IIM Metallurgy Materials Engineering

NEWSLETTER
THE INDIAN INSTITUTE OF METALS
(DELHI CHAPTER)

ANIL GUPTA
Chairman, Delhi Chapter

S. C. SURI
Chairman, Technical & Publication Cell

Issue No. 47/2011 **Vol. XLVII "Monthly"** **Date: 31.10.2011**

Advisory Committee

L. Pugazhenthy
B R Thukral

Technical & Publication Cell

S C Suri – Chairman
G I S Chauhan
Neeraj Gupta
Dr. A K Srivastava
M Saravanan
P R Chandna
R K Vijayavargia
M P Sharma
V N Grover
Sunil Garg

Executive Committee

Chairman
Anil Gupta

Vice Chairmen
S. C. Suri
K. L. Mehrotra

Hon. Secretary
V. C. Singhal

Jt. Hon. Secretaries
G. Mishra
G I S Chauhan
Manoranjan Ram

Hon. Treasurer
Neeraj Gupta

Jt. Hon. Treasurer
Ram Chandra

Members
P K Chatterjee
B D Jethra
V K Tyagi
R K Gupta
Dr. G N Mohanty
Raj Tiwari
M Saravanan
M P Sharma
A C R Das
Dr. A K Srivastava

INTRODUCTION

This News Letter is containing a brief on 4th and 5th meetings of the Executive Committee of IIM-DC held on 1.10.2011 and 29.10.2011 respectively. The News Letter also contains the following write-ups:

1. Chairman's Message
2. Ten reasons why one should do business in India by Mr. P R Chandna, Life Member, IIM DC
3. Visit to IIM Delhi Chapter members to Non-Ferrous Industries in Northern Region
4. Brief on Nobel Prize for Chemistry 2011: Professor Daniel Shechtman from the Technion Israel Institute of Technology
5. The News Letter also contains National and International news relating to ferrous & non-ferrous sectors.

Published By

"The Indian Institute of Metals – Delhi Chapter"

Jawahar Dhatu Bhawan, 39 Tughlakabad Institutional Area, M B Road

Near Batra Hospital, New Delhi-110 062

Tel: 011-29956738, Telefax: 011-29955084; E-mail: iim.delhi@gmail.com

Website: iim-delhi.com

Chairman's Message

This brings us to the end of first six months of current EC's tenure.

I must thank members of current EC in particular as well as members of IIM Delhi Chapter in general to have supported me and my EC's new endeavours.

The following new initiatives have been taken during this period:

1. Increased activities and thrust to initiate skill development for SME Sector
2. Conceptualising, organizing and carrying out at least one technical activity every month in the form of Talk / Seminar / Workshops. Notably the following were successful:
   Delhi Schools' Students Meet "Metal in Everyday Life" colloquium
   Interactive meet with Secretary (Mines) on Mines and Minerals Sector
   And now Computer Aided Design and Automated Die Casting to be held on 7.11.201
3. Increased visibility in various National and International fora, Exhibitions, Conferences etc.
4. Collaborative programmes with different Industry Associations in Metals, Minerals field in Northern India
5. Collating data bank of SME Industry in and around Delhi
6. Introduction of merit scholarships in Metallurgical profession in engineering colleges in the Northern Region
7. Starting Contact Programmes for AMIIM examinations for prospective students. This is likely to take concrete shape in a month or two.

We are also having the following world class facilities in our Building:

1 20 seater meeting room
2 125 seater fully air conditioned lecture hall and
3 A library equipped with internet facilities

My EC looks for any new ideas and constructive suggestions from Delhi Chapter members

A Core Committee has been constituted to spear-head MMMM 2012 and likely participation to be 50% - 60% more than the previous International Conference. It is proposed to run two parallel sessions, one in mines and mineral field and the other in metals and metallurgy.

We invite all members who could contribute towards this endeavour.

I again thank all dormant Delhi Chapter members to come forward, suggest and carry out activities which they would love to see at IIM Delhi Chapter

Chapter News

Executive Committee Meetings

The 4th and 5th meetings of the Executive Committee were held on 1st and 29th October 2011 respectively. The following are the salient points of the two meetings:

(i) Award of Scholarships to the Engineering Students in the Metallurgy Stream in Northern Region
(ii) Technical activities to be undertaken during December 2011 to December 2012
(iii) Visit of National Council members of IIM to IIM-Delhi Chapter on 11.10.2011
(iv) Evaluation report on the annual activities of IIM DC for 2010-11
(v) Training Programmes on "Lean Manufacturing & Six Sigma Green Belt"
(vi) Topic for MMMM 2012 to be held in September 2012
(vii) Setting up of a scheme for local NMD Awards

Ten reasons why one should do business in India

Mr. P R Chandna
Life Member, IIM Delhi Chapter

Reserve Bank of India recently painted quite a gloomy picture for the Indian economy and rating house Moody's too pointed out how corruption and scams are hampering the country's business environment. However, things are not as bad as it seems. According to research firm Dun and Bradstreet, India will become a $5.6 trillion economy by 2020. The firm has also predicted a three-fold jump in the country's gross domestic product, from $1.7 trillion last fiscal, on the back of rapid development.

1. India's GDP is on a roll

India's gross domestic product is reaching new heights every year. India is now the 11th biggest economy in the world. The GDP expanded 7.7 per cent in the second quarter of 2011 over the previous quarter. From 2000 to 2011, India's average quarterly GDP growth was 7.45 per cent. India reduced poverty by about 10 percentage points from 1997.

2. India's trade is growing steadily

India's imports are increasing more than 25 per cent year on year (since 1960). Even if 2009 saw a small fall-back due to global recession, in 2010 imports were however again growing at 32.2 per cent (August, 2010 -- year on year growth) and reached over $140 billion (2010).

3. India's FDI is on the rise

India's foreign direct investment has been increasing significantly since the past five years. There are three major countries that are known to be the biggest foreign direct investors in India. Topping the list of India's foreign direct investment ranking is the small island nation called Mauritius. This country is located very close to India and enjoys very small tax rate.

This is the reason why many companies set up their businesses there or invest in the existing organizations. The tax levied is no more than 3 per cent.

In the second place is Singapore, which invests funds in almost the same sectors as the United States, though Singaporeans are also interested in the transportation sector. Coming in at third place is the United States, which bring in more than $15 billion into the country. Most of the US investments are placed in the areas of telecommunications, services (usually offshoring), power, oil refinery, food processing, and electrical equipments.

