

Use of CPR Pellets as Metallised Feed to Minimise Coke Rate & Enhance BF Productivity

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Abstract

Indian steel industry is on the rising path aiming at an annual production of 200 million ton (mt) steel by the year 2020. The added capacity can be achieved by the new plants with modified blast furnace practice with minimum coke rate and high productivity. The paper highlights the use of Composite Pre Reduced (CPR) Pellets in blast furnace as a metallised feed to cut down the coke rate and increase the productivity. The CPR pellets are special type of Direct Reduced Iron (DRI) having 50% metallic iron produced by using waste iron ore and coal/coke fines in a cost effective manner. This development of CPR Pellets is significant in the present period in view of rising cost and non availability of coke in the world market. This is further more relevant to iron ore rich states of India like Orissa which pioneers in steel production and has maximum amounts of unused ore fines. The paper gives the salient features of CPR Pellet properties, its method of preparation and advantages of use.