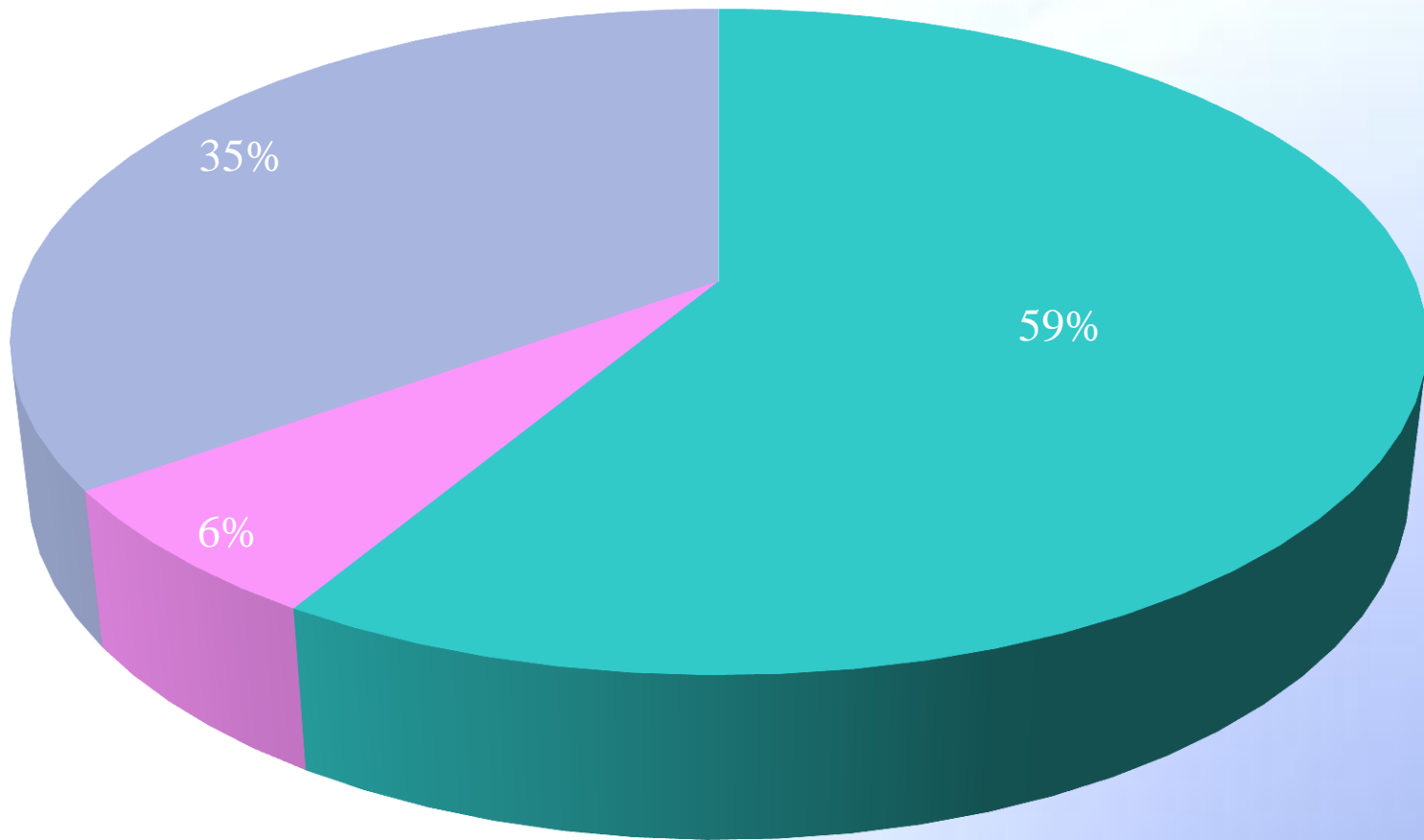
Sales through Dealer Network



Sales through Dealer Network during H1 FY13 : 2.32 lakh tonnes
New Rural Dealers Appointed: 439

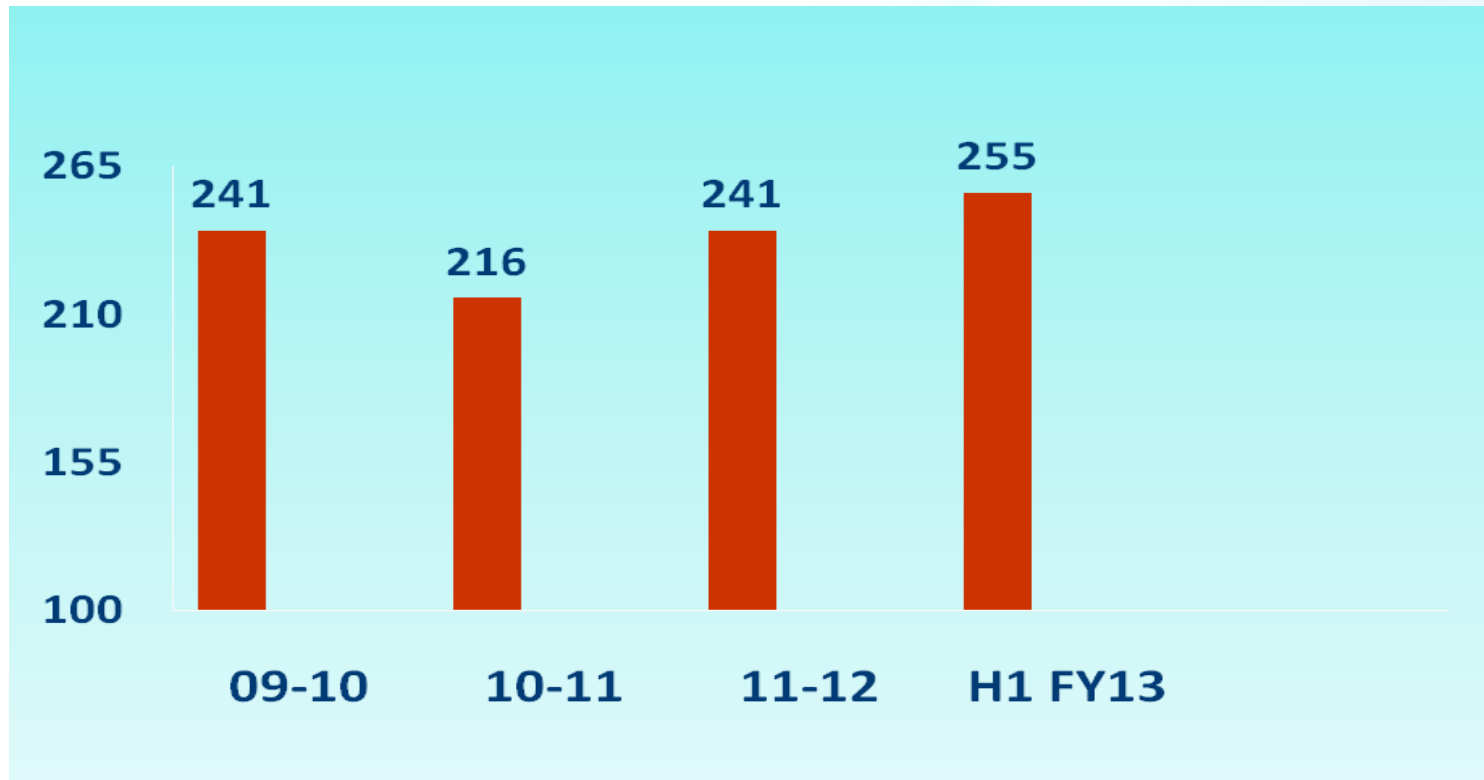
Captive Power Generation & drawal from the Grid