4. India is turning into an industrialized economy

India is moving from being an agriculture based economy to an industrialized and service focused economy similar to the US, Europe and other industrialized countries. India is now the world's biggest manufacturer of small cars. India is ranked 12th in the world in terms of nominal factory output. The Indian industrial sector underwent significant changes as a result of the economic reforms of 1991.

5. India's population keeps on growing

In terms of population, India is the second largest country in the world.

By 2025, India will be the biggest country in terms of population. Western markets like the European Union and the United States are set to benefit from a 1.15 plus billion population in India. The population will continue to grow also in terms of disposable income and consumption of Western products.

6. There are 771 million mobile phone subscribers in India

More than half the population owns a mobile phone in India now. India is the world's fastest growing

wireless market, with 771 million mobile phone subscribers as of February 2011. It is also the second largest telecommunication network in the world in terms of number of wireless connections after China.

7. Wireless technology to boost India's Internet access

Wireless Internet is going to massively increase the access of hundred of millions of Indians across the subcontinent. A new era awaits the country's 584 million mobile phone users, with a faster and more robust Internet, and better access to data services including e-commerce, social networking and telemedicine. Also ready are mobile device manufacturers with a slew of 3G handsets; providers of hosting, billing and network management services with expanded offerings; and content providers selling cell phone ring tones, wallpapers and graphics.

8. India's GNI per capita is growing

Gross National Income per capita in India in terms of purchasing power parity is increasing. In less than 10 years, the GNI per capita doubled (from $1,560 in 2000 to $3,250 in 2009). This means Indian consumers can now afford double as much goods and services as just 10 years back.

9. Doing business in India is getting easier

India is among the top 40 nations to have carried out the highest number of business regulation reforms in the last five years, most of these related to introduction of technology to ease business operations. Nowadays, in just 30 days one can have one's business up and running. Doing business in India is getting easier and investor friendly year by year.

10. India & China: New Economic Gravity by 2050

Andreas De Rosi mentions in his article a research paper of Danny Quah, from the London School of Economics. Quah wrote that the world's economic centre of gravity is projected by 2050 to locate, literally, between India and China. Observed from the Earth's surface, that economic centre of gravity will shift away from its 1980 location a distance of 9,300 km or 1.5 times the radius of the planet. So doing business in India is a must for companies with a long-term view. India will sooner or later come back to the time when it was the biggest economy in the world.

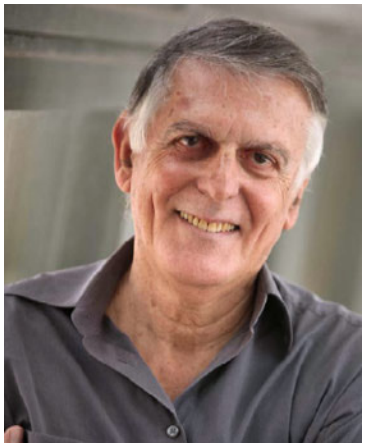
Source: "India 2020 Economy Outlook", Dun & Bradstreet

Visit of IIM Delhi Chapter members to Non-Ferrous Industries in Northern Region

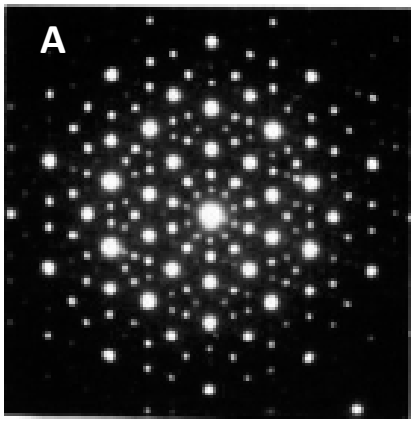
One of the activities of IIM Delhi Chapter is dissemination of information in the Ferrous and Non-ferrous sectors. In this connection the Institute is organizing a Seminar on Die Casting on 7th November 2011. In this regard, a team comprising Shri Raj Tiwari and Shri M P Sharma visited MAXOP Engineering Co., Manaser and ASK Automotive Pvt. Ltd. Manaser on 15th October 2011 and gave a presentation to their team about the activities of IIM Delhi Chapter. The team also briefed the company officials about the usefulness of the forthcoming Seminar on die Casting. After presentation, the company officials promised their representation in the forthcoming seminar.

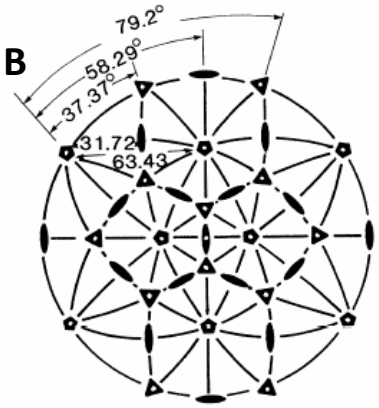
A brief on: Nobel Prize for chemistry 2011: Professor Daniel Shechtman from the Technion Israel Institute of Technology, for his discovery of the structure of quasicrystals in Al-Mn alloy

A metallic phase with long-range orientational order and no translational symmetry was reported in Al-Mn alloy. A rapidly solidified Al-14at.%Mn alloy with long-range orientational order, but with icosahedral point group symmetry ($m\bar{3}\bar{5}$) inconsistent with lattice translations was observed. The corresponding diffractions spots were as sharp as those of crystals but could not be indexed to any Bravais lattice. This solid was metastable and formed from the melt by a first-order transition (Reference: D. Shechtman, I. Blech, D. Gratias and J. W. Cahn, Physical Review Letters, Volume 53, Year 1984, Page nos.1951-1954). Professor David Phillips, President of the Royal Society of Chemistry, said: "Quasicrystals are a fascinating aspect of chemical and material science – crystals that break all the rules of being a crystal at all."



Professor Daniel Shechtman
Born: 1941, Tel Aviv, Israel





(A). Selected area electron diffraction pattern along 5-fold rotational symmetry recorded from a single grain of the icosahedral phase. (B). Stereographic projection of the symmetry elements of the icosahedral group $m\bar{3}\ \bar{5}$.

