



## Material - ASTM A890 22Cr5NiMoN

**Standard Specification for Castings, Iron-Chromium-Nickel-Molybdenum Corrosion-Resistant, Duplex (Austenitic/Ferritic) for General Application**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A890 / A890M Iron-Chromium-Nickel-Molybdenum Corrosion-Resistant, Duplex (Austenitic/Ferritic) for General Application**

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

**Grade Belongs to the Industry - Casting**

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	21.000 - 23.500		
Nickel	Ni %	4.500 - 6.500		
Molybdenum	Mo %	2.500 - 3.500		
Copper	Cu %	1.000 max.		
Nitrogen	N %	0.100 - 0.300		
Iron	Fe %	Balance	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	620 min.
-	-	-	Yield Strength in Mpa	415 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A995 4A	ASTM	USA	Casting
J92205	UNS	USA	Casting
A240 UNS S31803	ASTM	USA	Steel, Sheet, Plate and Strip
A240 UNS S32205	ASTM	USA	Steel, Sheet, Plate and Strip
CD3MN	ASTM	USA	Casting
4A	ASTM	USA	Casting
H10C	AS	Australia	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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