H1 FY13



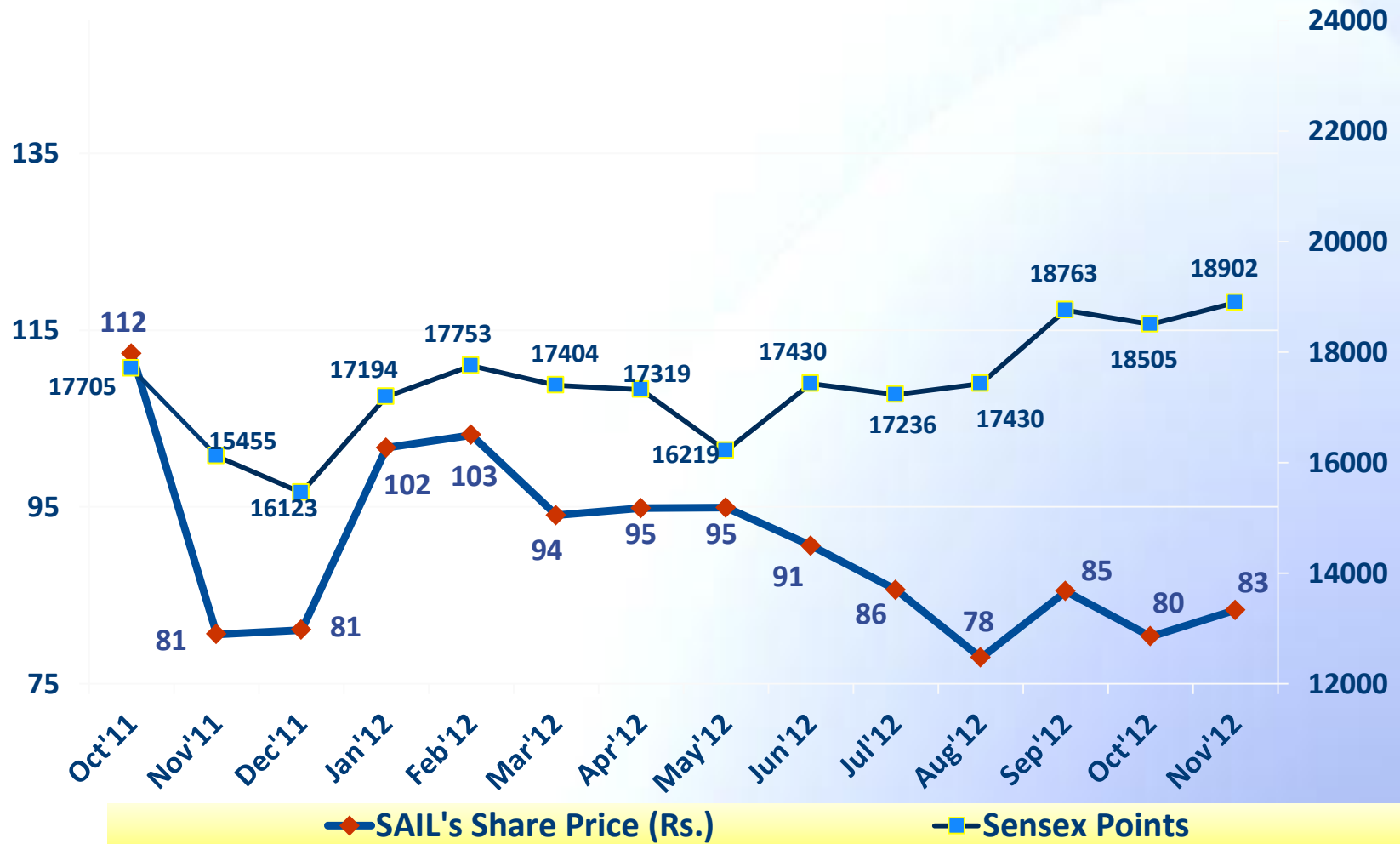
Labour Productivity

Tonnes Crude Steel /man - year



Current manpower : 1,03,509 numbers as on 01.09.2012

Performance of SAIL Share price vis-à-vis Sensex



Closing Share Price and Sensex as on the last day of the month except on 7th Nov, 2012