Summary by Dr. A. K. Srivastava, National Physical Laboratory, C.S.I.R., New Delhi

National and International News

NALCO earns INR 1069 crore net profit for 2010 –11

National Aluminum Company Limited has earned net profit of INR 1,069 crore during 2010-11. Mr. Bagra CMD of Nalco said that the aluminium smelter and captive power plant of the company had made record production during the year. The level of capacity utilization at mines was 100.5% with a production of 4.824 million tonnes. At alumina refinery, it was 96.8% with 1.556 million tonnes. At alumina refinery, it was 98.8% with 1.556 million tonnes. At aluminium smelter the utilization was 96.4% with 0.444 million tonnes and at captive power plant 91.7% with 6,608 million units. The slight decrease in alumina hydrate production at the refinery, as compared to 1.591 million tonnes achieved in the previous fiscal was due to the plant being shut down for hook up jobs under expansion project and for maintenance jobs. Bauxite transportation was in line with the demand of alumina refinery for achieving the near rated capacity. The company achieved the highest domestic metal sale of 340,752 tonnes surpassing the previous record of 289,032 tonnes achieved in 2009 to 2010 and it was 17.9% higher than last year's sale.

Source: Metal News

Global Aluminum Market will be worth USD 100 billion in 2011

The aluminum industry is emerging as one of the strongest markets after recession as the commodity is gradually gaining prominence in the recovering transportation and construction industries. The global aluminum market is a steadily growing market which is expected to follow a progressive above average growth rate in developing nations and a modest, steady growth rate in mature markets. Visiongain calculates that the global aluminum market will be worth USD 99.9 billion for aluminum was negatively impacted during the recession and the industry is rapidly picking up owing to the soaring demand of developing Asian economies and of developed nations. China and India are the major contributors to global aluminum production and consumption with other countries including Russia, USA, Australia, Brazil and Norway, making significant contributions to the global growth. Visiongain expects the global metals and mining industry and in particular, the aluminum market to bounce back and demonstrate solid growth in line with previously expected growth rates. The emerging economies which in total maintained positive growth through the crisis will continue to register strong growth, driving demand for aluminum products in the coming decade. Being the largest aluminum-consuming sector, recovery in the transportation industry is yielding good results for the global aluminum market. Contributing further to growth will be the infrastructure development going on at a massive scale in BRIC nations. Moreover, emerging consumer markets are rapidly growing opportunities. Rising GDPs leading to the higher purchasing power of the population will create more demand for automotives, enhanced infrastructure, construction work and other related products which will collectively boost the aluminum industry. Global growth is shifting towards East with Asian and Middle Eastern countries emerging as the most powerful markets. This decade is expected to have the largest production and consumption from the Eastern countries. Saudi Arabia is expected to emerge as a major aluminum exporter with several new smelter projects to start production within 5 years. The region has the abundance of cheap energy for industrial projects. In contrast, China, although self-sufficient with alumina reserves, the nation's extensively growing economy offers scope for further exploration. As such, the promising Middle East aluminum market will benefit the global aluminum industry. Aluminum smelting, being the largest smelting activity in the world, is expected to gain prominence with the growing demand. The aluminum industry is expected to exhibit solid growth mainly driven by gradually recovering markets, economic rebound in aluminum consuming industries, and growing consumer demand for improved aluminum products. The global aluminum industry is also expected to benefit from further refinement of the commodity to enhance its applications in several other sectors.

SOURCE: Metal World

MOIL plans to set up 2 JV units with SAIL and RINL

Projects Monitor reported that state-owned MOIL Limited proposes to set up two plants with an investment of Rs 600 crore, one each in equal JV with Steel Authority of India Limited and Rashtriya Ispat Nigam Limited to manufacture manganese alloy products. The new units would produce processed products silicomanganese and ferromanganese. The unit, set up in JV with SAIL at Bhilai in Chhattisgarh at a cost of INR 400 crore, will have an annual capacity to produce 106,000 tonnes of manganese alloys. The unit in JV with RINL will come up at Bobli, near Vishakhapatnam in Andhra Pradesh. The INR 200 crore plant would have a production capacity of 57,000 tonnes per year. Both the units will be commissioned by 2014 and jointly funded by the three partners. MOIL will contribute INR 300 crore from internal cash reserves of the company.

Source: Steel Guru

Indian iron ore mining mess - Steel minister calls for immediate hike in export tax

Press Trust of India reported that concerned over severe shortage of iron ore after the ban on mining in Karnataka, Indian Union Steel Minister Mr Beni Prasad Verma said that the Finance Ministry should immediately increase export duty on the raw material to 30%. He said "If exports of iron ore stop, the problem of iron ore shortage in Karnataka and other states would get solved, by and large." He added that "We want to get this implemented immediately. I had written to them just at the

beginning of the Karnataka crisis." Mr Verma had written a letter to Finance Minister Mr Pranab Mukherjee two weeks ago to increase the duty by 10% to 30%, to discourage exports.

Source: Steel Guru

Steel Capacity Build-up

As per the draft Report of the Working Group on Iron Steel 12th Five Year Plan, against the total steel demand of 115 MT in 2015-16, following production capacity has been indicated:

	State	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
SAIL		12.84	13	15.27	20.75	20.75	20.75	20.75
Vizag Steel plant (RINL)	Andhra Pradesh	2.82	2.82	6	6	7	7	7
NMDC Nagarnar	Chhattisgarh					2	3	3
Tata Steel, Jamshedpur	Jharkhand	6.8	7.62	9.22	10	10	10	10
Tata Steel, Kalinganagar	Orissa				1	3.05	5.5	6
JSW Vijayanagar	Karnataka	6.8	8.93	10	10	10	12	12
ESSAR Steel	Gujarat	4.6	6.3	8.5	8.5	9	10	10
JSPL Raigarh	Chhattisgarh	2.4	3	3	3.5	4	4	4
JSPL Angul	Orissa			1.5	2	2	3	4
Electrosteel Steel Ltd. Siyaljori Bokaro	Jharkhand			1.7	2.2	2.2	2.2	2.2
Bhushan Steel Limited Angul, Dhenkanal	Orissa	1.5	2.3	2.3	4	5.2	5.2	5.2
Jindal Stainless	Orissa			0.6	0.8	0.8	0.8	0.8
Others	Multi-Location	32.5	34.13	35.83	37.91	39.79	41.77	43.85
Tata Steel, Gopalpur	Orissa					2	2	4
JSW SALEM	Tamil Nadu	1	1	1	1	1	1.6	1.9
JSW ISPAT	Maharashtra	3.3	3.3	3.3	3.3	3.3	4	4.5
JSPL Pattratu	Chhattisgarh				1.5	2	3	3.5
POSCO INDIA	Orissa							4
Bhushan Power & Steel, Sambalpur	Orissa	1.2	1.8	2.5	2.5	2.5	2.5	2.5
Uttam Galva	Maharashtra						0.8	1.1
Monnet Ispat, Raigarh	Chhattisgarh	0.3	0.6	0.9	1.5	1.5	1.5	1.5
Visa Steel, Kalinganagar	Orissa	0.5	0.5	0.9	1.5	1.5	1.5	1.5
Others-Medium Scale (Jai Balaji, Kalyani, Mukund, MSPL, Brahmini etc)	Multi-Location	1.5	2	2.5	2.5	4	4	4.5
Total (Firm Projects)		78.06	89.00	103.8	117.56	126.19	135.52	140.00
Additional Capacity form Project not firm but possible		0.00	0.00	1.71	2.90	6.40	10.10	17.60
Realizable Capacity Considering possible slippages		78.06	89.00	104.66	119.01	129.39	140.57	149.00

Realizable Capacity – Capacity form firm Projects + Additional Capacity form Not firm Projects*0.5

Steel Talks - Mr P. K Misra Steel Secretary Government of India

Mr P K Misra, Steel Secretary, Government of India, in an exclusive interview with Steel Guru has shared his views on some of the critical issues Indian steel industry is facing.

