GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A290 Grade 1 Class A

Standard Specification for Carbon and Alloy Steel Forgings for Rings for Reduction Gears

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A290 Grade 1 Class A Carbon and Alloy Steel Forgings for Rings for Reduction Gears

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

Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.350 - 0.500
Manganese	Mn %	0.600 - 0.900
Phosphorus	P %	0.040 max.
Sulphur	S %	0.040 max.
Silicon	Si %	0.350 max.
Nickel	Ni %	0.300 max.
Chromium	Cr %	0.250 max.
Molybdenum	Mo %	0.100 max.
Vanadium	V %	0.060 max.
Copper	Cu %	0.350 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Normalizing or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	550 min.
Yield Strength in Mpa	310 min.
Elongation in %	22 min.
Reduction of Area in %	45 min.
Hardness in HB	163 - 202
Impact in Joule	14 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
EN 10083-1 C 35 R	AFNOR NF	France	Steel
A 35-552 XC 38 H 1 u	AFNOR NF	France	Steel
EN 10083-1 3 C 35	AFNOR NF	France	Steel
970-1 080 M 36	B.S.	United Kingdom	Steel
10083-1 1.1180	EN	European Union	Steel
10277-5 C 35 R	EN	European Union	Steel
C 35 R	NBN	Belgium	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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