



## Material - STAS 20 VNiMoCr 120

### Standard Specification for Heat Resisting Steels

Group - Ferrous Stainless Steel Alloys

Sub Group - STAS 20 VNiMoCr 120 Heat Resisting Steels

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.170 - 0.230	Annealing or Hardening + Tempering	
Silicon	Si %	0.100 - 0.500		
Manganese	Mn %	1.200 max.		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	10.000 - 12.500		
Nickel	Ni %	0.300 - 0.800		
Molybdenum	Mo %	0.800 - 1.200		
Vanadium	V %	0.250 - 0.350		
Copper	Cu %	0.300 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa - Yield Strength in Mpa - Elongation in % - Reduction of Area in % - Hardness in BHN - Impact in Joule -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4935	DIN	Germany	Casting
SUH 616	JIS	Japan	Bar and Wire
422	AISI	USA	Bar, Wire, Shapes and Forging
S 42100	UNS	USA	Casting
X 20 CrMoWV 12-1	DIN	Germany	Casting
A176 Type 422	ASTM	USA	Plate, Sheet and Strip
A743 CA28MWV	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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