

# TECHNICAL INFORMATION

Since 1886, UCAR Carbon Company has been supplying quality carbon and graphite products, skilled technical service, and experienced application assistance worldwide.

## UCAR<sup>®</sup> Grade NMS Hot-Pressed Semigraphite Brick with Silicon Carbide RPD-95

September, 1995

**Description:** Hot-Pressed semigraphite brick with silicon carbide addition for the blast furnace boshes, belly, and stack. Features thermal conductivity similar to Grade NMD, but with lower permeability-micropore structure, higher strength, and oxidation resistance.

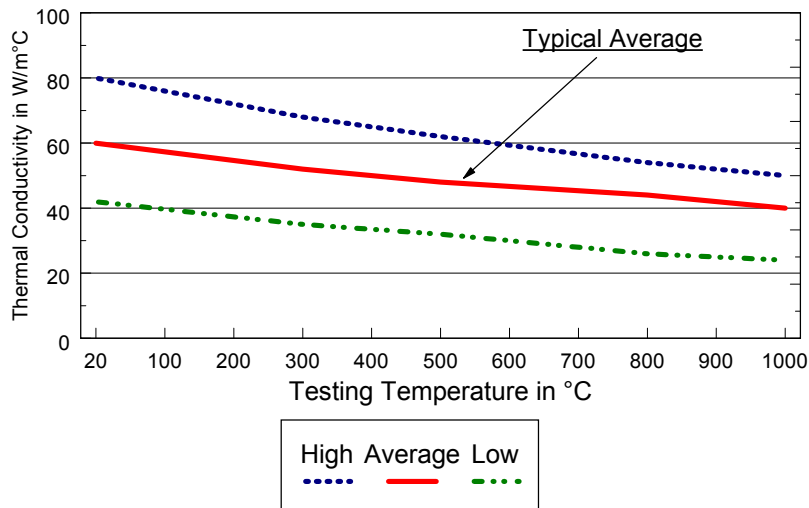
### ESSENTIAL PROPERTIES

	Typical Average	Min./Max. Order Avg.	Min./Max. Individual Sample	Comparable ASTM Test Procedure
Bulk Density (gm/cc)	1.86	1.84	1.78	ASTM C559
Crushing Strength (kPa) (AG)	35000	31000	27000	ASTM C133
Ash (percent)	17	19	23	ASTM C561
Permeability (m <sup>3</sup> darcy's) (WG)	3	5	10	ASTM C577

### INFORMATIONAL PROPERTIES

Porosity (percent)	16			ASTM C20
Reheat (at 1000°C) (Essentially Volume Stable)	±0.1%			ASTM C113
Thermal Conductivity (W/m <sup>2</sup> K) (WG) @ 20°C	60	55	40	ASTM C714

### THERMAL CONDUCTIVITY RANGE VS. TEMPERATURE OF NMS BRICK AS MEASURED BY THE LASER METHOD



**GRAFTech**

UCAR CARBON COMPANY INC.

A GrafTech International Ltd. Company

P.O. Box 218, Columbia, TN 38402-0218

Tel: (800) 934-8227 or (931) 380-4348

Fax: (931) 380-4308

This information is not to be taken as a warranty or representation for which we assume legal responsibility nor as permission or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation and verification.

85CP7101 0395