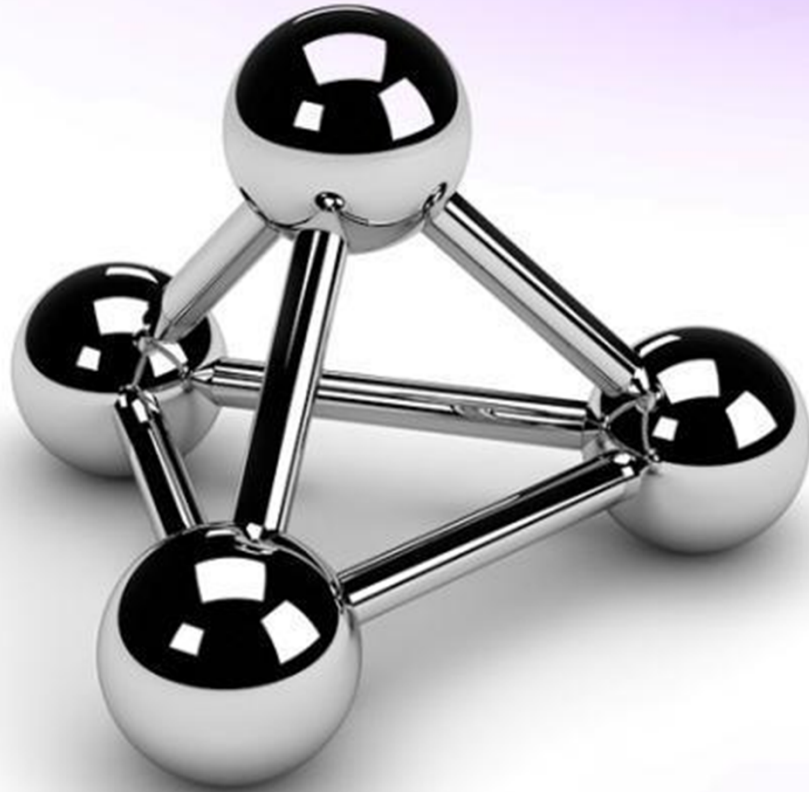


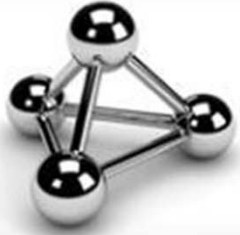
CRU – 13th World Stainless Steel Conference :17-19 Nov 2010, Paris



India – A driver of Stainless Steel Growth

Presented by N.C. Mathur
Advisor – JSL Stainless Ltd.

President : ISSDA (Indian Stainless Steel Development Association)



