SLAG FOAMING PHENOMENA IN PYROMETALLURGICAL PROCESSING OPERATIONS

R.I.L. Guthrie

Foaming phenomena can play an important role in determining the overall kinetics of slag based smelting operations. Low temperature simulations of ""direct steelmaking" processes were used to demonstrate that the superficial gas flowrates played a significant role in determining foam heights. It is concluded that BOF and similar refining systems where foaming slags are encountered, are governed more by inertial factors, than by viscous effects. A review of work to-date is discussed.