SILICON CARBIDE BRIQUETTES

PRODUCT DESCRIPTION

Silicon Carbide briquettes are produced for use in cupola melted gray and ductile base iron for the purpose of introducing silicon and carbon to the iron. The advantage silicon carbide holds over ferrosilicon products is the addition of a carbon component which may provide carbon units to the iron and/or reduce cupola coke requirements. The reduction in coke may in turn lead to increased melt rate.

American Colloid silicon carbide brick products are produced with metallurgical grade silicon carbide and lower grade by-products of high-grade production. The Free carbon component is graphitic in nature. Metallurgical breeze of other coke by-products are not utilized for free carbon additions.

All production is analyzed in-house for silicon carbide and total and free carbon content. Certificate of analysis is provided with each shipment.

TYPICAL CHEMICAL COMPOSITION

Product	Silicon Carbide	Total Carbon	Free Carbon	Binder
80% SiC	80% +/- 3%	28% Typ.	4 – 5%	10 – 12%
65% SiC	65% +/- 3%	30% Typ.	8 – 10%	10 – 12 %
36% SiC	36% +/- 2%	36% Typ.	24% Typ.	10 – 12%

In addition to the above standard products, custom formulations may be produced to meet specific individual requirements upon request.

SIZING

Brick Type	Dimensions	Product Weight (Typ.)
3” Solid Slab	3” x 8” x 16”	25 # +/- 2 #
4” Segmented Slab	4” x 8” x 16”	30 # +/- 2 #
4” Bulk Cylinder	4” dia. X 4” H	4 # +/- ½ #
5” Bulk Oval	2” x 3” x 5” H	3 # +/- ½ #

Slab bricks are packaged on pallets; 135 units per pallet and stretch-wrapped. Bulk products may be shipped in bulk, in supersacks, or in pallet boxes. The above represent standard sizes. Other shapes are available. Please consult your ACC representative for specifics.

USES

The products described in this bulletin may be used in any cupola melting operation. In order to affect the highest degree of efficiency, it should be determined that molten metal temperatures at the iron dam are in excess of 2730 $^{\circ}$F. Silicon carbide dissolves rather than melts, and it has been shown that elemental recoveries from silicon carbide begin diminishing when iron dam temperatures drop below this level.

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