

### Material - EN 1.5638

# Standard Specification for Steel Castings for Pressure Purposes; Steel Grades for Use at Low Temperatures

#### **Group - Ferrous Mild Steel Alloys**

Sub Group - EN 1.5638 Steel Castings for Pressure Purposes; Steel Grades for Use at Low Temperatures 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		
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.500 - 0.800	Normalising + Tempering or Hardening + Tempering	
Phosphorus	Р%	0.020 max.		Hardening + Tempering
Sulphur	S %	0.015 max.		
Nickel	Ni %	3.000 - 4.000		
Iron	Fe %	Balance		
-	-	-		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	500 - 650
-	-	-	Yield Strength in Mpa	360 min.
	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardne <mark>ss in BHN</mark>	-
-	-	-	Impa <mark>ct in Joule</mark>	27 @ J RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
SA-352 Grade LC3	ASME	USA	Casting	
1.5638	DIN	Germany	Casting	
J31550	UNS	USA	Casting	
503-490	BS	British	Forging	
AM8Ni14	UNE	Spain	Casting	
G12Ni14	UNI	Italy	Casting	
A352 LC3	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

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.

### **ONE STOP SOLUTION FOR METAL PARTS**