GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-705 Type 631

Standard Specification for Age-Hardening Stainless Steel Forgings

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-705 Type 631 Age-Hardening Stainless Steel Forgings

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

Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.090 max.
Manganese	Mn %	1.000 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Chromium	Cr %	16.000 - 18.000
Nickel	Ni %	6.500 - 7.750
Aluminium	Al %	0.750 - 1.500
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing or Precipitation Hardening

Mechanical Properties	
Tensile Strength in Mpa	1280 min.
Yield Strength in Mpa	1030 min.
Elongation in %	6 min.
Reduction of Area in %	10 min.
Hardness in BHN	388 min.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
S17700	UNS	USA	Steel
SA-564 Type 631	ASME	USA	Bars and Shapes
D 3698 STS 631	KS	Korea	Plate, Sheet and Strip
G 4312 SUS 631	JIS	Japan	Plate and Sheet
G 4311 SUS 631	JIS	Japan	Steel and Bars
G 4313 SUS 631-CSP	JIS	Japan	Steel and Strip
A 705 631	ASTM	USA	Steel and Forging

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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