Q: Information plays a very big role in conducting the business and understanding the situation. If you look at the developed country like USA and Europe etc they have very good information systems available on the steel sector. Even China has a very good information system. When India is poised to become a super power in coming years do you feel that we should also take this as a priority issue to create a robust system?

A: Certainly, the more knowledge you have, the better placed you are to take informed decisions and make the best decision.

Now towards this objective of the JPC, which is currently the official body for collection of statistics under the Ministry of Steel, I have asked them to go for a survey and also talk to the steel industries as to what kind of information they should collect which is beyond what they are collecting today. I have also asked our economic research unit the ERU to also discuss with industry to what areas they should need to work, which are more relevant to the steel industry.

So these interactions are going to take place.

We will welcome ideas and suggestions as to what kind of further information gathering like what are the industries that we need to add and to refine the process to make it more automatic, make it more online.

We would also like to design some software which will enable people to put the information on to the JPC without any interventions. I think all this will probably lead to better flow of information, better quality of information and larger set of information which will be useful for the steel industry.

Q: Indian steel industry is in a very de-fragmented state as we have more than 1000 or 1200 steel makers. Many of them do not even have proper addresses or emails etc. It is going to be a challenging task. Probably a joint effort from the industry side is required to achieve this?

A: We are getting quite a lot of cooperation from the Indian steel industry as a whole. For collection of statistics we hope to enhance this cooperation by engaging with them and interacting with them more frequently, holding seminars and any other innovative technology methods if we can employ to get the information.

I agree that with the large number of steel producers this is characteristic and we have to be content with that. But I think that there will be ways of getting around this problem and I am sure we will be able to find the solution after having these consultations with the industry.

Source: Steel Guru

Steel Ministry seeks sops for SAIL to set up a unit in J&K

PTI reported that concerned over delay in setting up a steel processing unit by SAIL in Jammu and Kashmir, the Steel Ministry has approached the State Government seeking some concessions and benefits for the company to expedite the project. Steel Minister Mr. Beni Prasad Verma told PTI that "I have written to Chief Minister of J&K Mr. Omar Abdullah about 15 to 20 days ago. Some concessions and rebates have to be given by the State Government. That commitment has not been fulfilled." The foundation stone for the 100,000 tonne per annum unit at Lassipora Industrial Estate in Pulwama district in the State was laid in September 2008 by then Steel Minister Mr. Ram Vilas Paswan who had also announced INR 150 crore investment for the SAIL unit. When asked about the delay in the project, Mr. Verma said that "Unless the State Government pass on the rebates and concessions, how come SAIL can set up the steel processing unit." He, however, did not say what kind of concessions and benefits have been asked by SAIL for the proposed unit. Stating that he is continuously monitoring the progress of the project, Mr Verma said that "If State Government is interested, the unit will get constructed there whether it is through private sector or joint venture route or by SAIL. The State should give concessions first." The unit was slated to have an initial capacity of 100,000 tonnes of TMT bars and galvanized corrugated sheets. Earlier, the Steel Ministry had told a Parliamentary panel that SAIL has undertaken a fresh financial review of the project as it has become uneconomical in the absence of concessions and benefits from the State Government.

However, the Parliamentary Standing Committee on Coal and Steel had termed it surprising and wondered that why SAIL could not assess its feasibility at the time of conception. The Committee had said that "Review by SAIL at this stage is surprising as all apprehensions and doubts would not have been ignored when this project was conceived and ultimately approved. The Committee would like to be apprised of the precise reasons for undertaking fresh review." In its argument before the Committee, the Ministry had said that during the soil investigation topographical survey done earlier,

it was found that the plot offered for the project has a level difference of about 17 meters from one end to another. Resolving the issue, the J&K Government had allotted fresh land in October 2009. However, the company could not carry out soil testing, to be initiated in January 2010, due to prevailing unrest and social environment in the region.

Source: Steel Guru

RINL has Potential to become Maharatna - Mr P K Misra steel secretary

The Secretary, Ministry of Steel, Mr P K Misra has said that RINL has the potential to become a leader in the country to achieve higher levels of techno-economic parameters in steel production. Improvement in techno economic parameters will lead to better profits and production of cheaper steel, he added. Mr Misra said that RINL has got all the potentiality to become MAHARATNA and all should work together and put all efforts to achieve this tag. Mr Misra was addressing the top management after witnessing a "Corporate Presentation of RINL" which highlighted the Company's achievements, growth plans, challenges ahead in Vishakhapatnam today. The Steel Secretary said that despite disadvantages of lacking captive iron ore mines, RINL is doing a wonderful job by adopting best techno economic parameters, higher levels of production with its highly skilled and motivated workforce. While complimenting RINL for its excellent performance and for bringing the best work culture right from the beginning, Mr Misra said that by using ingenuity, discipline and commitment, RINL would achieve the Mission of 20 million tonne plant by 2020 at a single location. Referring to captive iron mines to RINL, Mr Misra assured all possible help would be extended to RINL and hoped that VSP would emerge successfully. He said that the Ministry of Steel is continuously pursuing the matter with different State Governments where RINL had applied for mines. The Steel Secretary also released "RINL Customer Policy" on the occasion. The main objective of the policy is "To be the best Company to do business with: It also aims to create a healthy delight in supply of materials and meet the contingent requirement of customers and also to strive for enhancing value for the money and value for the relationship with complete care and concern.

