Material Test Report

Heat Code: UGW

Coffer Corporation
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	Part Desc: FLG 12.00 0150 SO RF / A105 NHT COFFR		
TULTITLAN, EDO, MEX 54940	Part No: 0152912100-0020F	Qty Shipped: 40	
	Vendor: SMI	Vendor Heat Code: 246558	
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:	0.18	0.84	0.008	0.018	0.22	0.29	0.13	0.07	0.039	0.003	0.001
Product:											

	C.E.	CuNiCrMo	CrMo
Ladle:	0.370400	0.53	0.11
Product:			

Mechanical Properties

Test Lab	AFG
Test Bar Size	SACRIFICIAL
BHN	170-170
Elg (%)	26.0
RA (%)	48.0
Tensile Specimen Size	0.502
Tensile (ksi)	76.7
Yield (ksi)	45.2
Gauge Length	2.00

Heat Treatment

Other Results

Country of Origin	USA (US)
EF	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.

S. Drozdowski

Stan Drozdowski - AFG Test Lab Manager

MTR No. 88979
MTR Date. 5/9/2006