GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-311 Grade 1018

Standard Specification for Cold-Drawn, Stress-Relieved Carbon Steel Bars Subject to Mechanical Property Requirements

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-311 Grade 1018 Cold-Drawn, Stress-Relieved Carbon Steel Bars Subject to Mechanical Property Requirements

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

Grade Belongs to the Industry - Steel and Bars

Chemical Composition		
Carbon	C %	0.150 - 0.200
Manganese	Mn %	0.600 - 0.900
Phosphorus	P %	0.040 max.
Sulphur	S %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Annealing

Mechanical Properties	
Tensile Strength in Mpa	485 min.
Yield Strength in Mpa	415 min.
Elongation in %	18 min.
Reduction of Area in %	40 min.
Hardness in HB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
G10180	UNS	USA	Forging, Bars, Wire Rods
SAE J 403 1018	AISI	USA	Forging, Bars, Wire Rods and Tubing
A 510 1018	ASTM	USA	Steel and Wire Rods
A 108 1018	ASTM	USA	Steel and Bars
A 29 1018	ASTM	USA	Steel and Bars
A 311 1018	ASTM	USA	Steel and Bars
A 519 1018	ASTM	USA	Tubing

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.