EXPANSION AND MODERNISATION PLAN

ISP - Continuous Casting Plant



BSP - 2nd Sinter Machine at SP-III



BSP – structural work at Universal Rail Mill



BSL - Bell Annealing Furnace



SAIL's Expansion Plan

Particulars	Million Tonne	
	Actual Production 2011- 12	After Ongoing Expansion
Crude Steel	13.4	21.4
Saleable Steel	12.4	20.2

Expansion Plan : Technological Shift

Technology	Current Status	After Expansion
BOF Steel Making	78%	100%
CC Route	70%	94%
Pelletisation Plant	No	Yes
Coke Dry Quenching	No	Yes
Top Pressure Recovery Turbine	No	Yes
Auxillary Fuel Injection in BF	Partial Coverage	Full Coverage
Desulphurisation of Hot Metal	Partly	100 %
Beam Blank Casting	No	Yes
Coupled Pickling & Tandem Mill	No	Yes
Beneficiation Plant	Partial	Full

Ongoing Projects

The Expected Outcome:

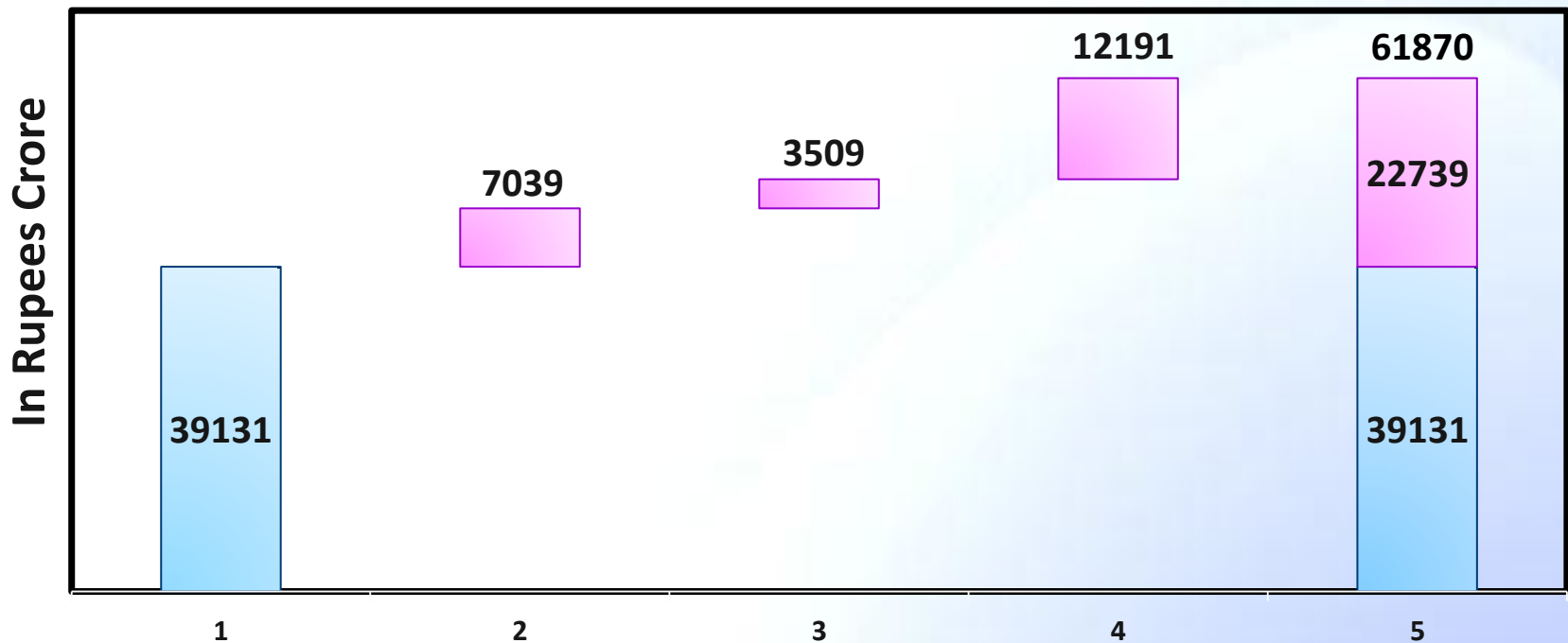
- Production through twin-hearth furnace (THF) route to be replaced by BOF-LD converter route.
- Production through Ingot – teeming route to be replaced with Continuous cast production route.
- Enhancement of Production Capacity by addition of 3 new 4060 m³ Blast Furnace.
- Increased Market Share.
- World class technology and products.
- Improved Product Mix / proportion of value added products to increase.
- Enhanced Pollution Control measures, with Environmental Conservation.

