GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A455

Standard Specification for Pressure Vessel Plates, Carbon Steel, High-Strength Manganese

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A455 Pressure Vessel Plates, Carbon Steel, High-Strength Manganese

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

Grade Belongs to the Industry - Plates

Chemical Composition		
Carbon	C %	0.330 max.
Manganese	Mn %	0.850 - 1.200
Phosphorus	P %	0.035 max.
Sulphur	S %	0.035 max.
Silicon	Si %	0.100 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Normalizing or Stress Relieved

Mechanical Properties	
Tensile Strength in Mpa	515 - 655
Yield Strength in Mpa	260 min.
Elongation in %	22 min.
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
17243 1.0481	DIN	Germany	Bars and Forging
17155-2 17 Mn 4	DIN	Germany	Plate and Strip
17175 1.0481	DIN	Germany	Tubing
17172 1.0484	DIN	Germany	Pipe
17172 StE 290.7	DIN	Germany	Pipe
SA-455 Type II	ASME	USA	Steel and Plates
SA-455 Type I	ASME	USA	Steel and Plates

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.