

## Material: DIN StE 285

### Standard Specification for Seamless Circular Tubes of Fine Grain Steels for Special Requirements

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** DIN StE 285 Seamless Circular Tubes of Fine Grain Steels for Special Requirements

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

**Grade Belongs to the Industry:** Tube

Chemical Composition			Heat Treatment	
Carbon	C %	0.180 max.	Normalizing or Annealing or Hardening + Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	0.600 - 1.400		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.450 max.		
Nickel	Ni %	0.300 max.		
Molybdenum	Mo %	0.450 max.		
Niobium	Nb %	0.030 max.		
Aluminium	Al %	0.020 min.		
Nitrogen	N %	0.020 max.	Mechanical Properties	
Copper	cu %	0.450 max.	Tensile Strength in Mpa	350 - 510
Iron	Fe %	Balance	Yield Strength in Mpa	205 min.
-	-	-	Elongation in %	21 min.
-	-	-	Reduction of Area in %	-
			Hardness in BHN	-
			Impact in Joule	31 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
12 MCh	GOST	Russia	Steel
L 17 HM	PN	Poland	Casting
J12540	UNS	USA	Casting
TS 15 CD 2-05	AFNOR NF	France	Tube
XF 400	AS	Australia	Flat
XF 500	AS	Australia	Flat
A356 5	ASTM	USA	Casting

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)