

BOF Oxygen Consumption

Question

We are very happy with your articles enriching our knowledge in the area of steelmaking. Recently we have achieved a specific oxygen consumption of 48.7 Nm³/metric ton liquid steel in our BOF. What are the world bench marks for oxygen consumption in a BOF ?

V.P., India

Answer

In South America, BOF oxygen consumption is around 50 to 55 Nm³/metric ton liquid steel with 55 Nm³/metric ton liquid steel found in a shop using post combustion. In Europe, 52 to 55Nm³/metric ton liquid steel is the bench mark for BOF shops. While in the USA, 51 to 56 Nm³/metric ton liquid steel is the norm. Aim carbon, coke additions, waste oxide (or ore) all have a significant impact on oxygen consumption.

Many thanks for this answer provided courtesy of Praxair from Charlie Messina, Charlie_Messina@praxair.com, Roland Bury, Roland_Bury @ Praxair.com and James_Kelly @ praxair.com