GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE J405 S41050

Standard Specification for Chemical Compositions of SAE Wrought Stainless Steels

Group - Ferrous Stainless Steel Alloys

Sub Group - SAE J405 S41050 Chemical Compositions of SAE Wrought Stainless Steels

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

Grade Belongs to the Industry - Steel

Chemical Composition		
Carbon	C %	0.040 max.
Manganese	Mn %	1.000 max.
Phosphorus	P %	0.045 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Chromium	Cr %	10.500 - 12.500
Nickel	Ni %	0.600 - 1.100
Nitrogen	N %	0.100 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	415 min.
Yield Strength in Mpa	205 min.
Elongation in %	22 min.
Reduction of Area in %	-
Hardness in BHN	183 max.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
S41050	UNS	USA	Steel
S40976	UNS	USA	Steel
A 176 S41050	ASTM	USA	Plate, Sheet and Strip
A 240 S41050	ASTM	USA	Plate, Sheet and Strip
A 959 S41050	ASTM	USA	Steel
A 276 S40976	ASTM	USA	Bars and Shapes
SA-240 UNS S41050	ASME	USA	Plate, Sheet and Strip

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.