Source: Steelguru

SAIL divestment hits hurdle

THE government's disinvestments programme has met with more hurdles, as the Finance Mministry may have to seek fresh Cabinet approval for stake sale in Steel Authority of India Ltd (SAIL) and Hindustan Copper. The two companies have told the government they do not want to go for fresh equity. On a brighter side, it may get some breather in the form of oil major ONGC's follow-on issue, discussions on which are likely to start shortly. "SAIL does not want to go for fresh equity," Disinvestments Secretary Mohammed Haleem Khan said today. "The same is the case with Hindustan Copper. So we have to go for authorization again," he told reporters on the side-lines of Economic Editors' Conference. The Finance Ministry was planning to disinvest 10 percent in SAIL in two separate tranches, while the company would also raise additional equity to the extent of 10 percent. Now the Ministry will take the Cabinet nod once again to sell its stake through a follow-on public offer. Another government official said SAIL and Hindustan Copper did not want to raise fresh equity in view of capital requirement, surplus cash and choppy markets. The Government would now have to see whether it would want to divest its shareholding in SAIL by five percent in each tranche or more, he added. The entire process of getting fresh approvals could take "about two months". Similarly, the Cabinet had approved the disinvestment of 10 percent paid-up equity capital of Hindustan Copper out of Government shareholding along with issue of fresh equity of equal size by the company.

Source: Business Standard Oct. 2011.

Steel Consumption grows 1.8% in H1

Following are steel production, consumption, Imports, exports figure during the first six month of Current FY. It may be observed that while the production growth was 9.3%, the consumption was very low at the level of 1.8%. While there was substantial reduction in imports, steel exports grew to very respectable figure of 46%.

(Million tonnes)

	H1 FY 2011-12	H1FY 2010-11	Growth
Production	34.79	31.82	9.3%
Consumption	33.70	33.10	1.8%
Imports	2.85	4.49	-36.4%
Exports	2.15	1.47	46%

Source – Mos

CMIE views on Steel Sector

CMIE expect the steel companies to hike prices by around October 2011, once the demand for steel from the industrial & infrastructural construction sector picks up. This will be to pass on the rise in input prices to the consumers. The steel industry has been suffering fall in profits for the last three quarters because of a sharp rise in prices of key points- iron ore and coking coal. With the Supreme Court banning iron ore mining from Bellary, Tumkur and Chitradurga districts of Karnataka, iron ore prices rose further to around USD 180 per tonne in August 2011. Prices of coking coal too remained high at around USD 315 per tonne. However, the steel companies could not pass on the burden of rising input cost to the consumers due to the seasonal fall in demand for the metal. Steel prices in China rose in August 2011, after falling for two consecutive months. CMIE believe that the international steel prices will also show an upward bias in the coming months, as the global demand for steel grows. The World Steel Association expects global consumption to grow by six percent in 2011. Finished steel production surged by 12.5 percent to 5.9 million tones in June 2011. This pushed up the growth in production during April-June 2011 to 7.8 percent. The major driver of this growth was Essar Steel. The company increased manufacturing capacity of its Hazira plant by 3.4 million tonnes per annum in March 2011, which enabled it to scale up output by 19.4 percent during April-June 2011. Tata steel and JSW Steel reported 3-5 percent rise in production. But, SAIL's output fell by 2.8 percent in the June 2011 quarters. CMIE expects steel production to continue to grow in the coming months, but at a slower pace than in June 2011. This is because the steel companies located in Karnataka are likely to face scarcity of raw material due to the ban imposed on iron ore mining in the State.

In spite of this, CMIE expect finished steel production to grow by 9.5 percent in 2011-12, slightly faster than the 8.9% growth clocked in 2010-11.

Exports up 52% in HI on engineering, petro items

	April-Sep, 2010	April-Sep, 2011	Growth (%)
Exports	105.3	160.0	52.0
Imports	176.4	233.5	32.4
Trade Deficit	71.1	73.5	-
	Sep, 2010	Sep, 2011	Growth (%)
Exports	18.2	24.8	36.1
Imports	29.6	34.6	17.0
Trade Deficit	11.4	9.8	-

No end in Sight to Steel Oversupply, price Slump

It is in itself some achievement that the country's steelmakers are able to engage their customers in discussions about price revisions of products for long-term contracts in the present difficult circumstances. This is because the initiative stands in rather sharp contrast to the scene in the northern hemisphere and China. In both regions, steel-makers are doing a few things to regulate production on anticipation of further fall in prices and their margins coming under increasing pressure. In spite of Western countries returning to work after a traditional holiday break for a month, global production in September, according to the World Steel Association (WSA), fell by 674,000 tonnes to 123.57 million tonnes (mt) over the previous month. This is the lowest since February, when world output was 118.36mt. What is a pointer to further disturbances in store is Chinese production contraction 3.5 percent in September to 56.7 mt, the lowest in seven months. Incidentally, September

marks the beginning of the peak steel consumption period in China. The Chinese economy grew 9.1 percent in the third quarter of 2011, nothing exception for the middle kingdom but absolutely exceptional by any other parameter. But this growth rate could not stop Chinese steel prices slumping to their lowest in 10 months. As demand remains weak, hot-rolled (HR) coils are selling at $648 a tonne (4,123 Yuan) and rebar finding application in construction at $675 a tonne. These prices may be at 10 months lows, but even then, Chinese steelmakers have braced themselves for further price fall.

The benchmark product HR coils are selling in the US and European markets at a discount of anything up to $250 over the April peak rates of $900 tonne. Observers will not rule out HR coils seeking still lower levels because of the domino effect of European Union's sovereign debt crisis, pursuit of tight monetary policy by major economies like china and India at the cost of growth and a global steel supply glut. What do we get to see in the West? In a falling market, steel buyers at the distribution sector, as is to be expected of them, are keeping their inventories low. Many are pressured by their banks to return the loan money. Steel no longer finds favour with banks. At the same time, US producers who till recently were not inclined to cut production and instead marked up spot prices of HR coils by $60 tonnes in August, are now inclined to sell the metal at discounted rates. They do not want to be left with bloated inventories. In the present market for steel and steelmaking raw materials, announcing another price rise by some midsized US mills is nothing but in this environment we see signs of improved demand. Here in our country, demand in the first half of 2011-12 grew disappointingly at 108 percent on a year-on-year basis. This falls considerably short of WSA forecast of Indian steel use rising 4.3 percent this calendar months to September, India's crude steel production was nearly 54mt, signifying an easy supply situation. Steel Secretary Mr. Pradeep Kumar Misra says by 2013-14, the country would have added 45 to 47 mt of new capacity. Mr. Misra and SAIL Chairman Mr. Chandra Sekhar Verma attribute the tepid demand growth till September to seasonal factors and they think this will get corrected as we go forward. Not everyone is, however, a taker of their optimism of a 9 to 10 percent demand growth happening this season. After all, the industrial growth rate between April and August was 5.6 percent, against 8.7 percent in the corresponding period of 2010-11. Perhaps the steel demand scene will get better once the 12th Plan, providing an investment of $1 trillion in infrastructure development is launched next year.

