

# UCAR<sup>®</sup> Refractory Systems

## CJR<sup>™</sup> Graphite

Graphite for blast furnace linings, hearth, stack, cooling course, bosh, and side wall blocks. Features excellent thermal conductivity, high density, good strength, and excellent machinability.

## CBY<sup>™</sup> Graphite

Low ash and low iron graphite for blast furnace linings, hearth, stack, cooling course, bosh, and side wall blocks. Features excellent thermal conductivity, high density, high strength, and excellent machinability.

## CS<sup>™</sup> Graphite

Low ash and low iron graphite for blast furnace linings, hearth, stack, bosh, tuyere, tapholes and side wall blocks. Features excellent thermal conductivity, high density, high strength, and excellent machinability. Through additional processing steps, CS<sup>™</sup> Graphite has higher density, strength, and thermal conductivity than CBY<sup>™</sup> Graphite.

## CSX<sup>™</sup> Graphite

Low ash and low iron graphite for blast furnace linings, hearth, stack, cooling course, bosh, and side wall blocks. Features excellent thermal conductivity, high density, high strength, and excellent machinability. As a result of additional process steps, CSX<sup>™</sup> Graphite has higher density, strength, and thermal conductivity than CS<sup>™</sup> Graphite.

Properties listed are typical and cannot be used as accept/reject specifications.

CJR <sup>™</sup> KEY PROPERTIES	Typical Average
Bulk Density (g/cm <sup>3</sup> )	1.63
Crushing Strength (MPa) (AG)	16
Thermal Conductivity (W/mK) (WG)	150
Ash (%)	.20

CBY <sup>™</sup> KEY PROPERTIES	Typical Average
Permeability (millidarcys)	130
Bulk Density (g/cm <sup>3</sup> )	1.63
Crushing Strength (MPa) (AG)	30
Thermal Conductivity (W/mK) (WG)	140
Ash (%)	.10

CS <sup>™</sup> KEY PROPERTIES	Typical Average
Permeability (millidarcys)	70
Bulk Density (g/cm <sup>3</sup> )	1.71
Crushing Strength (MPa) (AG)	42
Thermal Conductivity (W/mK) (WG)	160
Ash (%)	.10

CSX <sup>™</sup> KEY PROPERTIES	Typical Average
Permeability (millidarcys)	30
Bulk Density (g/cm <sup>3</sup> )	1.76
Crushing Strength (MPa) (AG)	52
Thermal Conductivity (W/mK) (WG)	175
Ash (%)	.11