Ongoing Projects

The Products to be 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



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

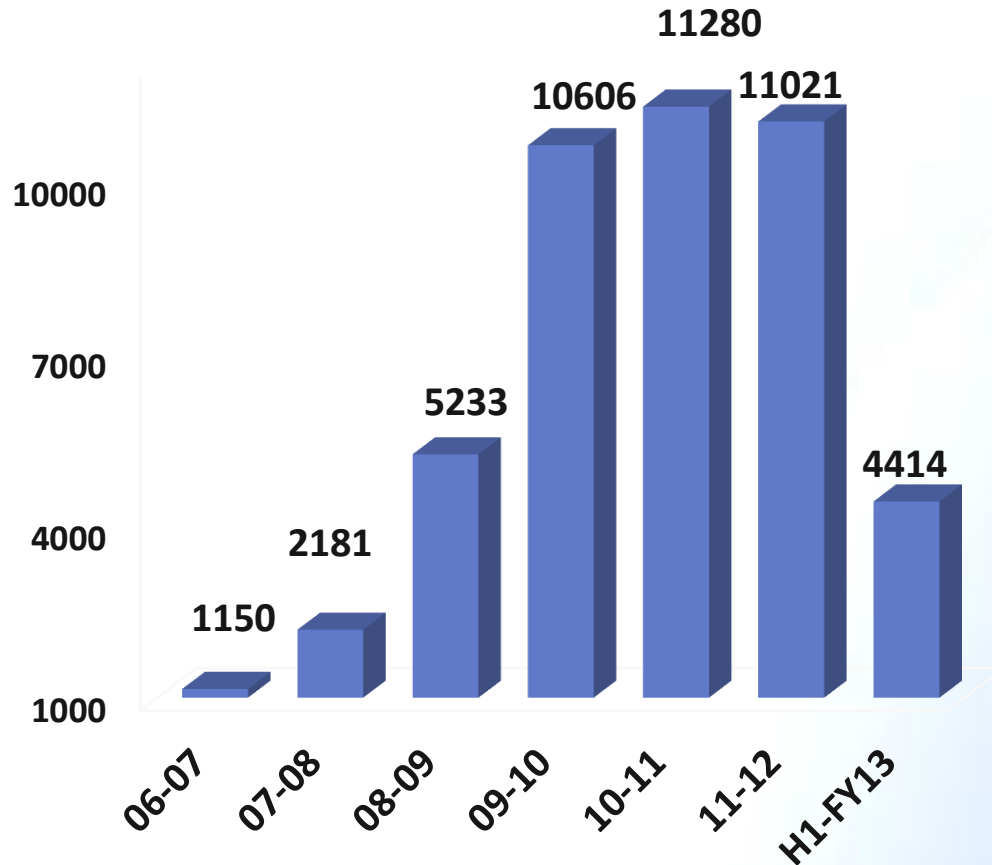
Ongoing Projects

- The ongoing expansion has been planned to achieve saleable steel production of 20.23 million tonne at a cost of Rs. 39,131 crore approximately
- In addition, following capex has also been planned for schemes ,as given here:

Value Addition / Product-Mix Improvement	Rs. 7,039 crore
Technological Upgradation / Modernization	Rs. 3,509 crore
Sustenance including de-bottlenecking, AMR & Environment	Rs. 12,191 crore
Augmenting Raw Material from existing mines & development of new mines	Rs. 10,264 crore

Capital Expenditure on Modernisation & Expansion

Unit : Rs Crore



■ Cumulative Capex till March 2012 is Rs. 45,885 crore.

■ Capex Plan 2012 -13 is Rs. 12000 crore, against which Rs. 4414 crore was spent till 30.09.2012.

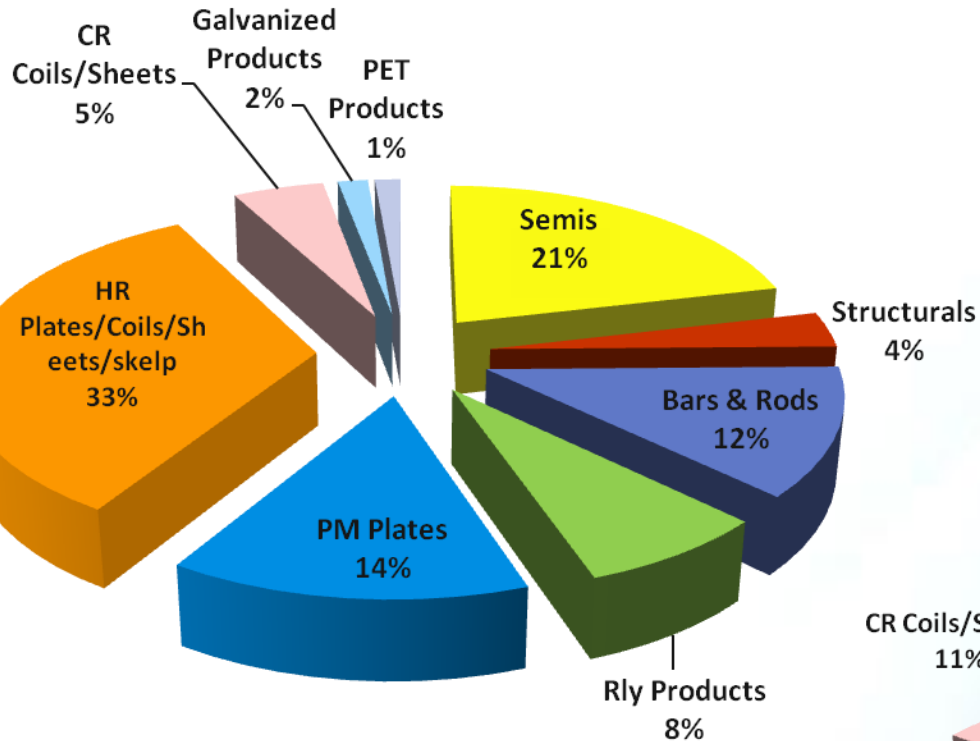
Ongoing Projects

- Orders for over Rs. 57,333 crore have already been placed for various Modernisation & Expansion Projects / Sustenance Schemes.
- Various options for raising fund to finance the Capex Plan, including ECB, ECA, Domestic / International Bonds and Term Loans from Banks are being continuously explored to minimize the debt cost.

