

# BEACH IRON

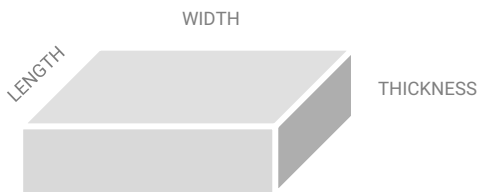


## Product Description

Beach iron is produced when high purity pig iron slabs are crushed into manageable shaped blocks. Due to its high carbon, low residuals and minimal slag content beach iron provides significant value to steelworks and grey iron foundries. Beach iron pieces vary in size but generally have a maximum thickness of 400 mm, a maximum width of 750 mm and a maximum length of 1200 mm or 750 mm (depending on the amount of processing requested).

## Physical Properties

Melting point	: 1100 to 1600 °C
Density	: approx. 7.8 ton/m <sup>3</sup> .
Bulk density	: 2.5 ton/m <sup>3</sup>
Average block weight	: 400 - 600 kg



## Packaging

The beach iron pieces are packed loosely into 20 ft containers. Container protection by means of plywood lining is available.

## Benefits

- Effective diluent capabilities, due to high purity and low gangue content.
- More affordable than regular pig iron with very similar benefits.
- High bulk density and consistent shape increase handling, loading (higher charge density) and storage efficiency.
- Reduced energy consumption in induction furnaces due to higher electrical efficiency.
- High density and high carbon content improve melting rates due to chemical energy contained in dissolved carbon resulting in less energy required in an EAF than when adding recarburiser to scrap.
- Savings as high as 50kWh/t of molten metal can be seen in electric arc furnaces.
- Decreased electrode usage and increased furnace lining life.
- Lower surface to volume ratio resulting in lower oxide formation and slag volumes and higher metallic recoveries.
- Increased ability to charge cheaper low-density scrap when combined with beach iron in a melt.
- Typical basic pig iron has a phosphorous content 4 to 6 times higher than ML beach iron.
- Predictable mass and heat balances, and known consistent chemistry certified by analysis.

## Typical Metal Analysis (weight %)

Element	C	Mn	S	P	Si	Cu	Cr	Fe
Typical Analysis	2.5 - 4	0.1	0.05 - 0.12	0.02	0.5	>0.01	0.03	94 - 97

MSDS available on request



 [info@mineral-loy.co.za](mailto:info@mineral-loy.co.za)  [www.mineral-loy.co.za](http://www.mineral-loy.co.za)  Tel: (+27) 011 802 4050  Fax: (+27) 011 802 4195

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