



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM A297 Grade HG10MnN

Standard Specification for Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant for General Application

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A297/ A297M Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant for General Application

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.070 - 0.110	As - Cast	
Silicon	Si %	0.700 max.		
Manganese	Mn %	3.000 - 5.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	18.500 - 20.500		
Nickel	Ni %	11.500 - 13.500		
Molybdenum	Mo %	0.250 - 0.450		
Copper	Cu %	0.500 max.		
Niobium	Nb %	8*C - 1.000 max.		
Nitrogen	N %	0.200 - 0.300	<b>Mechanical Properties</b> Tensile Strength in Mpa      525 min. Yield Strength in Mpa      225 min. Elongation in %      20 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      -	
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J92604	UNS	USA	Casting
A743 HG10MnN	ASTM	USA	Casting
1.4832	DIN	Germany	Casting
LH 19 N 14 G	PN	Poland	Casting
J92604	UNS	USA	Casting
19 Cr 12 Ni 4 Mn	Common	-	Casting
S30409	UNS	USA	General High Temperature and General Corrosive Service

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

**ONE STOP SOLUTION FOR METAL PARTS**