



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - DIN 1.7706

**Standard Specification for Steel Castings for Pressure Purposes; Steel Grades for Use at Room Temperature and Elevated Temperatures**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - EN 1.7706 Steel Castings for Pressure Purposes; Steel Grades for Use at Room Temperature and Elevated Temperatures**

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

**Grade Belongs to the Industry - Casting**

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 - 0.200	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.500 - 0.900		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	1.200 - 1.500		
Molybdenum	Mo %	0.900 - 1.100		
Vanadium	V %	0.200 - 0.300		
Tin	Sn %	0.025 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	590 - 780
-	-	-	Yield Strength in Mpa	440 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	27 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
422744	CSN	Czech Republic	Casting
1.7706	EN	European Union	Casting
J21610	UNS	USA	Casting
G 17 CrMoV 5-10	AFNOR NF	France	Casting
G 17 CrMoV 5-10	UNI	Italy	Casting
L 17 HMF	PN	Poland	Casting
A356 9	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](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.

**ONE STOP SOLUTION FOR METAL PARTS**