Capacity increase after Expansion

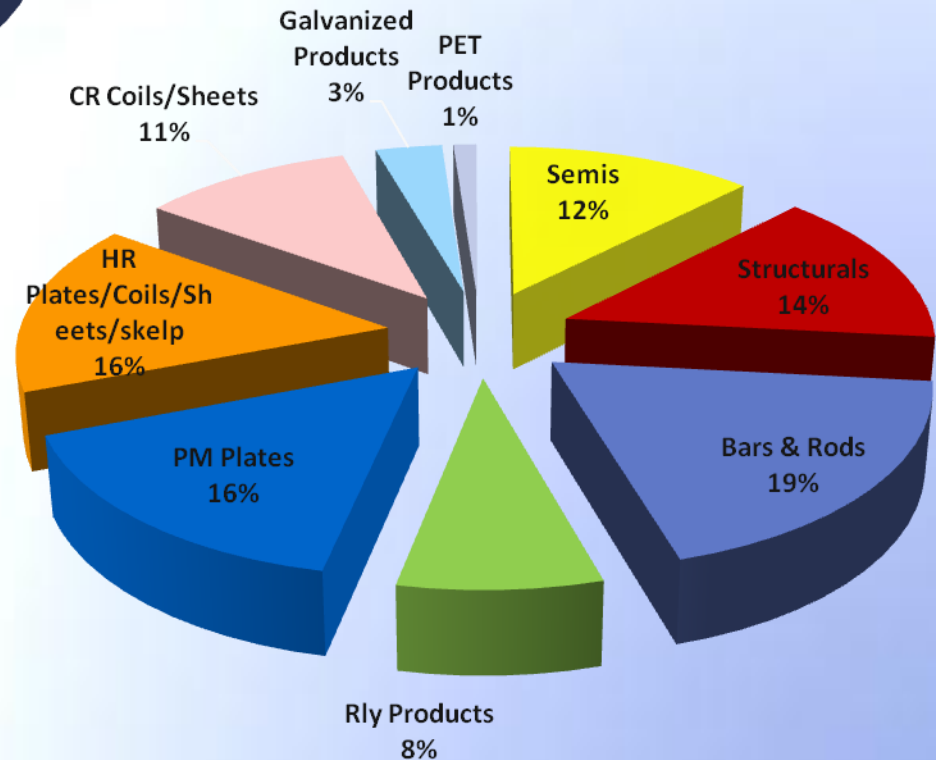
Plant	Hot Metal (MTPA)		Crude Steel (MTPA)		Saleable Steel (MTPA)	
	2011-12	After Expansion	2011-12	After Expansion	2011-12	After Expansion
BSP	5.1	7.5	4.9	7.0	4.3	6.6
DSP	2.1	2.5	1.9	2.2	1.8	2.1
RSP	2.3	4.5	2.2	4.2	2.1	4.0
BSL	4.0	5.8	3.6	4.6	3.3	4.2
ISP	0.5	2.9	0.3	2.5	0.3	2.4
VISL	0.1	0.3	0.1	0.23	0.1	0.2
ASP	-	-	0.2	0.48	0.2	0.4
SSP	-	-	0.1	0.2	0.3	0.3
TOTAL	14.1	23.5	13.4	21.4	12.4	20.2

