DEMAND/ AVAILABILITY SCENARIO FOR STAINLESS STEEL IN INDIA

INDUSTRIAL DEVELOPMENT SERVICES PVT. LTD.





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 $Partners\ for\ Business\ Excellence$



This presentation is based on in-house research carried out by the IDS team.

BRIEF HISTORY OF SS IN INDIA

Production of SS commenced in India with the setting up of Alloy Steel Plant, Durgapur in mid- 60s.

Domestic capacities increased with the setting up of units like Bihar Alloy Steels (Patratu), Shri Ishar Alloy Steels (Indore), Mukand (Kalwe), Jindal Stainless (Hissar), Ahmedabad Advance Mills (Ahmedabad), etc. during the early to mid 70s.

Salem Stainless Steel Plant (Salem) was commissioned during early 1980's. Panchmahal Steels also commenced production of SS during this period.

1980s witnessed mushroom growth of induction furnace units – many of these exclusively for the manufacture of stainless steel. Such units were spread over Delhi, Haryana, Indore and Ahmedabad.



BRIEF HISTORY OF SS IN INDIA (CONTD...)

Shah Alloys & Viraj Profiles took up the manufacture of SS in early 1990s.

Domestic production of stainless steel increased from a modest 25 Th.T in 1975-76 to almost 2.8 Mn.T in 2014-15, at an ACGR of 12.5% per annum.

Kitchenware accounted for over 90 percent of the aggregate consumption of SS in the country till the year 2000. Its share has gradually reduced to a current level of around 65 percent.

India currently accounts for a share of around 7 percent of world consumption of stainless steel.



MAJOR CATEGORIES OF PRODUCTS IN STAINLESS STEELS

Flat Products

- Slabs
- HR Coils/Sheets
- CR Coils/Sheets

Long Products

- Primary
 - Blooms/Billets
 - Rolled Bars
 - Wire Rods
 - Structurals
- Down Stream
 - Bright Bars
 - Drawn Wires
 - Flanges
 - Fasteners



MAJOR PRIMARY MANUFACTURES OF SS FLAT PRODUCTS

Northern Region

• Jindal Stainless Steel Ltd., Hisar (Haryana)

Western Region

• Shah Alloys Ltd., Kalol (Gujarat)

Eastern Region

• Jindal Stainless Steel Ltd., Jajpur (Odisha)

Southern Region

 Salem Steel Plant, SAIL, Salem (Tamil Nadu)



MAJOR PRIMARY MANUFACTURES CAPACITY OF SS FLAT PRODUCTS

Name of Company	Capacity (Th TPA)			
Northern Region				
Jindal Stainless Steel Ltd, Hisar	800			
Western Region				
Shah Alloys Ltd, Kalol	300			
Eastern Region				
Jindal Stainless Steel Ltd, Jajpur	1000			
Southern Region				
Salem Steel Plant, SAIL, Salem	180			



COMPANY-WISE PRODUCT MIX FOR SS FLAT PRODUCTS

Company	HR Coil	HR Sheet / HR Plate	CR Coil	CR Sheet
Northern Region				
Jindal Stainless Steel Ltd., Hissar	*	*	*	*
Western Region				
Shah Alloys Ltd., Kalol	*	*	*	*
Eastern Region		•		
Jindal Stainless Steel Ltd., Jajpur	*	*	*	*
Southern Region				
Salem Steel Plant., Salem	*	*	*	*



