

Material Standards : Special Alloy Iron castings for Floating Seals - Type B (Ni-Hard) White Cast Iron

SAP PARTS/QA

27/10/2014

Revision: 00

Material Standards

Scope :

This standard is typically for Special Cast Iron Castings used to produce Floating Seals. SRM 002 (Type -B) Ni0Hard or White Cast Iron.

Chemical Properties:

The chemical composition shall confirm the extent of elements as mentioned in the table below:

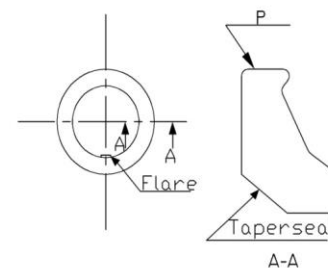
Chemical Composition %								
C	Si	Mn	P	S	Cr	V	Mo	Ni
3.0	0.4	0.3	0.3 Max	0.1 Max	1.2	0.3	0.4 Max	3.5
-	-	-			-	-		-
3.6	0.7	0.9			1.7	0.6		4.3

Mechanical Properties:

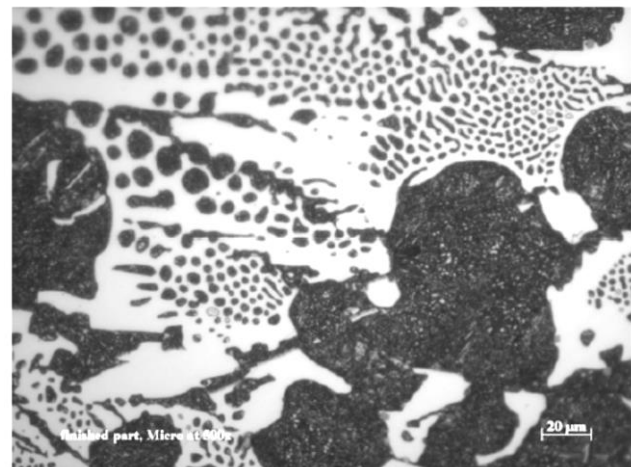
Modulus Of Elasticity	N/mm ²	>150,000 N/mm ²
Coefficient Of Thermal Expansion	10 ⁻⁶ M/m°C	
20-100 °C		8.1-9.0
20-200 °C		11.5-11.9
20-400 °C		12.2-12.8
Specific Gravity	Kg/m ³	7.7-10 ³

Hardness :

- a) 57-64 HRc Hardness shall be measured at P.



Microstructure :



The microstructure should be M3C consisting of cementite and transformed leadubrite.