As the world, and Asia in particular, is deluged by steel, we are seeing reports of disappointing earnings by companies in Japan, South Korea and India. Dispirited by the economic outlook, a spokesperson for Posco says prices are likely to fall till the first half of next year. He is viewing the company's fourth quarter earnings to be the "worst this year." Meantime, slowing demand growth in the face of oversupply has led both Nippon Steel and rival JFE to downgrade their full-year outlook. The world's biggest steelmaker, ArcelorMittal, is trying to make the best of a bad situation by switching off blast furnaces (BFs) at several centers in Europe while trying to lift production at its low cost plants. Other mills, including many in China are advancing maintenance schedules to keep production down for the time being. Some are postponing the relighting of BFs, though repair work is complete. The situation has come to such a pass that falling prices of raw materials are not leading to any improvement in steel profit margins. Because it will be some time before steel has found its bottom.

Source: Business Standard

World Steel Forecast

The World Steel Association (WSA), a premier global steel industry body, in its annual meet in Paris on 12.10.2011. has cut India's Steel use growth forecast to 4.3% in 2011 to 67.7 million tons (MT) from the earlier projected 13.3% growth. The decline is largely attributed to the weakening economic environment. For 2012, the growth has been reduced to 7.9% from the earlier projection of 14.3%

The WSA has further forecast that global steel use will grow by 6.5% to 1.398 billion tonnes in 2011 against the earlier projection of 5.9% to 1.359 billion tones. This has been attributed to the present global economy uncertainty.

Source: Financial Express- 11.10.2011.

Coal imports down 7.5% in 2010-11

Coal imports are expected to have healthy pace. This was indicated by a double-digit growth in coal cargo traffic.

Even Indian Railway's freight traffic of coal rose by 11.6 percent to 37.2 million tonnes in July 2011. This indicates that sufficient amount of coal was made available to the major user industries (steel and power), which enabled them to post a healthy growth in output. In July 2011. The electricity generation from coal based plants rose by 10.7 percent. Coal production and imports for the specified period are as under:

	Coal Prod. (Index)	Coal Prod. (% chg.)	Coal Imports (Million tons)	Coal Imports (% chg.)
	Apr-Jul	Apr-Jul	Apr-May	Apr-May
2010-11	124.7	0.7	13.41	-1.2
2011-12	125.5	0.7	15.95	18.9
	Apr-Mar	Apr-Mar	Apr-Mar	Apr-Mar
2010-11	139.6	-0.3	69.91	-7.5

In 2010-11, Coal production in India had remained nearly flat. Delays in environment & forest clearances had taken a toll on coal production. Besides, the law & order problems faced by major coal producing states Jharkhand & Chhattisgarh- also impacted the growth in coal output. However, the situation is likely to improve in 2011-12. In 2011-12, Ministry of Environment and Forest (MoEF) is expected to review its policy over comprehensive Environment Pollution Index and go/non-go areas. This will enable the coal companies to raise their output. CMIE expect coal production to grow by 5 percent in 2011-12. Domestic production of coal is not sufficient to meet the rising demand from power, cement and steel industries. Hence, India relies on imported coal. Indian companies largely import coal from three countries-Australia, South Africa and Indonesia. Imported coal accounts for around 10-15 percent of the coal supply in India. In 2010-11, India's coal imports fell by 7.5 percent to 69.9 million tonnes. However, imports are exported to witness a sharp rise in 2011-12, on the back of higher demand from power and steel industry. CMIE expect coal imports to grow by 65 percent to 114 million tons in 2011-12.

Source – CMIE

Steel production – demand mismatch continues

A glaring mismatch between the steel demand and production continues in India. According to the data provided by the Joint Plant Committee, the government body that tracks steel metrics in India, steel production in the first six months of the year grew by 9.3 percent whereas demand rose by a mere 1.8 percent. The period of April-September saw the country producing a total of 34.79 million tonnes (mt) of steel as against 31.82 mt in the same period last year. The real consumption remained at 33.7 mt versus 33.1 mt last year, clocking a growth of a mere 1.8 percent. However, when compared on a moth-on-month basis, the steel production in the month of September was recorded at 5.73 mt as against 6.43 million tonne in August. The consumption, too, fell from 5.89 mt to 5.65 mt. An analyst tracking the steel sector said, "The steel production is impacted because of the iron ore situation in Bellary [Karnataka] and that is now showing in the numbers." JSW steel, which operates a 10 million tonne steel plant in Bellary, cut down its production to 80 percent capacity in September due to the shortage and later brought it further down to 30 percent. Many other steel plants in the region have also resorted to production cuts or complete shutdowns.

SAIL, Tata Steel and RINL- the three major steel makers in India – together posted a production growth of 2.9 percent with Tata Steel topping the chart with 11.1 percent growth in the first six months. RINL's production slipped by 5.5 percent whereas SAIL managed a dismal 1.1 percent growth. On October 14, Tata Steel said it sold 3.2 million tonne steel in the first half of the current fiscal as against 3.06 mt in the same period last year. Another analyst said the steel companies normally sold more steel during the second half of the year. "This will be the case even this year, but as the

economic sentiment is going down we don't expect them to sell close to the numbers of last year," he told *Business standard.*

SOURCE: Business Standard Oct. 2011

India may miss crude steel target

Mr Sushim Banerjee DG of Institute of Steel Growth and Development in an article wrote that India's elevation as a number two in the world from the latest rank of fourth in terms of crude steel production by 2013 seems to be a likely scenario. He said "Even assuming that the present recessionary trend continues in the West as well as in Japan and Russia, which would discourage any fresh steelmaking capacity to emerge in these countries, the capacity augmentation efforts in India would also not be a smooth affair."

He said "As per the available indications, India is likely to add 10 million tonne to 12 million tonne capacity by 2012 and another 10 million tonne to 12 million tonne, thus making a total of 98 million tonne to 102 million tonne by 2013." Mr Banerjee added "However, demand from major consuming segments like construction and other manufacturing and processing industries is rather subdued." He said "In addition, the latest mining Bill and land acquisition Bill have already sensitized the steel producers to an extent which can hardly be termed as investor friendly. Thus it would not be surprising if the slated capacity addition exercise is spilled over by another year or two, in which case the installed capacity by 2013 would be lower than projected."