Contents

Global SS
Scenario

Indian SS
Scenario

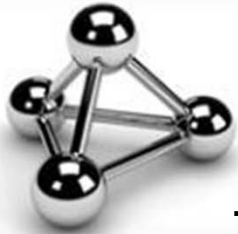
JSL Profile

Watch for

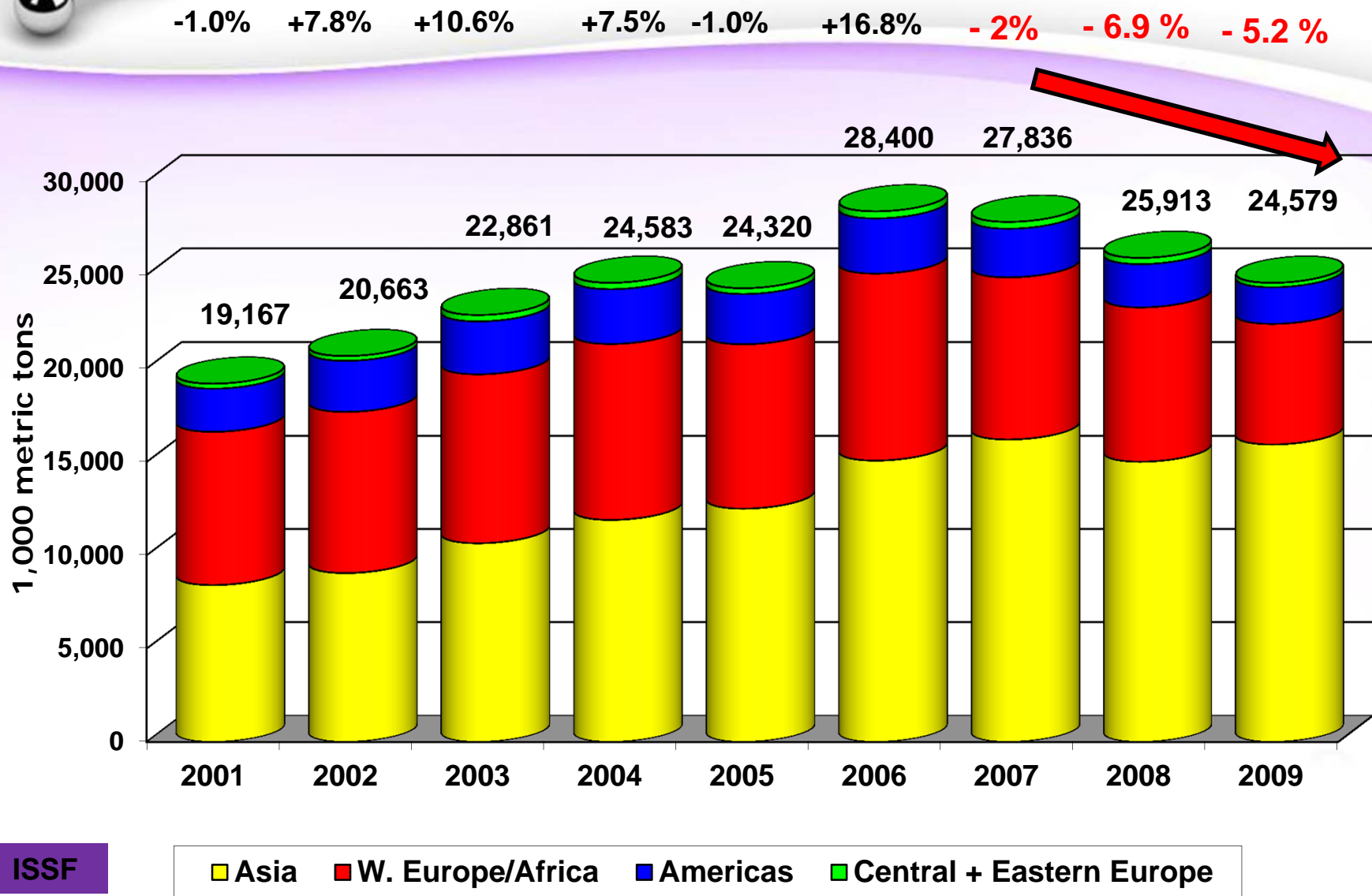
Summing up

Global SS Scenario



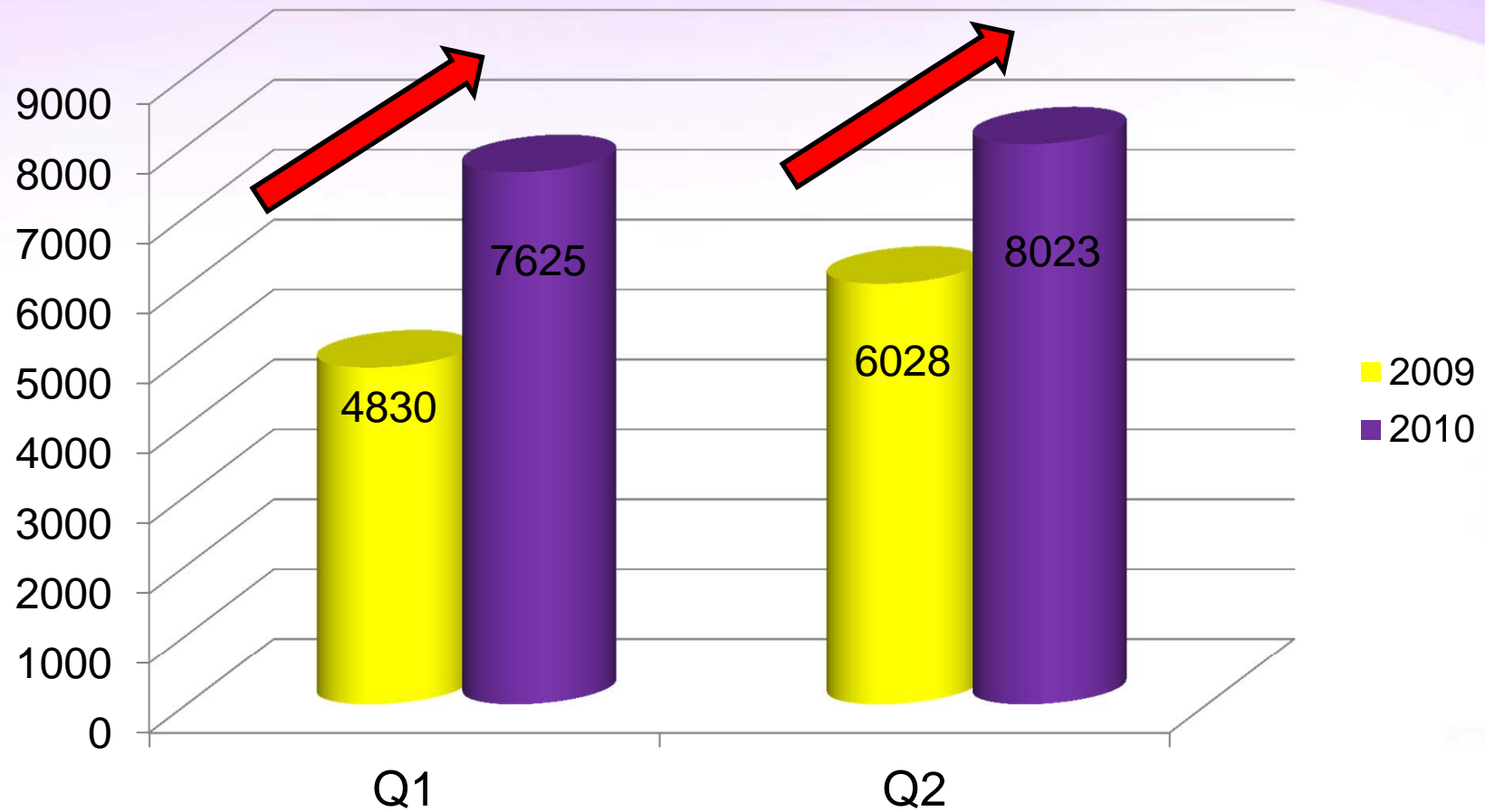


Global SS Production : Growth Slowdown





Global SS Production : Coming back...