MAJOR PRIMARY MANUFACTURERS OF SS LONG PRODUCTS

Northern Region

- Ambica Steels Ltd., Sahibabad(Uttar Pradesh)
- Rimjhim Ispat Ltd. ,Kanpur(Uttar Pradesh)
- Rathi Udyog, Ghaziabad(Uttar Pradesh)
- Rathi Super Steel ,Ghaziabad(Uttar Pradesh)
- Chandan Steel Ltd., Umergaon (Maharashtra)
- Facor Steels Ltd., Nagpur(Maharashtra)
- Girodia Special Steels, Khopoli (Maharashtra)
- India Steel Works, Khopoli (Maharashtra)
- Laxcon Steel Ltd., Ahmedabad(Gujarat)
- Shah Alloys Ltd., Kalol(Gujarat)
- Mittal Corp, Pithampur(Madhya Pradesh)
- Mukand Ltd., Mumbai(Maharashtra)
- Panchmahal Steels Ltd., Kalol (Gujarat)
- Rajputana Stainless Steel Ltd., Jodhpur(Rajasthan)
- Ratnesh Metal, Ahmedabad(Gujarat)
- Shree Jay Jagdamba SS Ltd., Thane(Maharashtra)
- Sunflag Iron & Steel Ltd., Nagpur (Maharashtra)
- Viraj Profiles Ltd., Boisar (Maharashtra)

Eastern Region

Western

Region

• Arcvac, Howrah(West Bengal)



COMPANY-WISE AGGREGATE INSTALLED CAPACITY FOR SS LONG PRODUCTS

Name of Company	Capacity (Th TPA)			
Northern Region				
Ambica Steels Ltd., Sahibabad(Uttar Pradesh)	80			
Rimjhim Ispat Ltd. ,Kanpur(Uttar Pradesh)	120			
Rathi Udyog , Ghaziabad(Uttar Pradesh)	30			
Rathi Super Steel ,Ghaziabad(Uttar Pradesh)	30			
Western Region				
Chandan Steel Ltd., Umergaon (Maharashtra)	60			
Facor Steels Ltd., Nagpur(Maharashtra)	20			
Girodia Special Steels, Khopoli (Maharashtra)	20			
India Steel Works, Khopoli (Maharashtra)	80			
Laxcon Steel Ltd., Ahmedabad(Gujarat)	60			
Shah Alloys Ltd., Kalol(Gujarat)	100			
Mittal Corp, Pithampur(Madhya Pradesh)	120			
Mukand Ltd., Mumbai(Maharashtra)	100			
Panchmahal Steels Ltd., Kalol (Gujarat)	150			
Rajputana Stainless Steel Ltd., Jodhpur(Rajasthan)	40			
Ratnesh Metal, Ahmedabad(Gujarat)	20			
Shree Jay Jagdamba SS Ltd., Thane(Maharashtra)	20			
Sunflag Iron & Steel Ltd., Nagpur (Maharashtra)	60			
Viraj Profiles Ltd., Boisar (Maharashtra)	528			
Eastern Region				
Arcvac, Howrah(West Bengal)	20			



COMPANY-WISE PRODUCT MIX FOR SS LONG PRODUCTS (PRIMARY PRODUCTS)

Name of Company	Primary Products			
-	Blooms / Billets/ Rolled Bars	Wire Rods	Structurals	
Northern Region				
Ambica Steels Ltd.	*		*	
Rimjhim Ispat Ltd.	*	*		
Rathi Udyog	*	*		
Rathi Super Steel	*	*		
Western Region				
Chandan Steel Ltd.	*		*	
Facor Steels Ltd.	*			
Girodia Special Steels	*			
India Steel Works	*	*		
Laxcon Steel Ltd.	*		*	
Shah Alloys Ltd.	*	*		
Mittal Corp	*	*		
Mukand Ltd.	*	*		
Panchmahal Steels Ltd.	*	*		
Rajputana Stainless Steel Ltd.	*	*		
Ratnesh Metal	*		*	
Shree Jay Jagdamba SS Ltd.	*			
Sunflag Iron & Steel Ltd.	*	*		
Viraj Profiles Ltd.	*	*	*	
Eastern Region				
Arcvac	*			



COMPANY-WISE PRODUCT MIX FOR SS LONG PRODUCTS (DOWNSTREAM PRODUCTS)