He said "It may be recalled that in 2010, Japan actually produced 110 million tonnes of crude steel. During the first eight months of 2011, Japan has produced more than 72 million tonnes against India's 48 million tonnes. By 2013, Japan has projected a production level of 110 million tonnes of crude steel. Although domestic consumption in Japan would continue to be lower than 70 million tonnes in the next few years, Japan would strive to become a major exporter of steel products to the tune of nearly 40 million tonnes by 2013. Plants in US could produce 81 million tonnes of crude steel, which was merely 77% of total capacity in 2010." He said "The available indications suggest that US would achieve a crude steel capacity of more than 110 million tonnes by 2013. It appears that subdued domestic market is not a deterrent to higher capacity utilization of crude steel in Japan and US as both may emerge to become large exporters. This makes India's target of becoming number two a bit more challenging."

Source: Steel Guru

Enviro Friendly Iron Making in SME Sector

There are number of methods used for melting the metal in MSME sector. The environmentally friendly techniques for melting now a days is coke less cupola. The coke less cupola having same inner die as coke fired cupola is able to yield two times metal. No coke is used in coke less cupola therefore the inner workings of the furnace are different though they look similar from the outside.

In the coke less cupola there are gas-fired burners which provide the necessary heat to melt iron. Directly above the burners is a water cooled grate that bridges the vertical shelf which support both the weight of fresh solid metal and allow liquid metal to drip through and collect in the well below. Above the grate are many ceramic spheres known as the bed. Thus the bed is required to be super-heated by the burners and reflect heat into the metal as it melts to keep it molten. The iron is introduced at the top of the shaft onto the bed and when it melts and collects in the well it becomes easy to be tapped out as in a coke fired cupola.

The coke less cupola has further advantages over the conventional coke cupola. The waste gas has a low CO content and there is only 1% before dilution which means the maximum heat is being released to the metal compared with 12%to as high as 20% CO in' some coke operations which is a considerable loss to the process. Eliminating coke removes the major source of pollution and as there is no free oxygen in the coke less cupola metallurgical fume is formed. There are pros and cons to both methods (operationally) of iron melting but coke less cupolas are more fuel efficient, economical and environment friendly in MSME sectors.

SOURCE: Metal World

ArcelorMittal launches INR 4900 crore global cost saving plan

ET reported that amid global slowdown that is putting pressure on revenues, steel giant ArcelorMittal has embarked upon an asset optimization plan to save costs to the tune of about INR 4,900 crore by December 2012.

The Company's India spokesperson said that as per the plan, the world's largest steelmaker would move production from high cost plants to low cost plants across the world, adding that some blast furnaces will be kept idle while some other units will run at full capacity. The spokesperson added that "The blast furnaces lying idle will be restarted as and when local demand picks up. The shift in production from high cost facilities to low cost facilities give us the lowest cost footprint and will result in annualized cost saving of INR 4,900 crore by December 2012." Early this week, Company Chairman Mr LN Mittal had said in Paris that he remains cautiously optimistic about the growth in global steel demand in 2012 and pegged it to average between 4.75% and 5.25%.With a presence in more than 60 countries, the Company is a market leader in all major global carbon steel markets, including automotive, construction, household appliances and packaging. According to its website, the Company had produced 90.6 million tonnes in 2010, representing approximately 6 per cent of world steel output. The Company had also reported revenues of USD 78 billion in 2010. The spokesperson said that "The Company believes that steel demand is recovering and even though the Company remains cautious in its outlook, it remains fairly certain that the production will increase slightly this year and in 2012." The spokesperson said that "Moreover, the Company is looking at India and Brazil as its growth targets. This realignment does not impact our proposed investments in India. The country remains the growth target for us."

Source: Steel Guru

ArcelorMittal puts 12 MTPA Orissa steel plant on backburner

ET reported that perturbed over delays in getting necessary approvals and land acquisition issues, global steel giant ArcelorMittal is understood to have put its proposed 12 million tonnes steel plant in Orissa on back burner. According to Company sources, no progress has been made by the Company in the State in last one and a half years and at the moment the Company is focusing more on its plans for setting up steel units in Karnataka and Jharkhand. Only 8 gram sabhas meetings out of 15 required for land acquisition in Orissa has been conducted till first half of 2010 and the status remains the same, sources said. In 2006, ArcelorMittal had signed an MOU with the Orissa Government to set up a 12 million tonnes per annum steel plant in four phases at Keonjhar, entailing an investment of INR 50,000 crore. The MOU is due for renewal in December 2011. When asked whether project in Orissa was stalled, the Company's India spokesperson declined to comment.

Source: Steel Guru

India is immediate growth targets for ArcelorMittal - CEO

AFP quoted Mr LN Mittal CEO of ArcelorMittal as saying that India and Brazil are immediate growth targets for the world's largest steelmaker. He said that "We expect continued growth in steel consumption in the developing world. Immediate targets for ArcelorMittal's growth are India and Brazil." Mr Mittal forecast steel demand would continue growing in China, but added there was a significant, broad based growth in steel consumption beyond China as well. Analysts said that in the years ahead, emerging markets such as India, Brazil and China will continue to underpin steelmakers' profitability, thanks to fast paced urbanization and industrialization. ArcelorMittal has announced it will set up a USD 6.3 billion 6 million tonnes a year steel plant in the Bellary district of the southern Indian State of Karnataka.

Source: Steel Guru

JSPL's 2 MTPA steel plant to go on stream in June 2012

ET reported that Jindal Steel and Power Limited's 6 million tonnes per annum integrated steel plant and 1320 MW thermal power plant in Anugul district will be commissioned in June 2012. Mr Naveen Jindal MD of JSPL expressed concern over the delay in the finalization of coal linkage to the steel and power projects. The Company has not been able to develop the allotted coal block in Utkal B1 in Talcher in the absence of required statutory clearances. Mr Jindal told that "The progress at the Angul

steel project is going on very fast and the plant with a production capacity of 2 million tonnes will be commissioned in June 2012." The Company had signed a MOU with the State Government to set up a 6 million tonnes capacity steel plant in Angul district. The Company is also putting up a 1320 MW thermal power plant at Boinda in Angul district. Mr Jindal reiterated the Company's commitment to the proposed industrial park at Angul for which signing an MOU with the Government for the project is likely by next month end. Nevertheless, he clarified that everything would depend on the availability of land for the project. The company also has proposed to set up a coal to liquid project in Angul district which was cleared by the high level clearance authority of the State Government in May 2011. Jindal Synfuels limited, a JSPL group company will set up a CTL plant with a capacity of 80,000 barrels per day equivalent of key oil products such as diesel, naphtha and LPG.