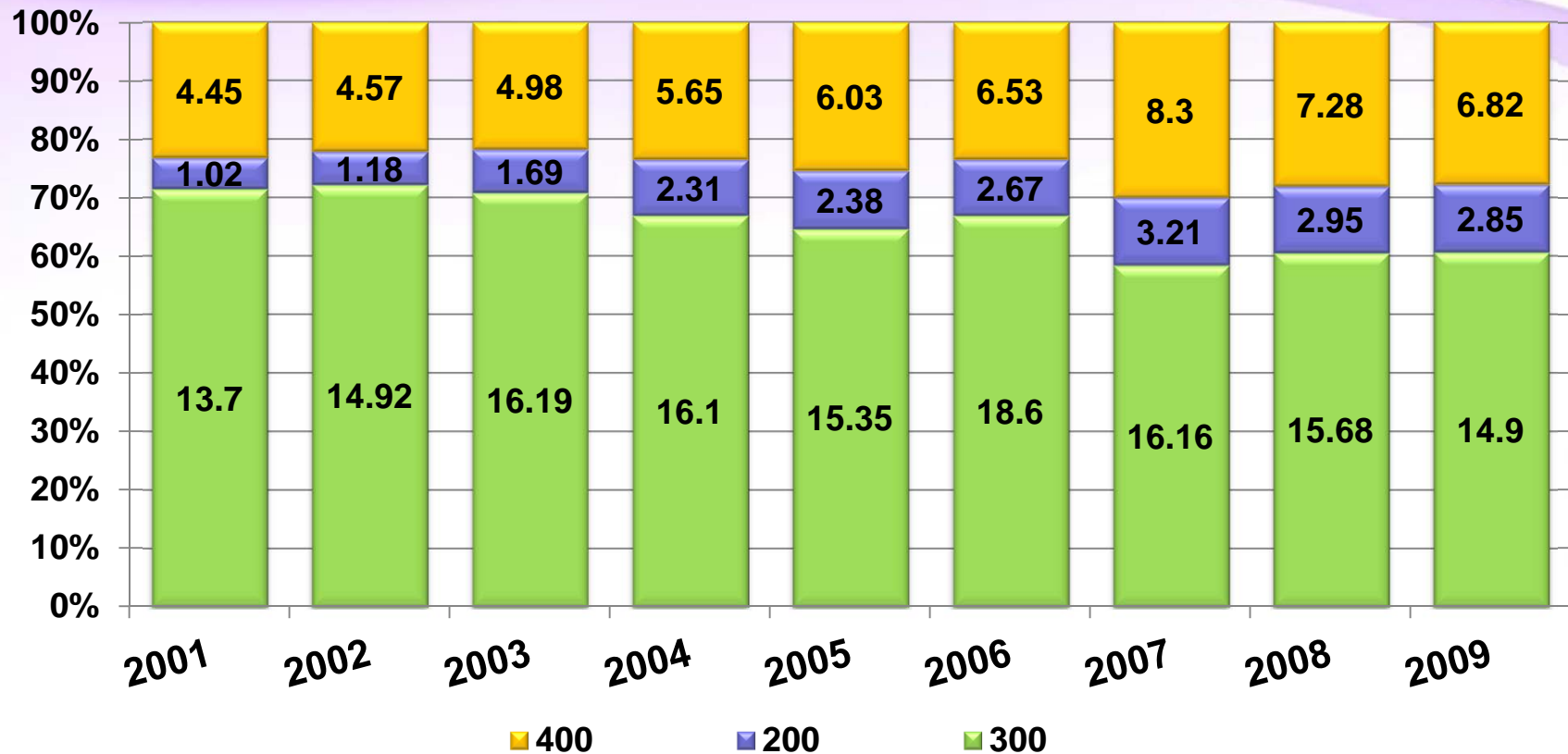


Global SS Production... Recovery

- Significant recovery : Q1 & Q2 ,2010
- Growth in H1,2010 : 44% over H1, 2009
- Production 2010 : Expected to reach 30 Mill Tons
- Growth Region : China and other Asia

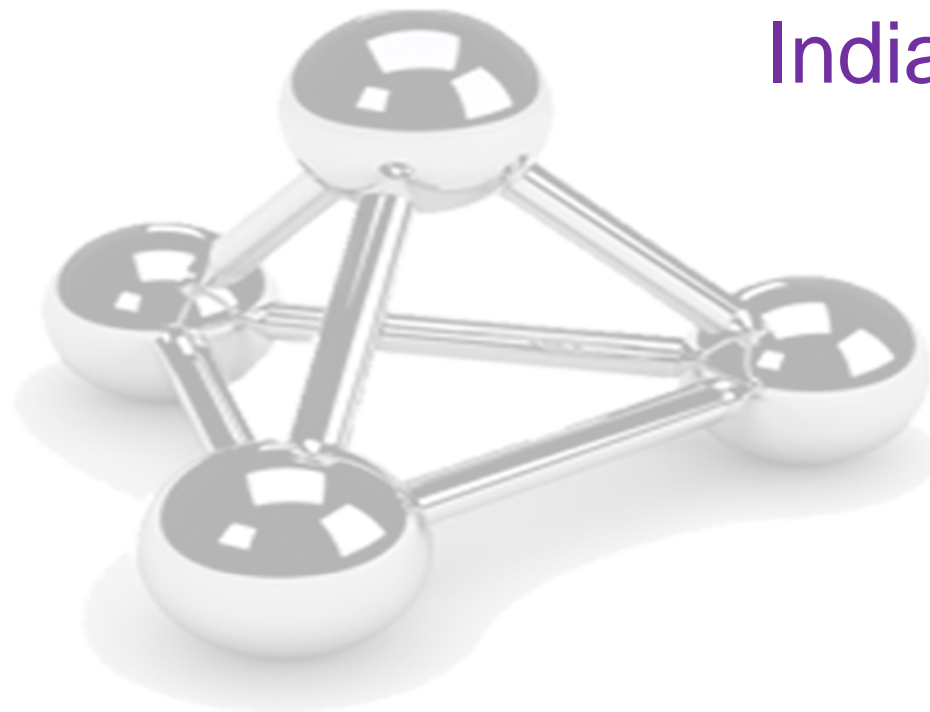


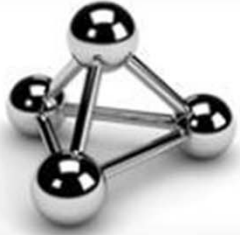
Global SS Production... by Series



- Significant grade shift in SS , Steady increase in share of 200 & 400 series

Indian Stainless Scenario





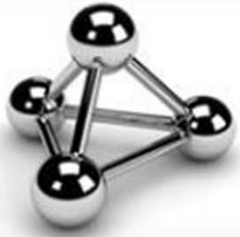
India : Macro Economic Overview

GDP growth 6.7 % (FY 2008-09)

