

## Material: ASTM A890 4A

### 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	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>620 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>415 min.</td> </tr> <tr> <td>Elongation in %</td> <td>25 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		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	-
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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
22Cr5NiMoN	ASTM	USA	Casting
CD3MN	ASTM	USA	Casting
-	-	-	-

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