



## Material - BS 10213 EN 1.5636

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - BS 10213 Steel Castings for Pressure Purposes

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Carbon	C %	0.060 - 0.120	Normalising or Annealing or Hardening + Tempering															
Silicon	Si %	0.600 max.																
Manganese	Mn %	0.500 - 0.800																
Phosphorus	P %	0.020 max.																
Sulphur	S %	0.015 max.																
Chromium	Cr %	0.300 max.																
Nickel	Ni %	2.000 - 3.000																
Molybdenum	Mo %	0.200 max.																
Copper	Cu %	0.300 max.																
Vanadium	V %	0.050 max.																
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>480 - 630</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>280 min.</td> </tr> <tr> <td>Elongation in %</td> <td>24 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>27 min. @ -70°C</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	480 - 630	Yield Strength in Mpa	280 min.	Elongation in %	24 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	27 min. @ -70°C
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
20 N 8	AFNOR NF	France	Steel
24 Ni 8	DIN	Germany	Steel
G 9 Ni 10	EN	European Union	Casting
SCPL 21	JIS	Japan	Casting
G9Ni10	UNI	Italy	Casting
J22501	UNS	USA	Casting
AH 60	MSZ	Hungary	Steel

**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)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.