Projected @ 8--9% over next 5 years

Overall Steel Consumption to grow at 1.2 times GDP

Planned Infrastructure Investment in 5 years: USD 440 billion

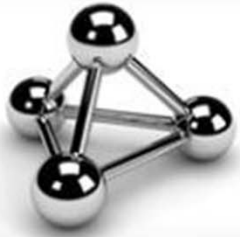


Indian SS Melt Capacity (Flat Products)

Qty : '000 MT

| Company | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
|------------------|-------------|-------------|-------------|-------------|
| JSL-Hisar | 720 | 720 | 720 | 720 |
| JSL-Orissa | | | | 800 |
| Sail-Durgapur | 50 | 50 | 50 | 50 |
| Sail-Salem | | | 180 | 180 |
| Others | 1410 | 1480 | 1550 | 1550 |
| Sub Total | 2180 | 2250 | 2500 | 3300 |

Others include the melting capacity of unorganized Utensil Grade sector

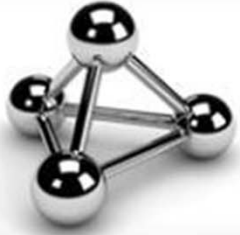


Indian Cold Rolling Capacity (Flat Products)

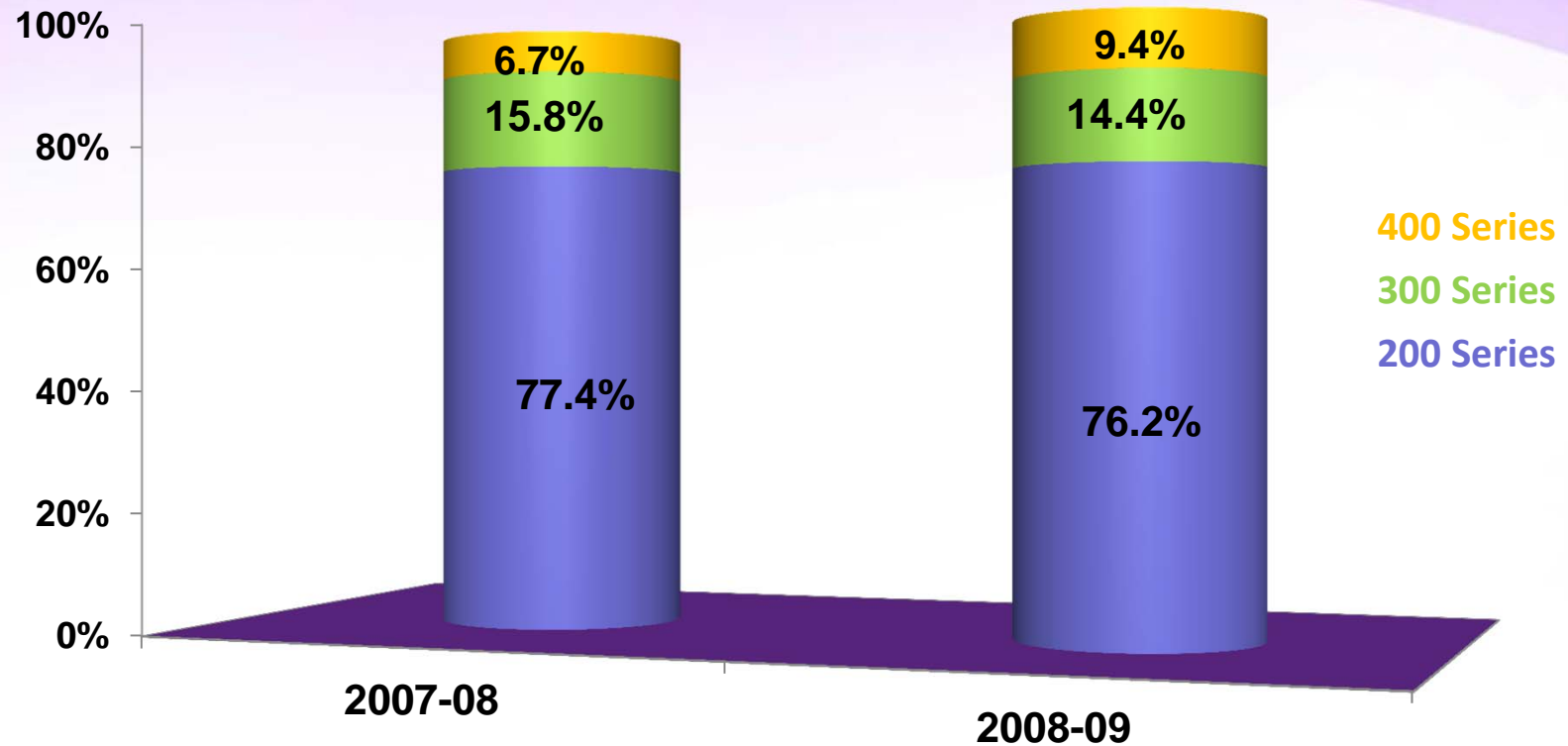
Qty : '000 MT

| Company | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
|------------------|-------------|-------------|-------------|-------------|
| JSL-Hisar | 275 | 275 | 275 | 275 |
| JSL-Orissa | | | | 400 |
| Sail-Salem | 70 | 70 | 140 | 140 |
| Others | 1170 | 1220 | 1275 | 1275 |
| Sub Total | 1515 | 1565 | 1688 | 2088 |

