



Material Test Report

Heat Code: UTZ

An Ameri-Forge Group Company

13770 Industrial Road
Houston, TX 77015

ISO 9001:2000 Certified

Sales: (713) 393-4200 Fax: (713) 455-8366

PLESA ANAHUAC Y CIAS	PO: 1345	Sales Order: 54360	Sales Ord Line: 1
SA DE CV AV. VALLE DE LAS TULTITLAN, EDO, MEX 54940	Part Desc: FLG 12.00 0150 SO RF / A105 NHT COFFR		
	Part No: 0152912100-0020F		Qty Shipped: 191
	Vendor: SMI		Vendor Heat Code: 247802
Spec: ASTM A 105/A 105M-03/ASME SA 105/SA 105M-04, Melt Practice EF			

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Cb
Ladle:	0.23	0.85	0.011	0.013	0.20	0.27	0.07	0.08	0.020	0.004	0.000
Product:											
	C.E.	CuNiCrMo	CrMo								
Ladle:	0.415130	0.44	0.10								
Product:											

Mechanical Properties	Heat Treatment	Other Results
Test Lab Test Bar Size BHN Elg (%) RA (%) Tensile Specimen Size Tensile (ksi) Yield (ksi) Gauge Length		Country of Origin EF
AFG SACRIFICIAL 163-167 32.0 60.0 0.500 80.4 46.5 2.00		USA (US) Y

Comments

No Weld repair performed. Chemical Analysis results shown are actual. Forgings are capable of passing hydrostatic test compatible with the appropriate rating. Elongation taken from a round specimen. All material supplied under this order is certified to be free of mercury contamination and no mercury bearing equipment was used in manufacturing, fabrication or testing. Yield strength was determined using the 0.2% offset method.
Product compliant with NACE MRO175, latest edition.
Product compliant with and meets all requirements of ASTM A105/ASME SA105-05.

This report is issued in compliance with the requirements of EN10204 3.1 / ISO 10474 3.1.b.

MTR No. 88982
MTR Date: 5/9/2006

S. Drozdowski
Stan Drozdowski - AFG Test Lab Manager