

## SEMINAR ON BENCHMARKING FOR ENHANCING COMPETITIVENESS OF INDIAN STEEL PLANTS

The Delhi Chapter of IIM organised a Seminar on Benchmarking for Enhancing Competitiveness of Indian Steel Plants at India International Centre, New Delhi, on 15<sup>th</sup> September 2017.

At the outset Shri KL Mehrotra, Chairman, Delhi Chapter, welcomed the participants in the Seminar. He stated that Benchmarking is one of the effective tools for improving operative and strategic effectiveness in Steel



Sector. This calls for culture of new knowledge acquisition, learning from best practices and increasing technical competence by skill development.

The Seminar was coordinated by Shri PK Bajaj, Vice Chairman, Shri KK Mehrotra, Member Executive Committee and Shri RK Vijayavergia, Member, Executive Committee of Delhi Chapter.

Thirteen technical papers were presented in the Seminar.

The first paper was presented by Dr Rakesh Kulshreshtha, Former Executive Director, SAIL. In his presentation he touched upon the origin of benchmarking. He mentioned that benchmarking is a continuous process of measuring products, services



and practices against the toughest competitors or those companies recognised as industry leaders. He also talked about the operational definition of benchmarking. He stated about different kinds of benchmarking which are internal benchmarking, competitive benchmarking, functional benchmarking and generic benchmarking. Benchmarking mirrors the continuous improvement efforts that may already exist in an organisation.

The second paper was presented by Shri SK Roy, Secretary General, IIM. In his presentation he stated that if we have to be competitive in the Steel Market, we have to stay ahead in the world steel cost curve. He spoke about the operating efficiencies in iron and steel making operations by BOF



route vis-a-vis EAF route. The operating efficiencies areas covered were BF iron making, fuel rate, injection rate, agglomerate, BOF/EAF steel making, metallic charge, scrap rate, DRI rate and flux rate. He also touched upon the achievements of two world class large sized modern blast furnaces by Shougang.

Shri Prabhat Kumar Ghorui, Sr VP (TE, R & D, PDQC, Coal Planning), JSW Steel, talked about the energy conservation in steel industry. He stated that energy conservation in steel industry is crucial to ensure the competitiveness of the industry and to minimise environmental



impacts. There is huge potential of improving energy efficiency in iron and steel sector irrespective of limitations in the availability of quality of iron ore and coking coal in India.

Shri K Sudhakar, DGM(O)-EMD, RINL, Vishakapatnam, spoke about the Roadmap to achieve benchmarking in specific energy consumption at RINL. He informed that RINL is the first steel plant to get ISO 50001 certification for Energy Management. In his



presentation he touched upon the energy consumption variable in process route (BOF vis-a-vis EAF), ash content of coal and coke, coke strength after reaction, alumina in iron ore and sinter, level of energy conservation technology and energy efficiency in the generation of utilities(Power generation efficiency).



Shri Rajan Kumar of R&D Centre, NMDC Ltd. spoke on Benchmarking and Sustainability in Iron Ore Mining and Beneficiation.

Shri Manoj Sanyal of Tata Steel spoke about "Maintenance Approach towards Benchmark Effective Operating Hours at Blast Furnaces in Steel Jamshedpur. In his presentation he touched upon the



concept of measuring effective operating hours in blast furnaces. He also talked about maintenance strategy to increase effective operating hours in blast furnaces.

Shri Sandeep Maheshwari, Vice President, Jindal Stainless (Hisar) Ltd. presented a paper on Cost of Poor Quality: Link for improving cost competitiveness and reduce waste in Steel Industry. He talked about the elimination of certain costs in case a company produces products



and processes with perfection. He touched upon the traditional cost of poor quality in terms of wastages, rejects, testing costs, inspection costs and recall of products. Quantification of cost of poor quality was described by him in terms of sigma values 6 to 2. He also spoke about mapping of cost of poor quality in Steel Melting Shop, Hot Mills, Cold Rolling Complex, Finance, taxation and logistics.

Shri S K Chaurasiya, Jt GM, NMDC Iron & Steel Plant NMDC, spoke on Project Monitoring & Construction of Iron and Steel Plant at Nagarnar. He mentioned about the journey from Mineral to Metal at NMDC. In his presentation he talked about project monitoring and construction of



NMDC Iron and Steel Plant of 3.0 MT capacity at Nagarnar. He touched upon the salient features of the plant.

Shri Dipak Sangameswaran, Dy. GM (Sales & Marketing) of Paul Wurth India Ptd, talked about Benchmarking in Iron Making.



Shri Pankaj Kumar, GM (SMS II & CCS), Bokaro Steel Plant spoke about benchmarking for process improvement of steel making at Bokaro Steel Plant. In his presentation he spoke about Indian Steel Industry Scenario, Steel Making & Casting Facility at Bokaro Steel Plant, comparative study of major techno-economic parameters and areas of concern for improvement. He



also spoke about crude steel production and also production process in different countries. In his presentation he also indicated segment wise consumption of steel in India in 2015-16 and projected segment wise share in 2020-21.



Dr. Santosh Kumar, GM (Products) SAIL RDCIS Ranchi, spoke on Evolution of

## Special Steels in India.

Shri K Ranjan, DGM i/c MECON spoke about Benchmarking on the requirement of land, water and power for iron ore beneficiation and Pellet Plant of various capacities.



Shri K K Singh, Dy. Manager (O) SMS II, Rourkela Steel Plant, spoke about Benchmarking for improvements in steel making and continuous casting. Material flow chart at Steel Plant Shop II RSP was exhibited by him in his presentation. In his presentation he mentioned about improvements at Basic Oxygen Furnace, secondary steelmaking.



Continuous casting, increasing yield and caster throughput, prevention of breakdowns and making of value added products.





There was a lively question-answer session at the end of the Seminar.

Shri K K Mehrotra, Member, Executive Committee, delivered concluding remarks of the Seminar.

Shri R K Vijayaverdya, Member, Executive Committee, proposed vote of thanks.

The Seminar ended with presentation of mementoes to the speakers.

About 50 participants from various organisations attended the Seminar.