Others include the unorganized Utensil Grade(Patta Sector)



Indian Stainless Steel : By Series



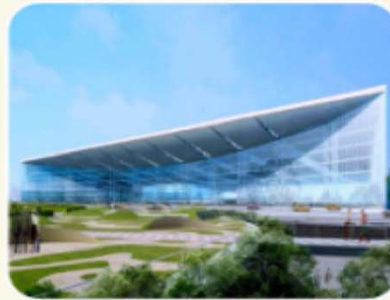
200 Series continues to be dominant , 400 series share rising



India : SS Growth Drivers



Railways



**Architectural
Building &
Construction
Airports**



Industrial

- Power
- Process
- Industries



**Automotive
White Goods**



SS in Railways

Railways

- New Stainless Steel Wagons & Coaches
- Refurbishing Railway Stations with world class facilities
- Development of Metro Rail projects and street infrastructure



Delhi Metro

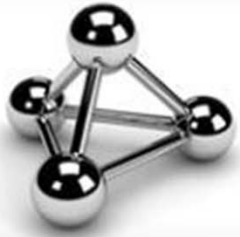


SS in Railways



Railways

Railway Stations : Cladding , Roofing , Structures ,
Decoration , Selling Carts , Display Boards , Ticketing
Area , Seating Space , Floor Tiles



SS in ABC

ABC

- Urban Renewal in the form of Street furniture e.g. Bus Shelters
- Shopping Malls, organized retail is growing at rapid pace.
- Modular kitchens
- Airports



Delhi Bus Shelter



SS in ABC

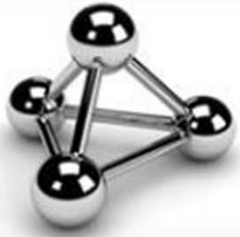
New age applications in Household

Kitchen Applications

- Bathroom Accessories
- White Goods
- Lifestyle Products
- Interior Decoration

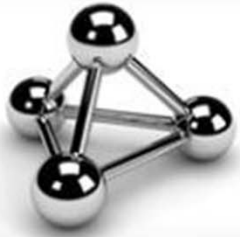


SS Modular Kitchen by J-ARC



SS in ABC





SS in ABC



Airports

Wall Cladding , Roofing , Check in Area , Seating Spaces ,
Immigration Area, Railings , Display Boards , Lounge , Booths,
Duty Free Area , Signage , Decorative , Elevators , Escalators ,
Travelators , Food Courts....



