

## Material - AISI 422

## **Standard Specification for Stainless and Heat Resisting Steels**

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - AISI 422 Stainless and Heat Resisting Steels

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Bar, Wire, Shapes and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 - 0.280		
Silicon	Si %	1.000 max.		
Manganese	Mn %	0.500 - 1.000	Annealing or Hardening + Tempering	
Phosphorus	Р%	0.030 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	11.000 - 12.500		
Nickel	Ni %	0.500 - 1.000		
Molybdenum	Mo %	0.900 - 1.250		
Vanadium	V %	0.200 - 0.300	Mechanical Properties	
Tungsten	W %	0.900 - 1.250	Tensile Strength in Mpa	965 min.
Iron	Fe %	Balance	Yield Strength in Mpa	760 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	24 min.
-	-	-	Hardn <mark>ess in BH</mark> N	248 min.
-	-	-	Impac <mark>t in Joule</mark>	26 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
1.4935	DIN	Germany	Casting	
SUH 616	JIS	Japan	Bar and Wire	
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

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