Product Mix - Saleable Steel Production

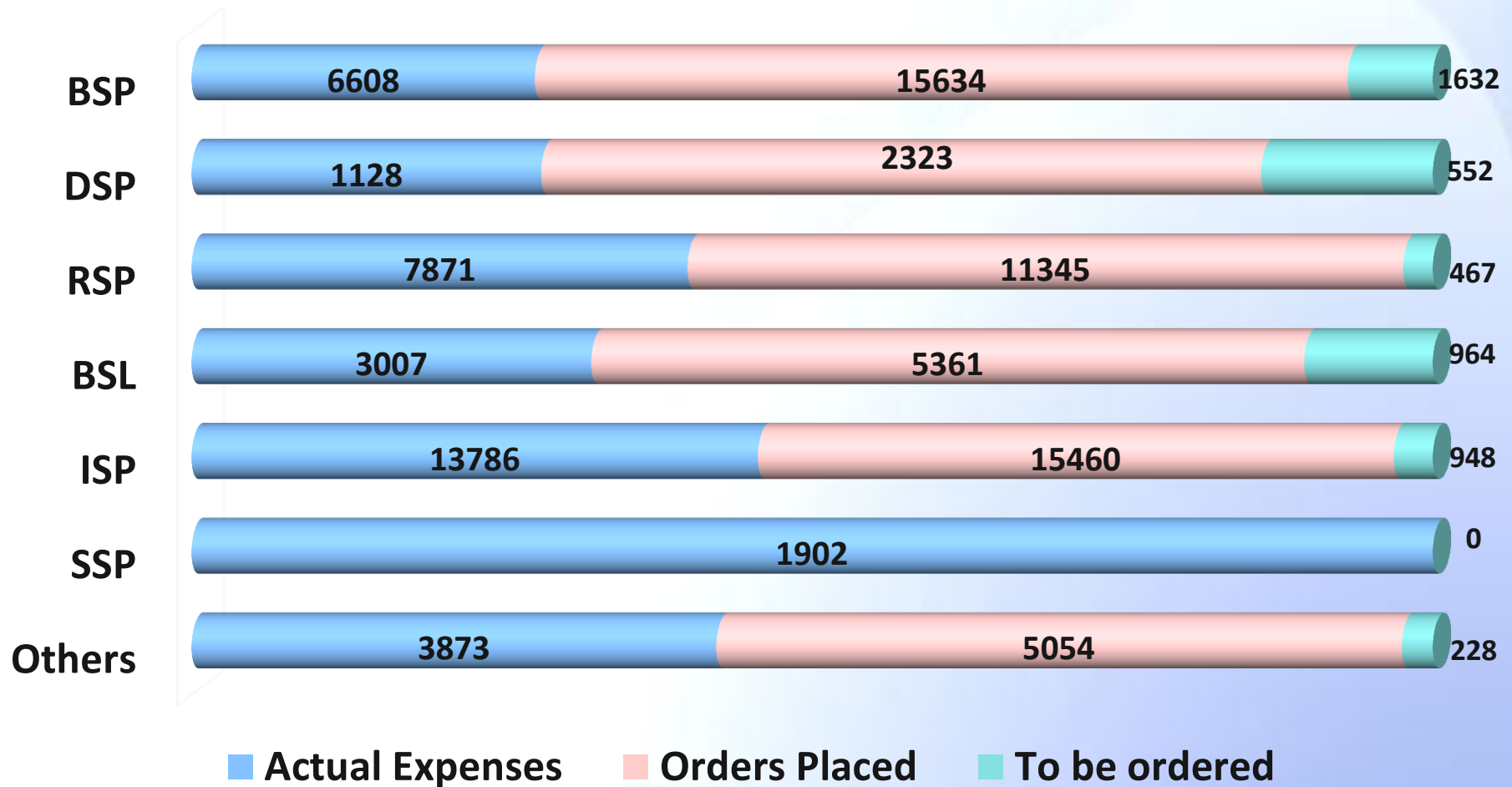


FY 12

**Post
Ongoing Expansion**



CAPEX Status for the ongoing Expansion & Modernisation as on 30.09.2012



Value of Orders placed include Actual Expenses Incurred

Salem Steel Plant

- **Facilities being added:**
 - Steel melting Shop – Electric Arc Furnace (55 T); AOD Converter (60 T); Ladle Furnace (60 T); Single Strand Slab Caster.
 - Roller Grinder for Hot Rolling Mill
 - Cold Rolling Mill Complex – including 20 – Hi Sendzimir Mill.
- **Production (MTPA) :**

Item	2011 -12 (Actual)	After Expansion
Crude Steel	0.096	0.18
Saleable Steel	0.298	0.34

IISCO Steel Plant

- **Expected Date of commissioning:** The commissioning of individual facilities has begun from May 2012. Major facilities are expected to be progressively commissioned by March 2013.
- **Facilities being added:**
 - New stream to produce 2.7 MTPA of Hot Metal, 2.5 MTPA Crude Steel.
 - Saleable Steel from both existing & new facilities: 2.39 MTPA.
 - New Coke Oven Battery, Sinter machines, Blast furnace 4060 m³
 - 3 nos. of 150 T BOF Converters.
 - 2X6 Strand Billet Casters & 1X4 Strand beam Blank / Bloom Caster.
 - Heavy Section Mill (0.6 MTPA); Wire Rod (0.5 MTPA); Bar Mill (0.75 MTPA)
- **Production (MTPA) :**

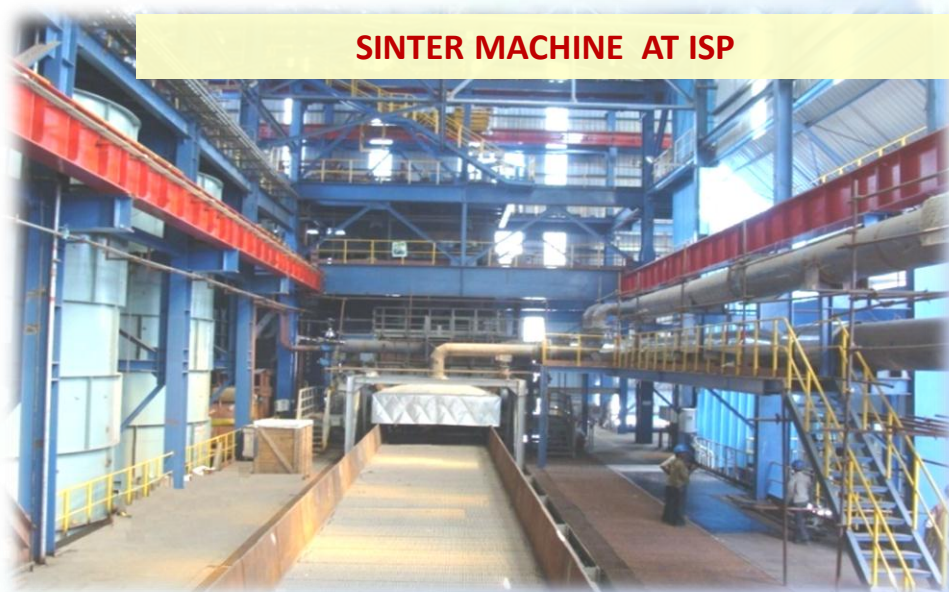
Item	2011 -12 (Actual)	After Expansion
Crude Steel	0.33	2.50
Saleable Steel	0.32	2.39

