



Material Specification Sheet

Alloy Cast Steel

AS 705

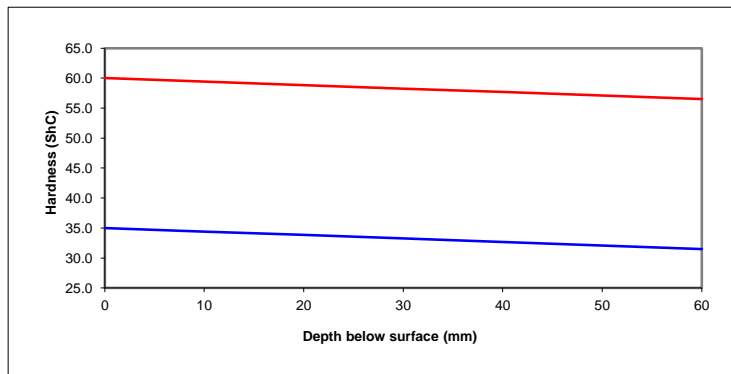
**A Cr-Ni-Mo alloyed steel with good wear properties consisting of a pearlitic matrix.
The amount and distribution of carbides in the matrix depends on the
carbon content and heat treatment.**

This material has a high strength and is spall resistant.

Chemical Composition

	C	Mn	Si	P	S	Ni	Cr	Mo			
Min	1.00	0.60	0.40	0.000	0.000	0.30	0.50	0.10			
Max	2.00	1.20	1.00	0.100	0.100	1.60	1.60	0.60			

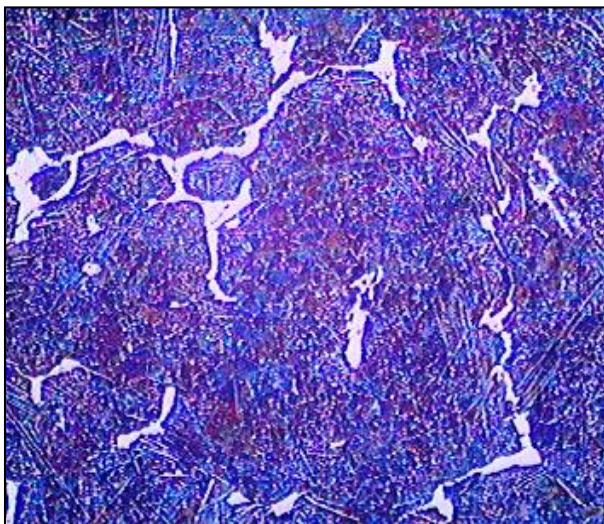
Hardness Curve



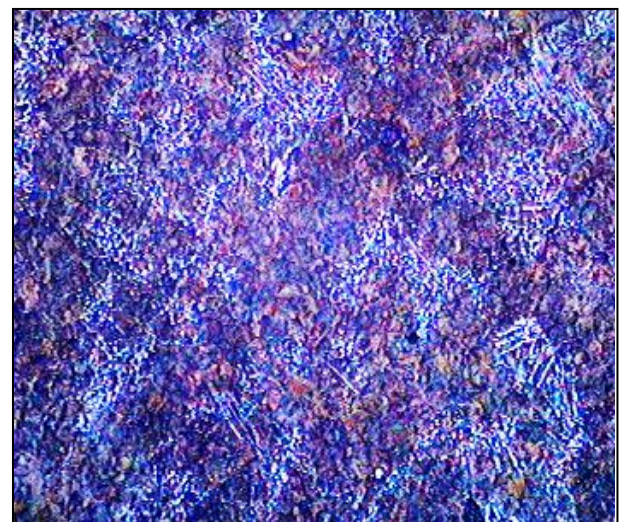
Physical Properties

Tensile Strength (tensile test rod B12x60 DIN 50125)	400 to 600 MPa
Bending Strength (Bending test 10 at DIN 50110)	600 to 1200 MPa
Impact strength (ISO-V Test piece, DIN 50115)	1.5 to 4.0 J
Percentage elongation (after fracture)	< 1 %
Alternating tensile - compression strength	150 to 220 MPa

Microstructure



100 X



200 X

Nov-11