

## Material: ASTM A890 1C

### 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 %	1.100 max.																
Manganese	Mn %	1.200 max.																
Phosphorus	P %	0.030 max.																
Sulphur	S %	0.030 max.																
Chromium	Cr %	24.000 - 26.700																
Nickel	Ni %	5.600 - 6.700																
Molybdenum	Mo %	2.900 - 3.800																
Copper	Cu %	1.400 - 1.900																
Nitrogen	N %	0.220 - 0.330																
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>690 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>450 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	690 min.	Yield Strength in Mpa	450 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 1C	ASTM	USA	Casting
J93373	UNS	USA	Casting
A240 S32205	ASTM	USA	Plate, Sheet and Strip
A276 S32205	ASTM	USA	Bar and Shape
A988 S32205	ASTM	USA	Casting
J92205	UNS	USA	Casting
Z3CNUD26.5M	AFNOR NF	France	Casting

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