GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A289 Grade 4

Standard Specification for Alloy Steel Forgings for Nonmagnetic Retaining Rings for Generators

Group - Ferrous Stainless Steel Alloys
Sub Group - ASTM A289 Grade 4 Alloy Steel Forgings for Nonmagnetic Retaining Rings for Generators
Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.100 max.
Manganese	Mn %	17.500 - 20.000
Phosphorus	P %	0.060 max.
Sulphur	S %	0.015 max.
Silicon	Si %	0.800 max.
Nickel	Ni %	2.000 max.
Chromium	Cr %	17.500 - 20.000
Nitrogen	N %	0.450 - 0.800
Titanium	Ti %	0.100 max.
Aluminium	Al %	0.040 max.
Vanadium	V %	0.250 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	1170 min.
Yield Strength in Mpa	1140 min.
Elongation in %	19 min.
Reduction of Area in %	48 min.
Hardness in HB	-
Impact in Joule	79 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
S28200	UNS	USA	Steel
A 276 S28200	ASTM	USA	Bars and Shapes
A 493 S28200	ASTM	USA	Wire and Wire Rods
A 580 S28200	ASTM	USA	Steel and Wire
A 959 S28200	ASTM	USA	Steel
SEW 390 1.3816	DIN	Germany	Steel
SEW 390 X8CrMnN18-18	DIN	Germany	Steel

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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