low success rate, and the sampler with the second highest tender price was considered to be the cheapest in normal production use owing to its best success rate.

Conclusions

There is no difference between sulphur analyses obtained on spoon samples and those obtained on lollipop samples from a hot-metal torpedo at the desulphurization station. At the deslagging station, a spoon sample has an insignificantly smaller silicon analysis, all the other analyses being the same.

Spoon sampling can be employed both at the desulphurization station and at the deslagging station.

Spoon sampling from a B.O.F. is practically possible. Aluminium-killed spoon samples have a lower phosphorus analysis than titanium-killed lollipop samples, as do lollipop samples with aluminium as deoxidant as opposed to titanium-killed lollipop samples.

When zirconium is used as deoxidant, the spectrometric analysis for sulphur in a steel sample is lower than that when titanium is used. Analysis by Leco carbon/sulphur analyser does not reveal any difference between such samples. Thus, it is concluded that the difference in the phosphorus and sulphur analyses are due to the effects of aluminium and zirconium deoxidants respectively on the spectrometric analyses.

Among the different types of lollipops available on the South African market, there are poor- and good-quality products. A sufficient amount of titanium deoxidant in a lollipop sample for end-point control is 0,006 g of deoxidant per gram of sample.

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Corrigendum: February Issue

Figs. 4 and 5 of the paper 'The analysis of ventilation and cooling requirements for mines' by J. van der Walt, E. M. de Kock, and L. K. Smith are positioned incorrectly in the February issue (*J.S. Afr. Inst. Min. Metall.*, vol. 83, no. 2, Feb. 1983). They should have been placed between pages 32 and 33 (and *not* between pages 36 and 37). The small type in these diagrams is not material to an understanding of the paper, their purpose being to give an idea of the approach adopted in the preparation of ventilation and cooling strategies.

Extractive metallurgy of zinc

At a professional development seminar to be held in Montreal (Canada) from 18th to 22nd April, 1983, specialists from industry and university will discuss the extractive metallurgy of zinc from ore to finished metal with special emphasis on the theory and practice of modern technology. Topics will include the mineral processing of zinc ores from conventional and complex sulphides, and the role of image analysis, on-line chemical analysis, and computer simulation in controlling milling practice. Although the pyrometallurgical recovery of zinc from concentrates or residues will be dealt with, the major emphasis will be on electrolytic processes. The Sherrit pressure-leaching process will be compared with conventional roast–leach methods, and the advantages of each discussed. The theory and practice of iron removal, including jarosite, goethite, and hematite processes, will be reviewed, and the critically important subject of solution purification will be discussed with reference to the control of cobalt, manganese, antimony, lead, chloride, fluorine, etc. Modern tank-house practice and instrumentation will be surveyed in the light of recent plant practice; automated stripping and handling of cathode deposits and the demand that automation makes on cell-room design and operation will also be dealt with. Environmental concerns, such as the control of mercury and arsenic, as well as residue disposal, will be examined. The course will conclude with lectures on the marketing of zinc (and zinc concentrates) and on future prospects for zinc.

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