

Opening Address

Dr. J. J. IRANI

Vice President (Opns.)
Tata Iron & Steel Co. Ltd.



Hon'ble Minister for Steel & Mines Mr. N. K. P. Salve, Mr. Mody, Mr. Samarapungavan, Dr. Altekar, Dr. Dastur, Dr. Kumar, distinguished delegates and colleagues,

It is an honour and privilege indeed to deliver the opening address of this National Seminar on 'Problems & Prospects of Ferro Alloy Industry in India' which is being organised by the NML and the Iron & Steel Division of the IIM.

It is very appropriate that this Seminar is being held at the NML, who have done excellent work in the past 3 decades in all areas of ferro-alloy production technology. The Birefeo Electric Furnace, the Mineral Beneficiation Plant and the dedicated work of a band of metallurgists have all led to significant contributions in this field by the NML over the past so many years. The Ferro Alloy industry has a very vital role to play in supporting and ensuring the satisfactory performance of the Iron & Steel industry as well as the alloy steel industry.

The ferro-alloy industry in India has made spectacular progress in the past 25 years and today we have adequate capacities for the primary ferro-alloys like ferro-manganese, ferro-silicon and ferro-chromium not only to meet the entire demand of the country but also surplus for export. In addition, there are for certain ferro-alloys like ferro-vanadium, ferro-titanium and ferro-molybdenum we have sufficient capacity to meet a part of the country's demand and the balance has to be still imported. Further, substantial capacities are being created for charge chrome with three plants each of about 50,000 tonnes capacity, all these units being export-oriented. Ferro-manganese capacity in the country is 2,50,000 tonnes, ferro-silicon 75,000 tonnes and ferro chrome around 30,000 tonnes. Thus we have a very strong and well established base and the industry has proved itself by meeting the indigenous demands and recording excellent export performances in previous years. However, the past 2-3 years have been very difficult ones for this particular industry with the slackening of home demand and a substantial fall in the

exports both due to the recession in the steel industry and also due to constraints in inputs particularly power. That the industry has been very adversely affected would be evident from the fact that the ferro-manganese production last year was less than 60% of the capacity, ferro-silicon less than 55% and ferro-chrome may be even lower. The performance of the first 6 months of this year is no better and hence the position faced by the industry is rather grim. The Seminar of this type is, therefore, very opportune.

The bulk of the ferro-alloys have necessarily to be produced by the electric smelting route. Power is the primary basic input. Ferro-manganese requires 3,000 KW per tonne, ferro-silicon 6,000 and ferro-chrome 4,000 KW per tonne. Apart from the quantum, consistent and continuous supply of power is a must. Most of the ferro-alloy producers in the country have been severely affected by the power constraints in the last two years, a typical example being our own Ferro-manganese Plant at Joda where the previous year 1982-83 was the worst in its 25 years' history due to cuts and restrictions throughout the year. In fact for the entire year, full load power was available for hardly 27 days and at times even for the minimum levels of operation, power from Andhra Pradesh had to be purchased at more than double the normal rate. Capacity utilisation for 1982-23 was just 60% and the total value of production lost was nearly Rs. 6 crores. Other major producers particularly in Orissa also faced similar problems. Unlike the integrated steel plants, which to some extent, have installed captive power generation facilities, the ferro-alloy units cannot afford such major capital assets and hence assured power supply has to be made to them through the public utility services.

Because of the slackness in the indigenous demand and available surplus capacity, the industry should receive special export incentives. This is all the more necessary due to the rece-

ssionary trend in the International steel industry and the intense competition from ferro-alloy producers abroad. Generous export incentives are essential for the very survival of this industry at this juncture. Even though India has the largest deposits of manganese ores, the metallurgical grade of ore required for ferro-manganese production is rather limited and conservation measures assume importance. Here attention needs to be paid to the utilisation of fines, which today, are wasted. It is gratifying to note that one unit has gone in for a 50 tonnes per day capacity for sintering manganese ore fines based on the know-how developed at the Regional Research Laboratory Bhubaneswar but it would appear that the cost of beneficiated and sintered products could be almost 4-times that of the raw ore and this area needs further attention.

In the field of ferro chrome, the charge chrome units are a welcome addition though extremely capital intensive and their future will depend upon the export market as this product is exclusively used for the production of stainless steels through the AOD route.

The Indian coke is high in phosphorus but as charcoal is scarce it has to be used resulting in unsurmountable problems in the production of export quality ferro-alloys. Representations have been made to the Government to allow import of low ash coal or coke on a duty free basis exclusively for this purpose particularly for the export-oriented output. This is a rather important demand and I hope, it will receive Government's favourable consideration.

The development and use of micro-alloy, HSLA and other grades of steel have generated demands for the special ferro-alloys including ferro-niobium, ferro-vanadium and to some extent ferro-molybdenum. The import of ferro-niobium will, perhaps, be inevitable as no indigenous source for the raw-material is available. However, instead of ferro-molybdenum, we could use, as mentioned earlier, the tailings containing molybdenum sulphide from the

Uranium Corporation, properly roasted to get oxide. TISCO has done some experiments in this connection and we are happy to report that molybdenum can be added to steels through this route.

The NML has done commendable work making ferro-vanadium available in the country through its work on the recovery of vanadium pentoxide. Regarding special ferro-alloys where imports are inevitable, these should be restricted only to the concentrates so that smaller ferro-alloy producers could utilise the capacity to make the value added product and the consumer industries could also expect to get the products at a reasonable price.

I have briefly touched upon some of the problems faced by the industry. Once these are tackled, I am optimistic about the excellent prospects and potential for this industry. I am sure that reasonable concessions will be forthcoming from the authorities.

I thank the Hon'ble Minister for being with us today and also the other distinguished guests and participants and I am sure that the deliberations during these days would be extremely fruitful.

Thank you.