



Material Test Report

Heat Code: TTM

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: 40
	Vendor: SMI		Vendor Heat Code: 245161
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:	0.20	0.86	0.011	0.022	0.24	0.25	0.10	0.10	0.029	0.003	0.001
Product:											
	C.E.	CuNiCrMo	CrMo								
Ladle:	0.393070	0.48	0.13								
Product:											

Mechanical Properties	Heat Treatment	Other Results
Test Lab AFG		Country of Origin USA (US)
Test Bar Size SACRIFICIAL		EF Y
BHN 170-170		
Elg (%) 32.0		
RA (%) 55.0		
Tensile Specimen Size 0.498		
Tensile (ksi) 79.2		
Yield (ksi) 45.5		
Gauge Length 2.00		

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. 88978
MTR Date: 5/9/2006

S. Drozdowski
Stan Drozdowski - AFG Test Lab Manager