



## Material - UNS S 42020

### Standard Specification for Martensitic Chromium Stainless Steel Casting

Group - Ferrous Stainless Steel Alloys

Sub Group - UNS S 42020 Martensitic Chromium Stainless Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment			
Carbon	C %	0.150 min.	Annealing or Hardening + Tempering			
Silicon	Si %	1.000 max.				
Manganese	Mn %	1.250 max.				
Phosphorus	P %	0.060 max.				
Sulphur	S %	0.150 min.				
Chromium	Cr %	12.000 - 14.000				
Molybdenum	Mo %	0.600 max.				
Iron	Fe %	Balance				
-	-	-	<b>Mechanical Properties</b>			
-	-	-			Tensile Strength in Mpa	690 min.
-	-	-			Yield Strength in Mpa	485 min.
-	-	-			Elongation in %	12 min.
-	-	-			Reduction of Area in %	-
-	-	-			Hardness in HB	262 max.
-	-	-			Impact in Joule	-
-	-	-			-	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
420F	AISI	USA	Bar, Wire, Shapes and Forging
A895 Type 420F	ASTM	USA	Plate, Sheet and Strip
A959 Type 420F	ASTM	USA	Bar, Wire, Shapes and Forging
A 582 Type 420F	ASTM	USA	Bar and Forging
SUS 420F	JIS	Japan	Bar and Forging
J9154	UNS	USA	Casting
A743 CA40F	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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