Progress of Expansion at IISCO Steel Plant

Coke Oven Battery-11



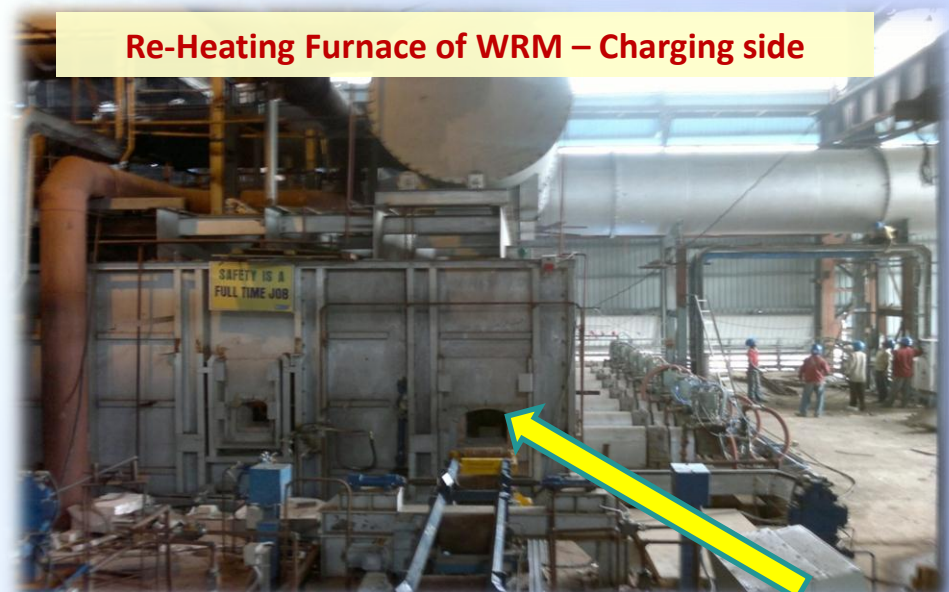
SINTER MACHINE AT ISP



BLAST FURNACE #5



Re-Heating Furnace of WRM – Charging side



Bokaro Steel Plant

- **Expected Date of commissioning:** December 2012 (New CRM).
- **Facilities being added:**
 - New Cold Rolling Mill (CRM) complex – 1.2 MTPA.
 - Re-building of 2 Coke Oven Batteries completed.
 - Capital repair of Blast Furnace #1 has commenced. Blast furnace #2 Up-gradation completed.
 - Up-gradation of Steel Melting Shop with necessary auxiliary facilities.
 - Augmentation of Raw material handling Facilities, Utilities and Services.
 - Up gradation of HSM with augmentation of Roughing facility & a new replacement Re-heating Furnace.
- **Production (MTPA) :**

Item	2011 -12 (Actual)	After Expansion
Crude Steel	3.65	4.61
Saleable Steel	3.33	4.18

Bhilai Steel Plant

- **Expected Date of commissioning:** September 2013.
- **Facilities being added:**
 - Phasing out of low yield & energy intensive units viz. Twin Hearth Furnace, Ingot casting, Soaking Pits and Blooming and Billet Mill.
 - New Coke Oven Battery, Sinter Plant, Blast Furnace 4060 m³.
 - New Steel Melting Shop with Secondary Refining Facilities.
 - Reduction of semis by enhancing finished steel production; broadening & value addition of product mix for higher flexibility & profitability.
 - Enhancing production of Rails to 1.5 MTPA (Class A Heavier Rails).
 - New Billet casters & Beam blank / bloom caster.
 - Universal Rail Mill; Bar & Rod Mill.
 - Augmentation of existing auxiliary & service facilities.
- **Production (MTPA) :**

Item	2011 -12 (Actual)	After Expansion
Crude Steel	4.90	7.0
Saleable Steel	4.29	6.56

BSP - Blast Furnace 8 - Stoves & Chimney



Rourkela Steel Plant

- **Expected Date of commissioning:** March 2013.
- **Facilities being added:**
 - New Coke Oven Battery, Sinter Plant, Blast Furnace 4060 m³.
 - New 3rd BOF (150 T), LF, RH-OB.
 - New 3rd Single Strand Slab Caster with balancing facilities for operation and increased production in SMS - II.
 - New 4.3 meter Wide Plate Mill (0.9 MTPA).
 - New Oxygen Plant on BOO basis.
 - Augmentation of Raw material handling Facilities, to double the capacity of OBBP.
- **Production (MTPA) :**

Item	2011 -12 (Actual)	After Expansion
Crude Steel	2.17	4.2
Saleable Steel	2.08	3.99

Progress of Expansion at Rourkela Steel Plant



SINTER PLANT - 3



Blast Furnace Stoves



Steel Melting Shop -II



Continuous Casting plant

Durgapur Steel Plant

- **Expected Date of commissioning:** March 2013.
- **Facilities being added:**
 - Rebuilding of Coke Oven Battery.
 - Bloom-cum-round Caster 1X4 (0.75 mtpa).
 - New Medium Structural Mill (1.0 mtpa).
 - New Oxygen Plant on BOO basis.
 - Up gradation of Raw material handling Facilities.
- **Production (MTPA) :**

Item	2011 -12 (Actual)	After Expansion
Crude Steel	1.91	2.20
Saleable Steel	1.84	2.12

Dividend

	Interim (%)	Final (%)	Total (%)	Dividend (Rs. Crore)	Dividend Tax (Rs. Crore)
2011 -12	12	8	20	826	134
2010 -11	12	12	24	992	162
2009 -10	16	17	33	1363	228
2008 –09	13	13	26	1074	181
2007- 08	19	18	37	1528	259
2006-07	16	15	31	1280	197

Raw Materials

Year	Hot Metal (mtpa)	Iron Ore Consumption (mtpa)	Linkages of Iron Ore
2011-12	14.1	22.0	Existing Mines
Post Expansion	23.46	39	<p>The capacity of existing mines at Kiriburu, Meghataburu, Bolani, Gua & Barsua are being ramped up to meet the requirement of Iron Ore for post ongoing phase of expansion.</p> <p>Two new Pellet Plants (One of 4 mtpa capacity at Gua & another of 1 mtpa capacity at Dalli) have been planned for better utilisation of Iron Ore Fines.</p> <p>In addition to the above, iron ore shall be mined from new mines at Rowghat, Chiria and Taldih.</p>





Raw Materials

Mine	Existing Capacity (mtpa)	Capacity after ongoing expansion (mtpa)	Remarks
Kiriburu	4.3	5.5	Capacity of Existing mines is being ramped up to meet the requirement of the ongoing expansion plan. The entire requirement of the increased capacity shall be met through captive mines.
Meghataburu	4.3	6.5	
Bolani	4.1	10.0	
Gua	2.4	10.0	
New Pellet Plants	New	5.0	The timeline for mines expansion is expected to be in line with Steel Plants expansion. New Pellet Plant shall use the existing reserve of fines at captive mines.
Barsua, Kalta, Taldih	3.3	6.5	Environment clearance received from MOEF
Rowghat	New	12.0	All statutory clearances have been received.
Chiria	1.5	7.45	Stage-I Forest Clearance has been obtained