SS in Industrial Applications

Industrial Applications

- Power
- Process Industry





SS in Auto & white Goods

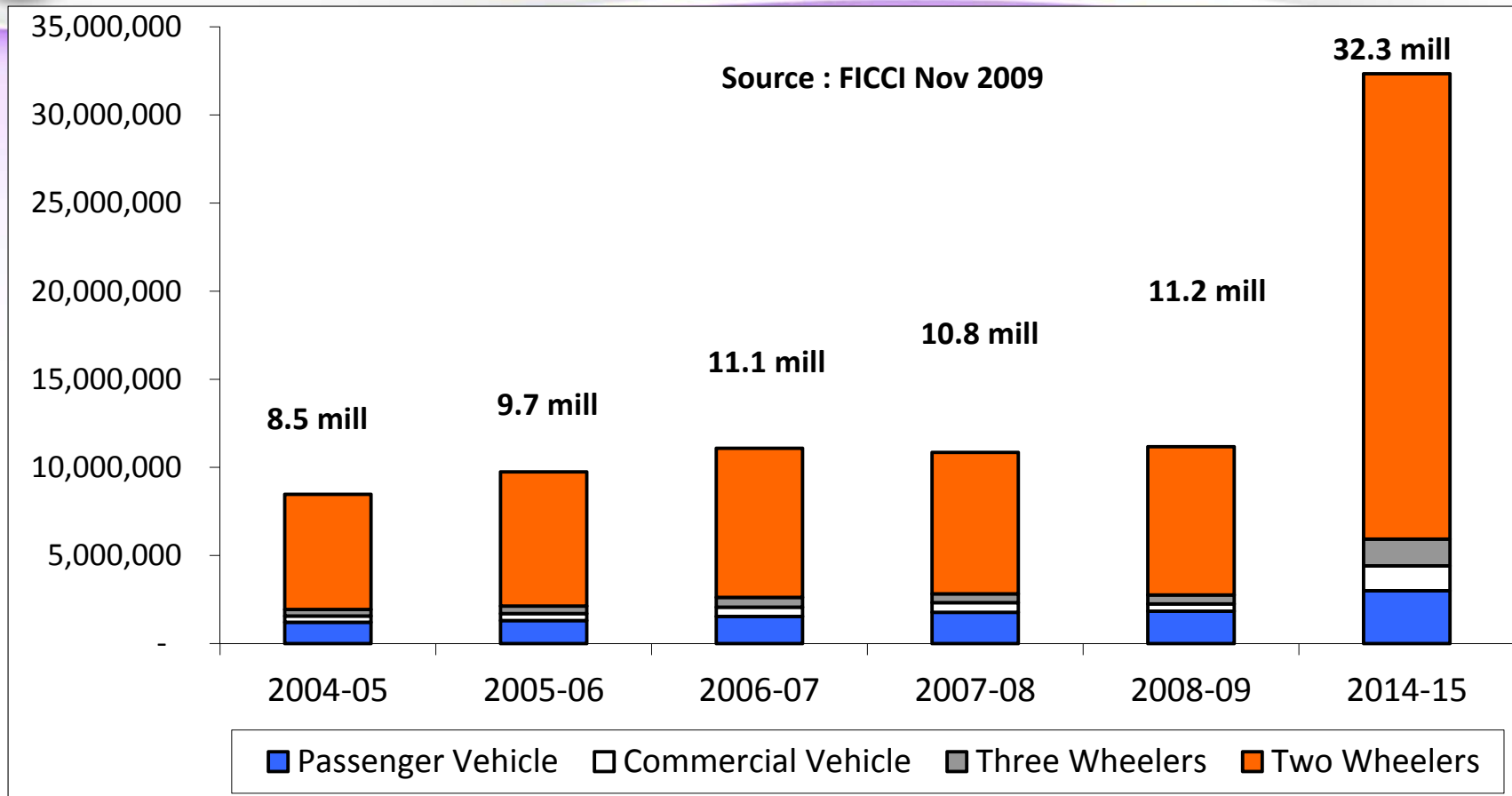
Automotive and White goods

- India a leading automobile hub in S.Asia, specially for two wheelers and small cars
- Increase usage of Stainless Steel in exhaust, wheel rims etc.
- Large middle class driving White Goods market





Indian Automotive : Growth Prospects



- India destined as a major Automotive hub in South Asia.
- A large manufacturing base for Two wheelers / Small cars / Steel and Stainless Steel components for automobiles.

What Next ?





Applications - Arriving shortly... (India)

Bus Body

LPG Cylinder

Cycle Rim

Plumbing

Hospital Furniture

Water Tanks

Modular Toilet in Trains



Applications - Arriving shortly... (India)



Bicycle Rim & Gas Cylinder



Applications - Arriving shortly... (India)



Plumbing



Applications - Arriving shortly... (India)



Storage Water Tank



Applications - Arriving shortly... (India)



Hospital Furniture



Applications - Arriving shortly... (India)



Bus Body



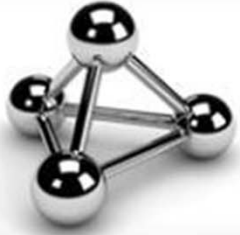
Applications - Arriving shortly... (India)



Modular Toilet in Trains

But ? ???

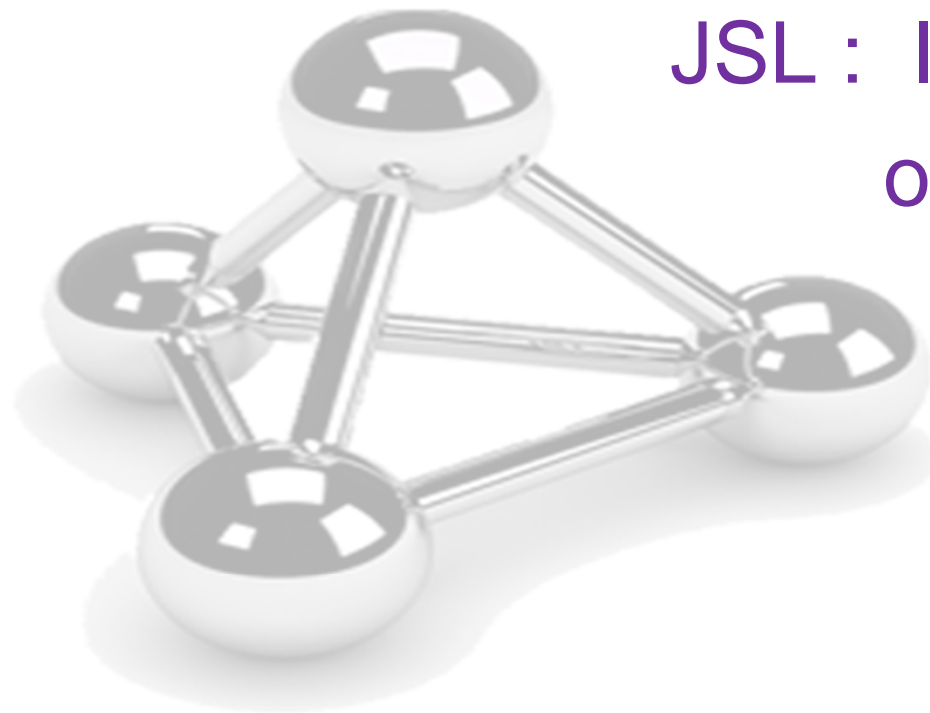


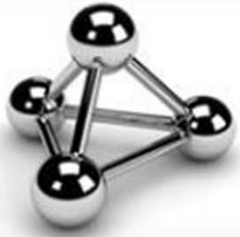


Challenges Ahead

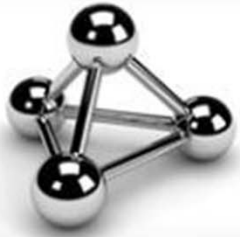
- Inadequate Infrastructure – Energy, logistics, ports etc. not conducive to growth of manufacturing sector
- Infrastructure projects subject to delays and financial constraints
- Budget constraints vs Life Cycle benefits of Stainless Steel
- Dependence on imports for certain raw material – Nickel, SS Scrap , Moly

JSL : Indian face of Stainless





JSL Stainless Ltd.



