

SILICON CARBIDE METALLURGICAL

1 PROPERTIES

It is an excellent substitute of the Ferro Silicon, as an alloy or deoxidizing, due with this product can be reduced the content of iron oxidize in the slag and in the metal, reducing the formation of iron silicon in the refractory walls, with which can be achieved an increase in the refractory life up a 30%, has other benefits as the following:

- ▶ Acts as **inoculant**, so required fewer inoculant in the ladle.
- ▶ As source of Coal is characterized by low **sulphur content**.
- ▶ Each 100 kg of SIC Met. provide 61.6 kg and 30 kg of Coal, saving this quantity from its normal amount of coal source..
- ▶ It is **exothermic** when is added to molten metal.
- ▶ Increases the **graphite centers** in the nodular iron as well as in the malleable and in the gray iron promotes the **graphite type "A"**.
- ▶ The Metallurgical silicon carbide **reduces the generation of slag up to 35%**, the remaining slag will be thicker, more dry, clotted and will be eliminated easier from the oven avoiding that could be dragged in the subsequent stages of the process.
- ▶ Reduces the **base "chill"** and makes it considerably more stable, reduced the tendency to shrink and improve the machinability.
- ▶ As a source of silicon, is characterized by its **low aluminum content**.

2 TYPICAL CHEMISTRY

SiC	Min. 85% (88% average)
Si	61.6% min.
Si + SiO ₂ libre	2.2 to 5.6%
C	28.4% min.
Fe ₂ O ₃	0.2 to 0.6%

3 PHYSICAL PROPERTIES

Cristaline Structure	Alpha in the hexagonal and rhombohedral class
Knoop Hardness	2,480
Mohs Hardness	9.2
Specific Gravity	3.20 gr/cm ³

4 SPECIFICATIONS / NORMS

Spec's: Micro Spec's

5 SIZE

Grit Size 0 x 10 mm

Typical grit size	VR
4	20.3
10	19.9
20	23.2
50	20.3
100	7.5
FINES	8.8

6 PACKAGING

25 kg. paper bags, 1 metric ton Super Sacks in wood pallets with stretchable plastic.