GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-965 Grade F46

Standard Specification for Steel Forgings, Austenitic, for Pressure and High Temperature Parts

Group - Ferrous Stainless Steel Alloys
Sub Group - ASME SA-965 Grade F46 Steel Forgings, Austenitic, for Pressure and High Temperature Parts
Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.018 max.
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.020 max.
Sulphur	S %	0.020 max.
Silicon	Si %	3.700 - 4.300
Nickel	Ni %	14.000 - 15.500
Chromium	Cr %	17.000 - 18.500
Molybdenum	Mo %	0.200 max.
Copper	Cu %	0.500 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	540 - 690
Yield Strength in Mpa	220 min.
Elongation in %	40 min.
Reduction of Area in %	50 min.
Hardness in HB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
A 943 S30600	ASTM	USA	Steel and Pipe
A 240 S30600	ASTM	USA	Plate, Sheet and Strip
A 358 S30600	ASTM	USA	Steel and Pipe
A 312 S30600	ASTM	USA	Steel and Pipe
A 336 Grade F46	ASTM	USA	Steel and Forging
A 959 S30600	ASTM	USA	Steel
A 269 S30600	ASTM	USA	Steel and 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.