54940 TULTITLAN, EDO, MEX

Material Test Report

Heat Code: HHF .

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

Line: 9

ISO 9001:2000 Certified

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

Sales Order: 72923 PO: 7589 PLESA ANAHUAC Y CIAS Qty Shipped: 96 Item Code: 0151600101-0020F SA DE CV AV. VALLE DE LAS Item Desc: FLG 06.00 0150 WN RF STD ALAMEDAS 66-0 Supplier Heat: 3012988

Supplier: CMC Spec: ASTM A105/A105M-(05)/ASME SA 105/SA 105M-(08a) Section II Part A

Elen	nent (%wt)	Ladle	Product	EPCR/	A CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
С	Carbon	0.22				Cr Chromi	Lum	0.07		√	1440-47-3
Mn	Manganese	0.91		✓	7439-96-5	Mo Molybo	denum	0.02			
P	Phosphorous	0.006				V Vanada	Lum	0.002			
8	Sulphur	0.019				Cb Colum)	nium	0.001			
Si	Silicon	0,23				C.E.		0.41			
Cu	Copper	0.19		✓	7440-50-8	CuniCrMo		0.35			
Ni	Nickel	0.07		✓	7440-02-0	CrMo		0.09			
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Mechanical To	esting	•	Other			
Test Lab	AFG	MILL	CMC-TEXAS			
Test Bar Size	Test Piece	MHC	3012988			
HBW	159 - 159					
Elg (%)	32.0					
RA (%)	59.0					
Tensile Specimen Size (in)	.247					
Tensile (ksi) 78.7						
Yield (ksi)	44.9	The state of the s	Company of the Party of the Company			
Gauge Length	1	PLEASA AN	AHUAC Y CIAS, S.A. DE C.V. NTROL DE CALIDAD			
		FECHA	29 Fac 2010			
		HRMA	Inque Pois			

Product compliant with NACE MR0175, latest edition and dimensions to ASME B16,5 Product compliant with and meets all requirements of ASTM A105/ASME SA105, latest edition. 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.

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.:

176977

Certification Date:

1/22/2010

Nicholas Tepovich - Metallurgic Lab Manager

Vialadas Japane