



Material - JIS C48GW-N-A

Standard Specification for Railway Rolling Stock - Solid Wheel - Quality Requirements

Group - Ferrous Mild Steel Alloys

Sub Group - JIS C48GW-N-A Railway Rolling Stock - Solid Wheel - Quality Requirements

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

Grade Belongs to the Industry - Forging

Chemical Composition			Heat Treatment			
Carbon	C %	0.520 max.	Annealing or Normalising or Hardening + Tempering			
Silicon	Si %	0.430 max.				
Manganese	Mn %	0.950 max.				
Phosphorus	P %	0.045 max.				
Sulphur	S %	0.045 max.				
Chromium	Cr %	0.280 max.				
Nickel	Ni %	0.280 max.				
Molybdenum	Mo %	0.800 max.				
Vanadium	V %	0.050 max.				
Copper	Cu %	0.280 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	630 - 750		
-	-	-	Yield Strength in Mpa	-		
-	-	-	Elongation in %	17 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	14 J @ RT		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1606	SS	Sweden	Casting
50 CD 4-M	AFNOR NF	France	Casting
5152	SAE	USA	Steel
735 A 51	BS	British	Hot Formed Spring
C 3	MSZ	Hungary	Steel
1050	AISI	USA	Forging, Bar, Wire, and Shape
A732 4A	ASTM	USA	Casting

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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