

## **Material Test Report**

Heat Code: A-2479

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

Line: 1

ISO 9001:2008 Certified

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

PLESA ANAHUAC Y CIAS PO: 10051 Sales Order: 92175 SA DE CV AV. VALLE DE LAS Item Code: 0153924100-0020F Qty Shipped: 3 ALAMEDAS 66-0 Item Desc: FLG 24.00 0150 BL RF 54940 TULTITLAN, EDO, MEX Supplier: MF RINGS Supplier Heat: A-2479

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

Elem	ent (%wt)	Ladle	Product	EPCR	A CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
С	Carbon	0.21	-			:Cr Chrom	i um	0.02			40-47-3
Mn	Manganese	0.90		~	7439-96-5	Mo Molybo	denum	0.03			
P	Phosphorous	0.030				V Vanad	ium	0.005			
S	Sulphur	0.011				: Cb Columb	bium	0.01			
Sí	Silicon	0.26				C.E.		0.37433			
Cu	Copper	0.03		1	7440-50-8	CuNiCrMo		0.1			
Ni	Nickel	0.02		1	7440-02-0	CrMo		0.05			
						:					

Mechanical T	esting	
st Lab MF RINGS		
Test Bar Size	SACRIFICIAL PIECE	
HBW	156 - 156	
Elg (%)	28.4	
RA (%)	57.3	
Tensile Specimen Size (in)	0.498	
Tensile (ksi)	76.1	
Yield (ksi)	43.2	
Gauge Length	2	:
		:

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

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.:

201128

Certification Date:

2/22/2011

Nicholas Tepovich - Metallurgic Lab Manager

Violadas Lepare

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