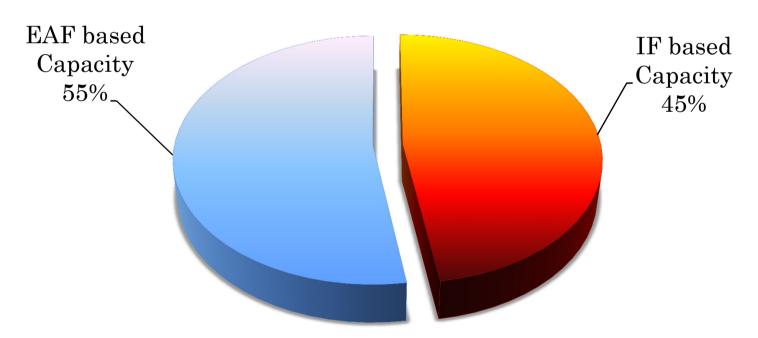
Name of Company		Downstream Products				
_ ,	Bright Bars	Wires	Flanges	Fasteners		
Northern Region						
Ambica Steels Ltd.	*					
Rimjhim Ispat Ltd.	*	*				
Rathi Udyog						
Rathi Super Steel						
Western Region						
Chandan Steel Ltd.	*	*	*			
Facor Steels Ltd.						
Girodia Special Steels						
India Steel Works	*	*				
Laxcon Steel Ltd.	*					
Shah Alloys Ltd.	*	*				
Mittal Corp						
Mukand Ltd.		*				
Panchmahal Steels Ltd.		*				
Rajputana Stainless Steel Ltd.						
Ratnesh Metal						
Shree Jay Jagdamba SS Ltd.	*					
Sunflag Iron & Steel Ltd.						
Viraj Profiles Ltd.	*	*	*	*		
Eastern Region						
Arcvac						



AGGREGATE CAPACITY

Current Hot Metal Capacity -6.0 Mn.T/Annum

Break-up of Hot Metal Capacity based on Type of Furnace



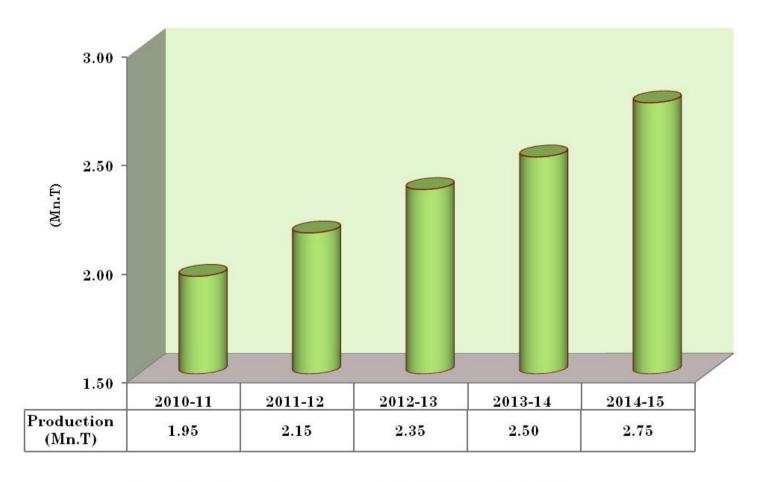


LEADING PLAYERS

Segment	Market Share
a) SS Flat Products	
Jindal Stainless Steel Ltd.	47 %
b) SS Long Products	
Viraj Profiles Ltd.	38 %



DOMESTIC PRODUCTION OF SS



Production increased @ACGR of 8.9%



APPARENT DOMESTIC CONSUMPTION OF SS

(Mn.T.)

