GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A131 Grade CS

Standard Specification for Structural Steel for Ships

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A131 Grade CS Structural Steel for Ships

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

Grade Belongs to the Industry - Steel

Chemical Composition		
Carbon	C %	0.160 max.
Manganese	Mn %	1.000 min.
Silicon	Si %	0.100 - 0.350
Phosphorus	P %	0.035 max.
Sulphur	S %	0.035 max.
Nickel	Ni %	0.020 max.
Chromium	Cr %	0.020 max.
Molybdenum	Mo %	0.020 max.
Copper	Cu %	0.020 max.
Cr + Mn/6	Cr % + Mn/6 %	0.400 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Annealing or Normalizing or Normalizing & Tempering or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	400 - 520
Yield Strength in Mpa	235 min.
Elongation in %	24 min.
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	41 @ -40˚C

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
17111 1.0703	DIN	Germany	Steel
17111 R 10 S 10 / C 10 RG 2	DIN	Germany	Steel
17111 1.0709	DIN	Germany	Steel
C 7 RG 2	EN	European Union	Steel
1.0709	EN	European Union	Steel
1.0703	EN	European Union	Steel
C 10 RG 2	EN	European Union	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

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