India's largest and
fully integrated
Stainless Steel
manufacturer in
Flat Products



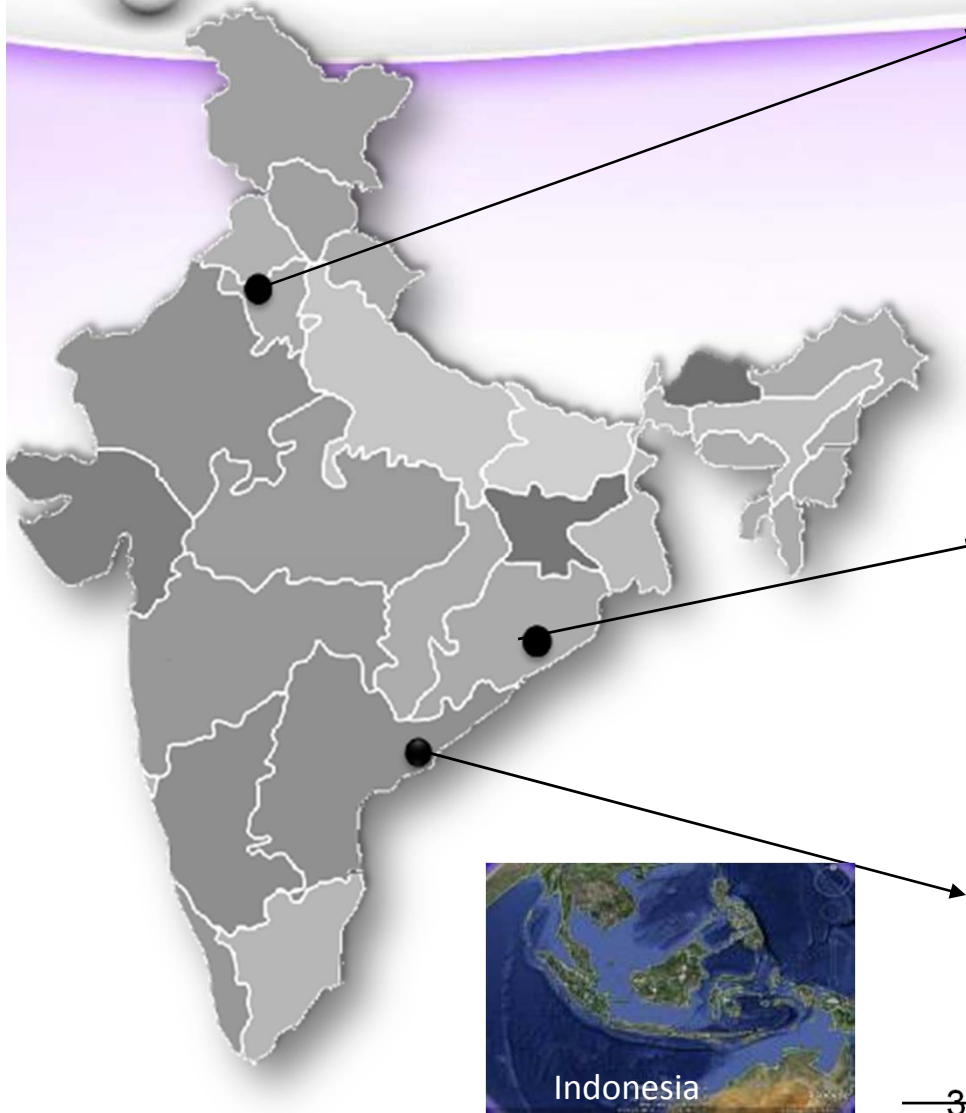
Leading global
supplier of
Precision strips,
Razor blade steel
and Coin blanks



Substantial Market
share for high end
applications



Manufacturing Locations



HISAR

SS Melting / HR - 720,000 tpa
Cold Rolling - 275,000 tpa
Special Products and Coin Blank – 35,000

ORISSA

Ferro Alloys – 250,000 tpa
Thermal Power Plant – 250 MW
Coke Oven - 430,000 tpa

Integrated SS Phase – I (by Mid 2011)
Capacity - 0.8 mtpa

Integrated SS Phase – II
Total Capacity – 1.6 mtpa

VIZAG

FeCr - 40,000 tpa integrated with Chrome
Ore Mines in Orissa

INDONESIA

Cold Rolling – 150,000 tpa

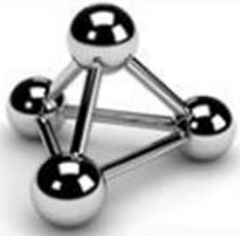




Hisar Plant

- India's largest and fully Integrated SS Plant of 720,000 tpa capacity with Twin Stand Steckel Mill and Cold Rolling Complex.
- Special products Complex with facilities for precision strips, razor blade and coin blanks



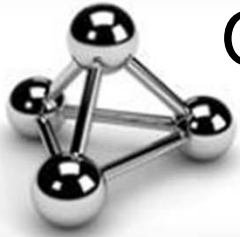


Orissa Plant



Orissa Plant





Orissa : Integrated SS Plant (Phase -1)

Meltshop (SMS-Demag, Germany)

- 0.8 mtpa - Liquid Steel and Liquid Ferro Chrome route
- EAF, Chrome pre-melter, AOD - 150t, LF & Slab Caster

Hotstrip Mill (Siemens VAI, Austria)

- Tandem mill, with capacity of 3.2 mtpa
- Coils upto 1650 mm and 36 tons weight
- Plates of 1600 mm for critical applications such as nuclear

Cold Rolling Complex (Andritz, Austria)

- 1 mtpa HRAP No 1 & 2E with 1-stand in-line rolling
- 0.5 mtpa CRAP with 3 Stands in-line rolling



Orissa : Integrated SS Plant (Phase -II)

Meltshop expansion to 1.6 mtpa

Power Plant/ Ferro Alloys / Coke Oven expansion

Subsequent plans to expand to 3.2 mtpa



Service Centre Network



Spain -Service Centre
In JV with FAGOR



Gurgaon, Vadodara, Mumbai,
Chennai -135,000 tpa each

Jajpur (Orissa)-Proposed Service
Centre in the SS Industrial Park

Watch For !!





Changes In the market place.....