Raw Materials

Year	Hot Metal (mtpa)	Coking Coal Requirement (mtpa)	Linkages of Coking Coal
2011-12	14.1	12.6	<ul style="list-style-type: none"> • Import Component – 70% • Over 90% of imported coal is sourced from Australia. • Indigenous: 30% • Domestic coal is largely sourced from Coal India Ltd. • SAIL has existing captive coking coal production of nearly 0.5 mtpa.
Post Expansion	23.46	21.0	<ul style="list-style-type: none"> • Long term / Quarterly/ monthly contracts to cover 95% of Import requirements. • Tasra captive coal block is being developed to produce 4 mtpa of ROM (2 mtpa washed coal) • Sitanala coal block shall also be developed for production of 0.30 mtpa of ROM (0.20 mtpa of washed coal) • New alliances / linkages / acquisitions are being explored




Major Joint Ventures – strategic initiatives

FOCUS AREA	ALLIANCE PARTNER	REMARKS
TECHNOLOGY		<ul style="list-style-type: none"> 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	  	<ul style="list-style-type: none"> International Coal Ventures Pvt. Ltd., a SPV of 5 leading PSUs incorporated (SAIL, RINL, CIL, NTPC & NMDC) for acquisition of coal assets in overseas territories. M/s SAIL & MOIL Ferro Alloys (Pvt.) Ltd. formed with MOIL for production of Ferro-alloys at Bhilai. M/s S&T Mining Company Pvt. Ltd. formed with Tata Steel for developing coking coal mines in India.

Major Joint Ventures – strategic initiatives

FOCUS AREA	ALLIANCE PARTNER	REMARKS
ENERGY	 	<ul style="list-style-type: none"> ▪ JV with NTPC & DVC for operating & managing CPPs of Durgapur, Rourkela & Bhilai.
CEMENT		<ul style="list-style-type: none"> ▪ Bhilai Jaypee Cement Ltd. -Slag based cement plant of 2.2 million tonne per annum capacity with grinding unit at Bhilai & clinkering unit at Satna. ▪ Bokaro Jaypee Cement Ltd.- Slag based cement plant of 2.1 million tonne per annum capacity at Bokaro.

Major Joint Ventures – strategic initiatives

FOCUS AREA	ALLIANCE PARTNER	OBJECTIVE
SHIPPING		<ul style="list-style-type: none"> ▪ Joint Venture Company 'SAIL SCI Shipping Pvt. Ltd.' to cater to SAIL requirements of shipping imports of coal. <ul style="list-style-type: none"> • acquisition of new capsized vessel is in process.
WAGON MANUFACTURE		<ul style="list-style-type: none"> ▪ 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		<ul style="list-style-type: none"> ▪ JV with Tata Steel to promote e-commerce activities in steel and related areas

MoUs signed

- **MoUs have been signed with following leading steel makers to collaborate in the strategic areas of mutual interest:**
 - **Kobe Steel Limited**
 - **POSCO**
 - **Danieli & C**
- **MOU signed with Ministry of Railways, NMDC & GoC for 235 Km long Dalli-Rajhara-Rowghat Jagdalpur Railway line to transport Iron-ore from Rowghat mines to Bhilai Steel Plant.**
- **MOU has been signed with the Chhattisgarh State Government for development of an Iron ore mine at Eklama Iron Ore Deposit through a JV to be formed between Chattisgarh Mineral Development Corporation Limited (CMDCL) & SAIL.**
 - **Eklama Iron Ore Deposit have a reserve of around 100 Million Tonnes.**

Awards and Accolades

- Raw Materials Division bagged “No Fatal Accident in Collieries/Mines” Award, from Joint Committee on Safety, Health & Environment (JCSSI).
- SCOPE Meritorious Award – 2010-11 for “Corporate Governance” has been conferred upon SAIL. Chairman SAIL received the award from Her Excellency Smt. Pratibha Patil, President of India, on 13th April’2012 at Vigyan Bhawan in New Delhi.
- SAIL honoured by President with the Rashtriya Khel Protasahan Puraskar for promoting ‘Community Sports and Identification and Nurturing of Budding Young Talent’.
- Alloy Steels Plant received Ispat Suraksha Puraskar, JCSSI for no fatalities for two consecutive years.
- SAIL has been chosen as a ‘POWERBRAND 2012’ by the Indian Consumer.



CSR Highlights

- Mid day Meal for more than 23000 children being supported through Akshyapatra at Bhilai.
- The program is being replicated at RSP with an aim to feed 30,000 children daily around Rourkela.
- 7 exclusive schools & 23 health centres for underprivileged people are being operated at ISPs.
- More than 1000 new water resources have been created.
- More than 500 solar street lights have been installed.
- Flood relief materials provided for Odisha & Uttar Pradesh.
- Support provided to Sikkim earthquake victims.
- More than 2400 health camps organised throughout country benefitting more than 1.8 lakh people, and 12 MMUs were provided

Abbreviations used

•	ASP	Alloy Steels Plant
•	BF	Blast Furnace
•	BOF	Basic Oxygen Furnace
•	BPL	Below Poverty Line
•	BSL	Bokaro Steel Limited
•	BSP	Bhilai Steel Plant
•	CS	Crude Steel
•	CPLY	Corresponding Period Last Year
•	DSP	Durgapur Steel Plant
•	EBIDTA	Earnings Before Interest Depreciation ,Taxes & Ammortization.
•	G.Cal/tcs	Giga Calories per tonne of Crude Steel
•	Gol	Government of India
•	IISI	International Iron & Steel Institute
•	ISP	IISCO Steel Plant

•	JPC	Joint Plant Committee
•	Kg/thm	Kilo Gram Per Tonne of Hot Metal
•	MEL	Maharashtra Elektros melt Limited
•	MT	Million Tonne
•	Mtpa	Million Tonne Per Annum
•	PAT	Profit After Tax
•	PBT	Profit Before Tax
•	RDCIS	Research & Development Centre for Iron & Steel
•	RINL	Rashtriya Ispat Nigam Limited
•	RSP	Rourkela Steel Plant
•	SSP	Salem Steel Plant
•	VISL	Visvesvaraya Iron & Steel Plant
•	TFS	Total finished Steel

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