



Material Specification Sheet

Alloy Cast Steel

AS 701

A Cr-(Ni)-(Mo) alloyed steel with a pearlitic-bainitic matrix.

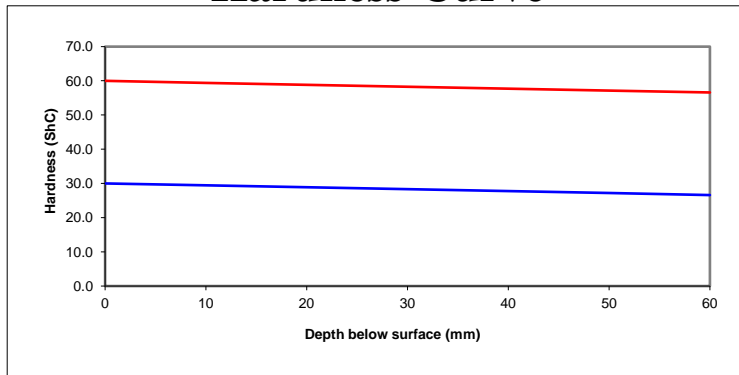
Material is recommended for heavy duty applications where high strength and good fire crack resistance is required.

Depending on the chemical composition and heat treatment it will have excellent wear and high mechanical properties.

Chemical Composition

	C	Mn	Si	P	S	Ni	Cr	Mo			
Min	0.50	0.30	0.20	0.000	0.000	0.00	0.70	0.00			
Max	1.40	1.40	1.00	0.100	0.100	1.80	2.20	0.50			

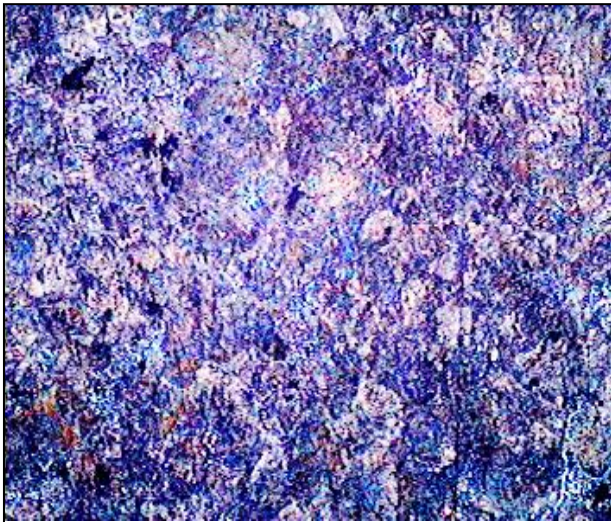
Hardness Curve



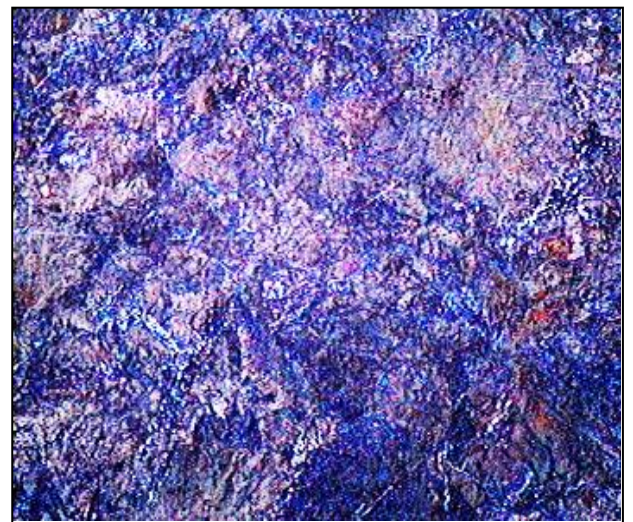
Physical Properties

Tensile Strength (tensile test rod B12x60 DIN 50125)	400 to 950 MPa
Bending Strength (Bending test 10 at DIN 50110)	850 to 1250 MPa
Impact strength (ISO-V Test piece, DIN 50115)	1.5 to 8.0 J
Percentage elongation (after fracture)	< 1 %
Alternating tensile - compression strength	150 to 220 MPa

Microstructure



100 X



200 X

Nov-11