



## Material - JIS SUH 616

### Standard Specification for Heat Resisting Steel Bars

Group - Ferrous Stainless Steel Alloys

Sub Group - JIS SUH 616 Heat Resisting Steel Bars

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

Grade Belongs to the Industry - Bar and Wire

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 - 0.250	Annealing or Hardening + Tempering	
Silicon	Si %	0.500 max.		
Manganese	Mn %	0.500 - 1.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	11.000 - 13.000		
Nickel	Ni %	0.500 - 1.000		
Molybdenum	Mo %	0.750 - 1.250		
Vanadium	V %	0.200 - 0.300		
Tungsten	W %	0.750 - 1.250		
Copper	Cu %	0.300 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	880 min.
-	-	-	Yield Strength in Mpa	735 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	25 min.
-	-	-	Hardness in HB	37 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4935	DIN	Germany	Casting
422	AISI	USA	Bar, Wire, Shapes and Forging
20 VNiMoCr 120	STAS	Romania	Casting
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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