GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A291 Grade 9 Class J

Standard Specification for Steel Forgings, Carbon and Alloy, for Pinions, Gears and Shafts for Reduction Gears

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A291 Grade 9 Class J Steel Forgings, Carbon and Alloy, for Pinions, Gears and Shafts for Reduction Gears

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

Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.250 - 0.390
Manganese	Mn %	0.200 - 0.600
Phosphorus	P %	0.015 max.
Sulphur	S %	0.015 max.
Silicon	Si %	0.350 max.
Nickel	Ni %	3.250 - 4.000
Chromium	Cr %	1.250 - 1.750
Molybdenum	Mo %	0.300 - 0.700
Vanadium	V %	0.050 - 0.150
Copper	Cu %	0.350 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Normalizing or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	1175 min.
Yield Strength in Mpa	960 min.
Elongation in %	10 min.
Reduction of Area in %	30 min.
Hardness in HB	352 - 401
Impact in Joule	25 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K42885	UNS	USA	Steel
4543 38ChN3MFA	GOST	Russia	Steel
6354 38 ChN 3 MFA	BDS	Bulgaria	Steel
1.6952	DIN	Germany	Steel
24 NiCrMoV 14-6	DIN	Germany	Steel
1.6746	DIN	Germany	Steel
32 NiCrMo 14-5	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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