Sintering behaviour of adhering fines and nucleus particles

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ABSTRACT

Sinter quality and productivity are significantly influenced by the reactions occurring in the sintering bed. Formation of initial sinter melt from adhering fines and its interactions with coarse nucleus particles are the key sintering reactions. Hence understanding of these high temperature characteristics of iron ore is urgently needed. In the present study, lab scale tablet tests were carried out to examine the effect of adhering fines and nucleus particles from various ores on the characteristics of primary sinter melt formed and the structure and strength of the resultant analog sinters.