



Material Specification Sheet

Acicular Nodular Cast Iron

PBN 715

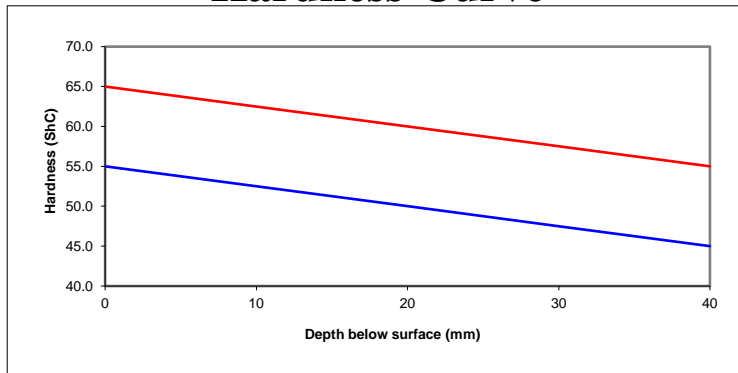
A Cr-Ni-Mo alloyed iron containing nodular graphite and carbides in a pearlitic-bainitic matrix.

The carbide content is dependent on the alloy content and produces a good wear resistant structure.

Chemical Composition

	C	Mn	Si	P	S	Ni	Cr	Mo	Mg		
Min	3.10	0.30	1.20	0.000	0.000	2.20	0.20	0.20	0.04		
Max	3.60	1.00	2.00	0.100	0.100	3.60	0.90	0.90	0.08		

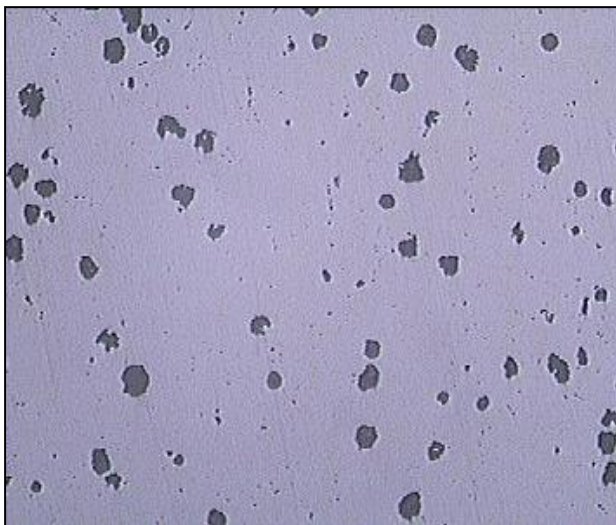
Hardness Curve



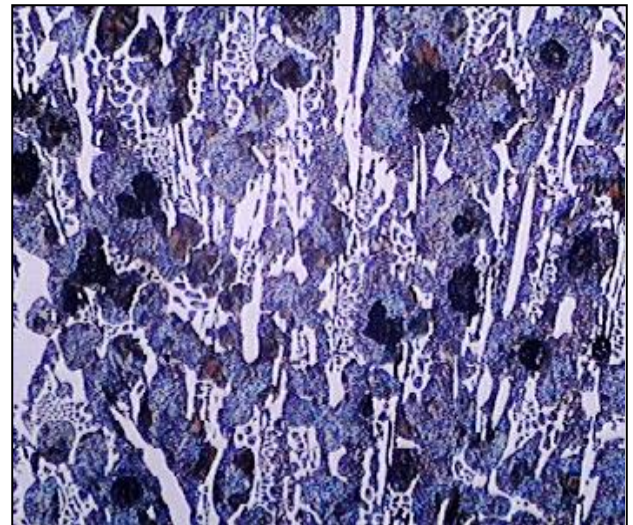
Physical Properties

Tensile Strength (tensile test rod B12x60 DIN 50125)	500 to 600 MPa
Bending Strength (Bending test 10 at DIN 50110)	900 to 1200 MPa
Impact strength (ISO-V Test piece, DIN 50115)	2.5 to 3.5 J
Percentage elongation (after fracture)	< 0.5 %
Alternating tensile - compression strength	100 to 170 MPa

Microstructure



50 X - Graphite unetched



100 X - etched

Nov-11