

Chairman's Summary — 2nd Session, Section 3

by T.E. KNIGHT*

Mr Rex Hooper outlined the development of the ferro-alloy industry in Australia and gave a most interesting review on optimum utilization of raw materials in manganese smelting. It is most appropriate for him to point out that smelting is dependent on the selection of suitable raw materials, accurate charge proportioning, and strict metallurgical control of furnace operation. He particularly stressed the importance of the removal of fines in modern large furnaces, while bearing in mind the beneficial utilization of fines and also manganese slags, in turn to produce silicomanganese. Alternatively, pelletizing, briquetting, or sintering of fines can be employed. It is highly important in the world of today that we should eliminate the wasteful attitude of earlier times, when fines and slags tended to be dumped. The conservation of all raw materials is very necessary.

We then had a paper, presented by Mr Coetzee, outlining the difficulties encountered in earlier times when operating small furnaces with inadequate knowledge behind us in a young country like South Africa. He drew attention to the more sophisticated and larger furnaces at present being installed, the necessity for a more intensive training of operators and maintenance personnel, and the care that has to be taken in ensuring preparation and particularly accurate batch weighing of raw materials. He correctly summed up his paper by referring to Amcor as today being not only the oldest ferro-alloy producer in South Africa, but also a major operator and one recognized for its largeness throughout the world.

Mr Arnesen's presentation on computerizing control of electric furnaces is of intense interest, since this is a subject that is widely discussed abroad. To date, furnace operators not only have had to cope with hard chores attaching to their duties, but also have had to watch variable time lags with all their complexities. It is extremely interesting to note that Elkem are now ready to deliver computerized control systems with future furnaces as a result of the comprehensive work they have carried

out to date in gaining a good basis for future improvements that can be incorporated. Mr Arnesen will, I feel, prove to be an ardent salesman of these computers — and this to our advantage.

Mr Westly pointed out in his paper that the heat distribution factor is just as essential as the correct fixed-carbon control balance, and put forward very interesting facts and figures. From past experience, many of us know that Mr Westly has made a very thorough study on a worldwide basis of all factors governing furnace operation.

Lastly, we had a very interesting paper presented by Mr Misawa of JMC. He points out how important it is that there should be more rationalization in our industry, and the establishment of a consolidated and closed system of manganese-alloy output will not only increase efficiency, but ease the burden that we face from pollution problems. A beneficial use of energy is of great importance in Japan and is naturally of interest to all of us.

I feel generally that it has been shown this morning that the ferro-alloy industry, similar to steel-making, is a harsh one in which there has to be a great deal of cooperation and hard work by all personnel. Not only is the process continuous, thereby to some extent disrupting family life, but very long hours have to be devoted to gain success. It is all the more important therefore that there should be due reward granted to our employees, while not overlooking the necessity of securing suitable return for our shareholders.

We shall also be burdened from now on by the heavy capital outlay and the running costs in which we will be involved to eliminate air pollution. Bearing in mind that most, if not all of us, are sold forward and that our aim is to remain competitive, we in South Africa wish to support the highest possible prices for our ferro-alloys in the interests of our country and, naturally, the industry as a whole throughout the world.

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