GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A1028 Grade E Class 1

Standard Specification for Stainless Steel Bars for Compressor and Turbine Airfoils

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A1028 Grade E Class 1 Stainless Steel Bars for Compressor and Turbine Airfoils

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

Grade Belongs to the Industry - Bars

Chemical Composition		
Carbon	C %	0.130 - 0.180
Manganese	Mn %	0.400 - 0.600
Phosphorus	P %	0.030 max.
Sulphur	S %	0.030 max.
Silicon	Si %	0.500 max.
Nickel	Ni %	0.500 max.
Chromium	Cr %	11.500 - 13.000
Molybdenum	Mo %	0.200 max.
Aluminium	Al %	0.050 max.
Niobium	Nb %	0.150 - 0.450
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Quenching & Tempering or Age-Hardening or Stress Relieved

Mechanical Properties	
Tensile Strength in Mpa	793 min.
Yield Strength in Mpa	517 min.
Elongation in %	15 min.
Reduction of Area in %	50 min.
Hardness in HB	277 max.
Impact in Joule	20 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
S41041	UNS	USA	Bars
S41005	UNS	USA	Steel
A 959 S41041	ASTM	USA	Steel
A 565 S41041	ASTM	USA	Steel and Bars
A 959 S41005	ASTM	USA	Steel
5611	AMS	USA	Bars, Wire, Forging and Tubing
5612	AMS	USA	Bars, Wire, Forging 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

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