Year	Domestic Production	Import	Export	Apparent Consumption
2010-11	1.95	0.07	0.03	1.99
2011-12	2.15	0.08	0.04	2.19
2012-13	2.35	0.09	0.04	2.40
2013-14	2.50	0.14	0.05	2.59
2014-15	2.75	0.20	0.05	2.90
				(ACGR 9.7%)



MAJOR EXPORT DESTINATIONS: 2014-15

Exports are mainly of manufactured products like Drawn Wire, Flanges and Fasteners to the following countries:

- AUSTRALIA
- BELGIUM
- BRAZIL
- CANADA
- FRANCE
- **❖** GERMANY
- **❖** ITALY

- **❖** KOREA RP
- MEXICO
- **❖** NETHERLAND
- * RUSSIA
- **TURKEY**
- ❖ U S A

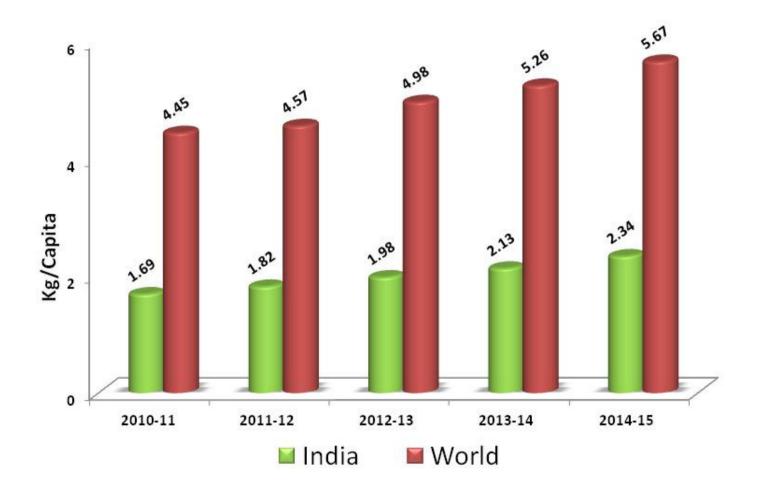


INDIA'S SHARE IN GLOBAL CONSUMPTION

			(Mn.T)
Year	India	World	India's Share (%)
2010-11	2.0	30.7	6.5
2011-12	2.2	32.0	6.9
2012-13	2.4	35.4	6.8
2013-14	2.6	38.1	6.3
2014-15	2.9	41.7	7.0

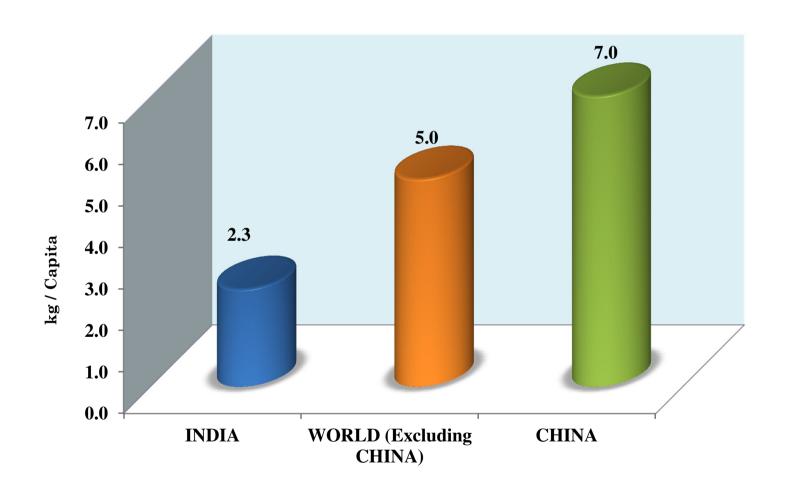


PER CAPITA CONSUMPTION: 2010-11 TO 2014-15





PER CAPITA CONSUMPTION OF SS: 2014-15





CURRENT PATTERN OF DOMESTIC CONSUMPTION: 2014-15

a) Aggregate Consumption	2.9 Mn. T
b) Break up by Categories	
Share of Flat Products	72%
Share of Long Products	28%
c) Break up by Grades	
Grade/Series	
200	57%
300	28%
400	15%
Others	Neg.