Railway

- Metro in major cities
- Railway Wagons
- Coach Up-gradation
- SS usage in Platforms

Increasing ABC applications

- Selective Rebar's
- Door & Windows
- Cladding
- Signage's
- Street Furniture
- Fasteners
- Life Style products

India as export hub for

- Auto Components
- Appliances
- Mill Products
- High Quality Value Added Engineering Products



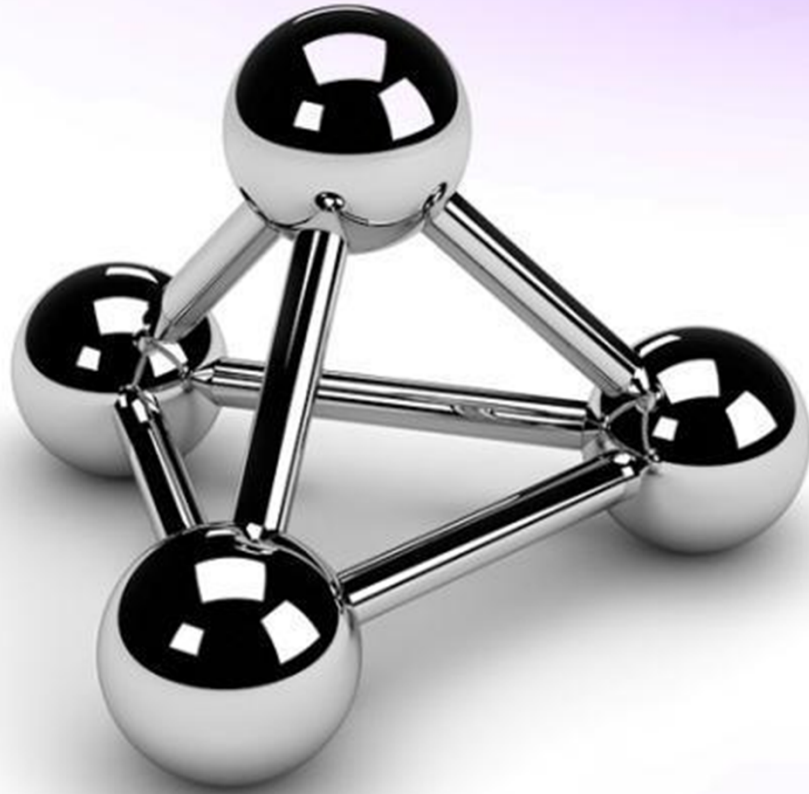
Movements In environment.....

- RM Price Fluctuations (Ni, Cr, Scrap)
- Grade / Series Substitution in Industry
- Standardization (e.g Ikea/ Whirlpool / Electrolux moving to 400 Series)

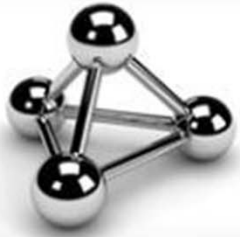


Opportunities

- Increase in Consumption Levels / Market Size
- Increasing Downstream Applications
- New products / segments being created



Summing up + +



Summing Up

Indian Stainless Steel Market

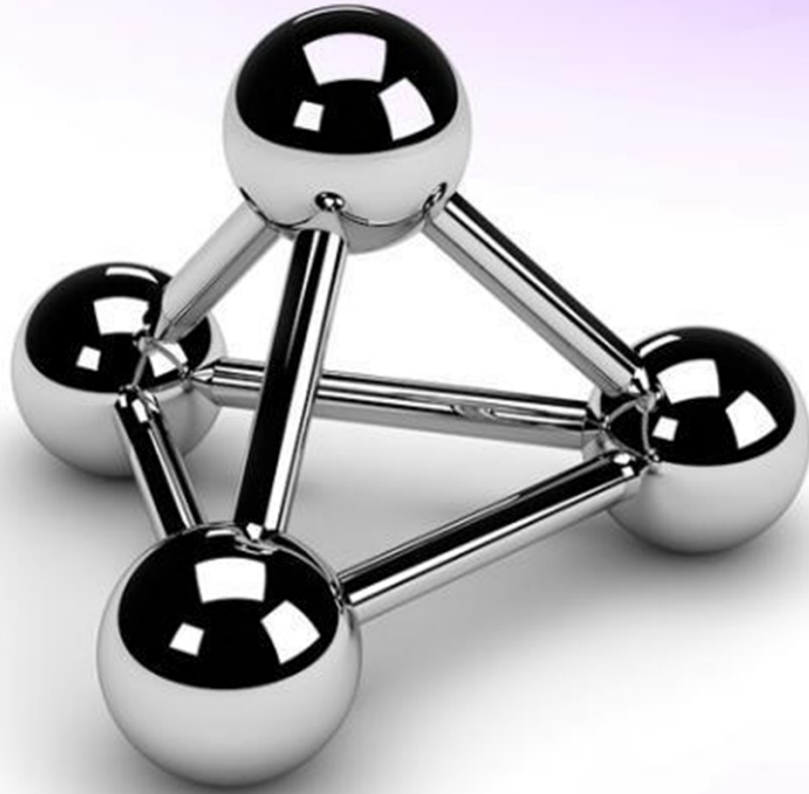
- SS Production will up to 4 Million Tons by 2015
- Overcapacity in the market .. export boost up
- Double digit growth in SS Consumption (10-12%)
(Growth in SS Consumption is about 1.2 Times GDP)
- New applications will emerge very fast
- Opportunities for business in downstream industries
- SS will change the face of India



Summing up

International SS Market

- Stainless Steel markets recovering, growth led by Asia.
- India to play major role in Asian market as China sets to stabilize
- JSL all set to take challenges of future India
 - Established plant at Hisar
 - Greenfield 0.8 MMT plant in Orissa (by 2011)
 - Enhanced reach by Service centre network
 - Opportunities for growth
 - Indian face of Stainless



Thanks