Material Test Report

Heat Code: JYG

An Ameri-Forge Group Company 13770 Industrial Rd. Houston, TX 77015

ISO 9001;2008 Certified

Sales: (713) 868-4421 Fax: (713) 455-8366

PLESA ANAHUAC Y CIAS SA DE CV AV. VALLE DE LAS ALAMEDAS 66-0

PO: 11304 Sales Order: 100764 Line: 6 Item Code: 0301910101-0020F Qty Shipped: 20

Item Desc: FLG 10.00 0300 WN RF STD

54940 TULTITLAN, EDO, MEX

Supplier Heat: 3025118

Supplier: CMC Spec: ASTM A105/A105M-(10)/ASME SA 105/SA 105M-(08a) Section II Part A

Mn Manganese 1.01	Elem	ent (%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
P Phosphorous 0.007 V Vanadium 0.004 S Sulphur 0.018 Cb Columbium 0.001 Si Silicon 0.25 C.E. 0.41 Cu Copper 0.24 √ 7440-50-8 CuNiCrMo 0.445	C	Carbon	0.20			**************************************	Cr Chrom	ium	0.06	·····	¥ 7	440-47-3
S Sulphur 0.018 Cb Columbium 0.001 Si Silicon 0.25 C.E. 0.41 Cu Copper 0.24 √7440-50-8 CuNiCrMo 0.445	Mn	Manganese	1.01		✓ 7	7439-96-5	Mo Molybe	denum	0.04			
Si Silicon 0.25 Cu Copper 0.24 ✓ 7440-50-8 CuNiCrMo 0.445	P	Phosphorous	0.007				V Vanad	ium	0.004			
Cu Copper 0.24 ✓ 7440-50-8 CuNiCrMo 0.445	S	Sulphur	0.018				Cb Columb	bium	0.001			
	Si	Silicon	0.25				C.E.		0.41			
No. 11 / 7440020 Compo 0.095	Cu	Copper	0.24		✓ ~	7440-50-8	CuNiCrMo		0.445			
NI NICKEI UIII VIGOLOZIO CINO UIO	Ni	Nickel	0.11		✓ 1	7440-02-0	CrMo		0,095			

Mechanical T	esting	Other				
Test Lab	AFG	WILL		CMC-TEXAS		
Test Bar Size	Sacrificial Piece	MHC		3025118		
HBW	159 - 159	EF		Y		
Elg (%)	31.0					
RA (%)	57.0					
Tensile Specimen Size (in)	. 498					
Tensile (ksi)	78.9					
Yield (ksi)	45.2					
Gauge Length	2					
1						

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. No weld repair performed on this product.

Product compliant with NACE MR0175, latest edition and dimensions to ASME B16.5-2009

EPCRA Supplier Notification: This product may contain one or more toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986) and 40 C.F.R. Part 372. Potentially reportable chemicals are indicated with a checkmark in the "EPCRA" column and a Chemical Abstract Services (CAS) registry number is provided for each such chemical in addition to the percent by weight of the chemical present in this product. It is your responsibility alone to determine whether your facility is required to submit a Toxic Release Inventory Report under EPCRA Section 313.

Certification No.:

219907

Certification Date:

10/4/2011

Nicholas Tepovich - Metallurgic Lab Manager

Nie alas Legarel