SERIES WISE APPLICATIONS OF STAINLESS STEEL

200

Utensils, cutlery and cookware

Dishwashers and washing machines

Furniture, hardware, staircase and sinks

Automotive components

300

Storage vessels and pipes for corrosive liquids

Mining, chemical, food and beverage equipment

Cryogenic and pharmaceutical equipment

Furnace, kiln and catalytic converter components

Pressure vessels and piping

400

Petrochemical equipments

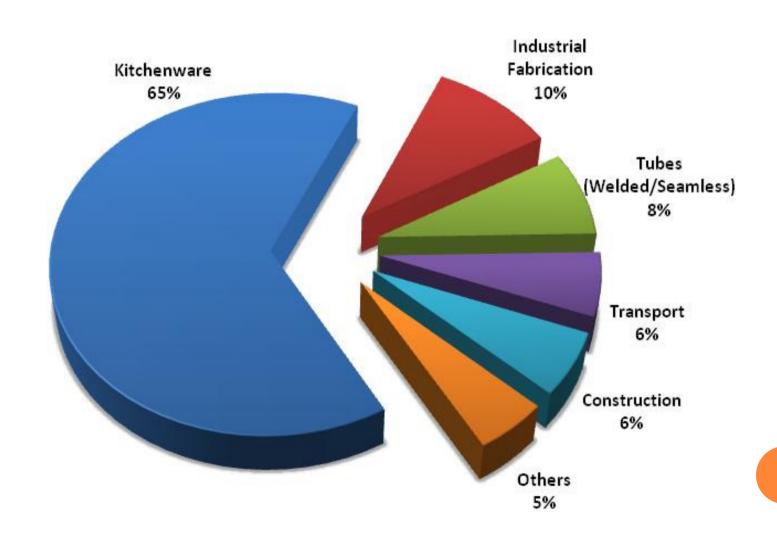
Automotive exhaust systems

Heat exchangers and furnaces

Food processing equipment and appliances



END-USE WISE PATTERN OF DOMESTIC CONSUMPTION: 2014-15



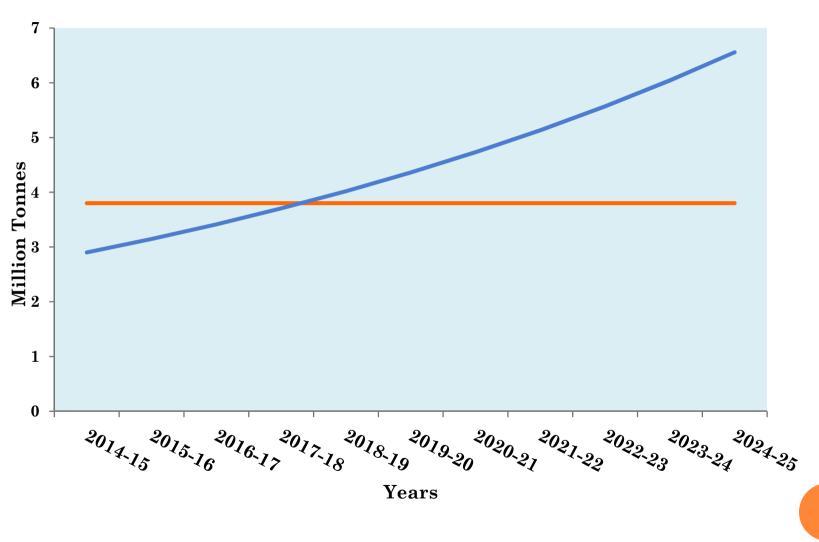


DEMAND PROJECTIONS

ACGR (2010-11 to 2014-15)	9.7 %
Projected Growth Rate 2014-15 to 2024-25	8.5 %
Projected Consumption 2024-25	6.5 Mn.T



ROLLING CAPACITY VS DEMAND ANALYSIS



—Capacity

—Demand



EMERGING DEMAND AVAILABILITY SCENARIO

Existing capacities appear to be adequate to meet the projected requirements of SS in the country till the year 2017-18.

The domestic availability is likely to fall short of the emerging demand from the year 2018-19 onwards.

Additional domestic capacities therefore need to be created in the post 2017-18 period.



THANK YOU!!