

Hot Briquetted Iron

The Ideal Steelmaking Raw Material



THE USE OF HBI IN THE BOF

HBI is a manufactured product with guaranteed and consistent specifications.

HBI Provides an Optimal BOF Charge Due to:

- Low levels of residual elements.
- Bulk density of 2.8 tonnes/m³ is higher than any type of scrap.
- Same metallic yield as hot metal.
- More predictable mass and heat balances.

HBI — An Excellent Trim Coolant Due to the Following Characteristics:

- Free-flowing from overhead bins.
- Well defined physical and chemical properties.
- Maintains steel bath composition.
- Easily charged from overhead bins.
- Rapid penetration of slag.
- Reduces slag volume when used instead of fluxes.

Other Advantages:

- Protects bottom by feeding charge pad before scrap charge; therefore, less refractory damage occurs.
- Can be fed into charge pan to adjust final weight to avoid charge delays.



DEFINITION OF HBI

A compacted form of direct reduced iron (DRI) produced from iron ore fines, pellets, or lumps that are densified following reduction at a temperature greater than 650°C to have a density greater than 5.0 g/cm³, which makes it more resistant to reoxidation and fines generation.



HBIA MEMBERS

PRODUCER MEMBERS

COMSIGUA
CVG FERROMINERA ORINOCO
JSC LEBEDINSKY GOK
MATESI-MATERIALES SIDERÚRGICOS S.A.
ORINOCO IRON S.C.S.
QATAR STEEL
VENPRECAR C.A
VIKRAM ISPAT

TRADER MEMBERS

COMMODITIES AND MINERALS ENTERPRISE LTD.
DUFERCO S. A.
NATIONAL MATERIALS TRADING
SIMS METAL MANAGEMENT
SOJITZ CORP. OF AMERICA
STEMCOR UK LIMITED
THE DAVID J. JOSEPH CO.
TUBE CITY IMS LLC

ASSOCIATE MEMBERS

CLEVELAND-CLIFFS INC.
COMPANHIA VALE DO RIO DOCE (VALE)
COPAL, C.A.
KOBE STEEL LTD.
KÖPPER N GMBH & CO. KG
LKAB
MIDREX TECHNOLOGIES, INC.
OUTOTEC
PHOENIX BULK CARRIERS (US)
PROGRESS RAIL SERVICES
QUEBEC CARTIER MINING CO.
SAMARCO MINERAÇÃO S.A.
SHIP MANAGEMENT & TRANSPORT
SIEMENS VAI
TENNOVA HYL
TORVALD KLAVENESS GROUP

Visit www.hbia.org for more information.

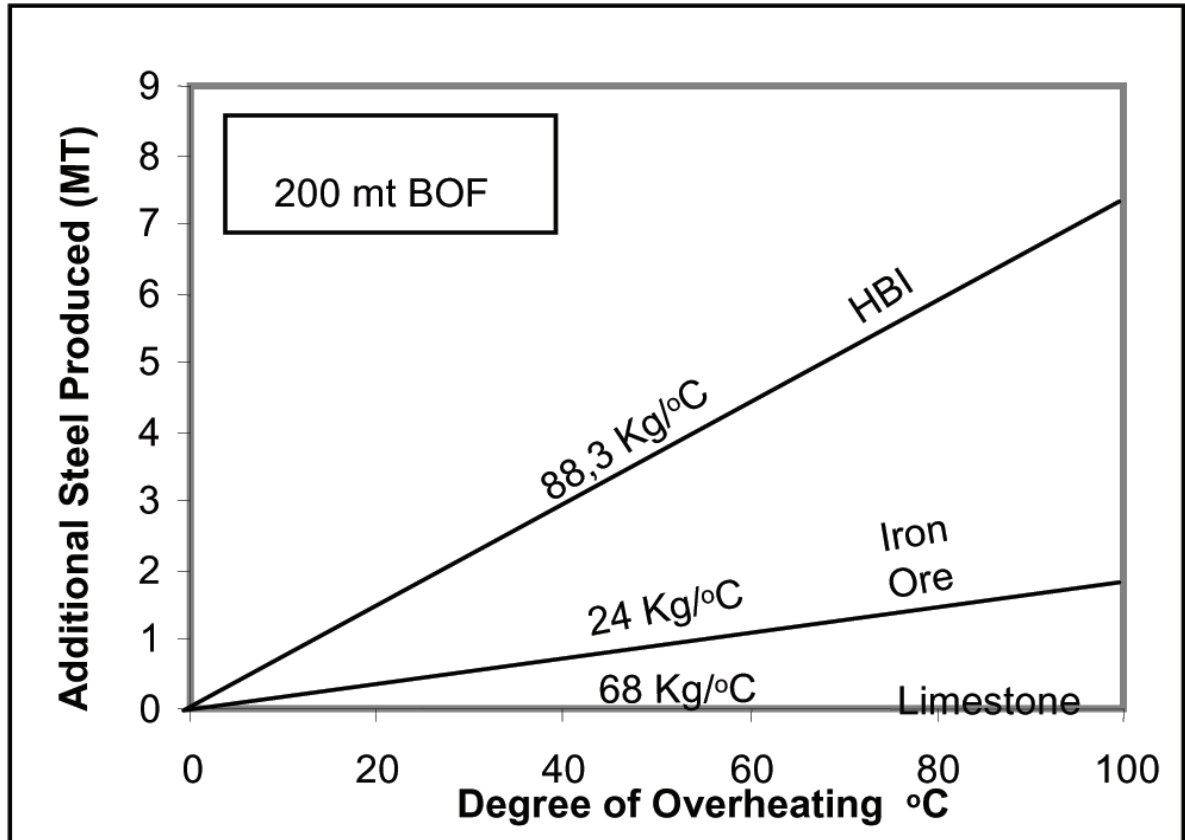


Hot Briquetted Iron

The Ideal Steelmaking Raw Material

Results of Charging HBI as Part of the Solid Charge Mix

ADDITIONAL CRUDE STEEL FOR DIFFERENT COOLANTS



The use of HBI as a part of the solid charge mix is recommended for the following situations:

- When the proportion of hot metal and scrap used results in overheating at the end of the blowing process (the use of HBI as a coolant produces the desired temperature without a cooling process).
- When the addition of fluxes or iron ore pellets is utilized to meet the energy balance (HBI can be used as a replacement).
- When the amount of hot metal needs to be increased.
- When scrap availability is an issue.
- When lower sulfur content of the charge material is required.
- When lower residual content is required.