Mr Jindal said that "The project is of much strategic importance because of the depleting crude oil reserves leading to volatile oil prices. The project will go a long way in ensuring energy security for the country. An MOU with the State Government is likely to be signed soon." TATA Steel in JV with South Africa based Sasol Synfuels (Pty) Ltd also has proposed to set up a 3.6 million tonnes per annum coal to liquid plant in Orissa. These two CTL plants, at an estimated cost of Rs 90,000 crore, are expected to come up by 2016 are first of its kind in the country. Both the mega projects envisage adoption of state-of-the-art Clean Coal Technology so that the carbon footprint will be drastically lower. The CTL overall process consists of three main sections namely Coal Gasification, Fischers Tropsch synthesis (liquefaction), and Product Up gradation. The pre-feasibility study for the project has been taken up. However, the location for the projects has not been finalized.

Source: Steel Guru

RAILWAYS TO ENHANCE STAINLESS STEEL COACH PRODUCTION

The importance of stainless steel coach has been well recognized by the Indian Railways. The Railways plan to switch over from indigenous ICF-design coaches to German Technology based LHB (Linke Hoffmann Bush) coaches in all mail and express trains in a phased manner within the next five years i.e. by 2016-17. LHB coaches are designed to minimize fire accidents, as they are equipped with fire retardant quality material and advanced couplers. This move is aimed at infusing more safety in train operations.

COACH PRODUCTION – SIGNIFICANT INCREASE IN STAINLESS COACH PLANNED

The Indian Railway is the largest single railway system in the world under a single owner – the Government of India. It has a fleet of 60,000 coaches, 64,000 route kilometers and 220,000 wagons. It carries 8 billion people a year, more than the total population of the world which is over 6 billion. Metro rail systems are separate and not included in the above numbers.

Out of the 60,000 coaches presently only 1,600 coaches are in stainless steel (LHB design). Current and next year plan of the railways to enhance the share of stainless steel coaches is given in the table below:

	2011-12	2012-13
Total Coach Production	3,650	3,800
Stainless Coach Production	320	800

A traditional ICF – design air-conditioned coach made of corten steel costs Rs. 1.5 crore each against stainless steel LHB coach costing Rs. 2.5-3.0 crores.

The modern coaches are more comfortable; have a longer life span of 35 years because of their high level of corrosion resistance against ICF's 25 years. LHB require much less maintenance, and also have a 12%-15% higher passenger capacity that can increase revenue. Railways are expecting to enhance production capacity of its coach factories to greatly increase LHB coach production in subsequent years.

It is planned to enhance stainless steel coach production through the following investments:

1. Rail Coach Factory, Raibareli, UP- Outlay Rs. 2,000 Crores (1,000 LHB coach per annum)

2. Rail Coach Factory, Palghat, Kerala- Outlay Rs. 1,000 Crores (600 LHB coaches per annum)
3. Expansion of Integral Factory, Chennai- Outlay Rs. 240 Crores (300 LHB coaches per annum)

In addition, significant investments will be made for new factories for manufacture of wagons (both stainless and carbon steel varieties) at five factories - Halida, Guwahti, Bardhman, Bhubneswar & Secunderabad; Electrical Multiple Units at Kacharapara, West Bengal; Diesel Multiple Units at Sankrail, near Kolkata; locomotives at Marhoura, and Madhepura in Bihar and rail axle at New Jalpaiguri. This is part of an overall plan of the Government of India to enhance infrastructure facilities. Severe constraints in infrastructure such as road, rail, water, electricity etc., are seen as the bottleneck pulling down the growth of the economy. Unlike indigenous ICF coaches, which are prone to capsize or climb on each other during collision, the LHB coaches do not get toppled. Apart from restricting the speed limit to 105 to 110 kmph on main line and Rajdhani tracks respectively, ICF coaches raise safety concerns due to a large hanging of under- gear parts.

Source: ISSDA
(Information extracted by Shri S C Suri, Chairman, Technical & Publication Cell)

TATA Group to focus on innovations - Mr Gopalakrishnan

Mr R Gopalakrishnan director of TATA Sons said that "In the last decade, the TATA Group had focused on global acquisitions. And since 2011, the TATAs have started promoting and encouraging innovations within the group companies." He was interacting with the media at the TATA Management Training Centre. The senior TATA Sons functionary said that the TATA Group Innovation Forum has been established to drive innovations. Mr Gopalakrishnan said that "TGIF has initiated a tool called innometer to measure and monitor new innovations in the group companies." The innometer, like a thermometer, assesses the innovation process and innovation culture of TATA Group of companies and helps design interventions. TGIF is using the innometer to encourage innovation in TATA companies. So far, the innometer has been used in about 25 TATA companies, mostly the large ones. To drive home the point that the group is promoting innovations, Mr. Gopalakrishnan said that the TATA Group has set up dare to try awards to recognize honest efforts by the group companies and managers, who have tried hard to innovate, but met with failure. Mr Ravi Arora VP of TATA Quality Management Services when the dare to try competition was started, not many TATA companies in India took part unlike the overseas TATA companies. He added that "But now about 90% of the applications that we receive for the competition are from the TATA companies based in India." According to him, TGIF organizes trips for the employees of TATA Group to see for themselves the functioning of the innovative companies across the world.

Source: Steel Guru

Survey of Induction Furnace Industry

As per JPC survey report on Induction Furnace – 2010-11, following observations have been highlighted

Total number of IF: 1047

Northern region leads with the maximum concentration (378 units) followed by West (271 units), South (225 units) and East (200 units).

Southern region has the maximum concentration of units with BIS license (53 units) followed by North (48 units), East (44 units) and West (14 units).

Total employment in the IF industry is 1,08,113, of which the largest share is of unskilled workers (47 percent), followed by skilled labour force (43 percent) while managerial team accounts for 10 percent only.

The survey shows that integration is yet to impact the Indian IF industry as only 121 units have reported presence of downstream operation, only 43 have upstream operation, presence of EAF is in only 37 units and secondary refining is limited to only 76 units in the country.

The survey shows that continuous casting is yet to make itself prominent in the overall operations in the Indian IF industry as only 162 units have reported presence pf casting facilities.

Annual capacity: 22.16 million tones and only 9 percent of the units in the Indian IF industry account for the largest share in total annual capacity (38 units).