

## **Material Test Report**

Heat Code: HLM

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
 PO: 9216
 Sales Order: 89436
 Line: 10

 SA DE CV AV. VALLE DE LAS
 Item Code: 0151800102-0020F
 Qty Shipped: 1

 ALAMEDAS 66-0
 Item Desc: FLG 08.00 0150 WN RF XH

 54940 TULTITLAN, EDO, MEX
 Supplier: CMC
 Supplier Heat: 3015365

54940 TULTITLAN, EDO, MEX Supplier: CMC Supplier Heat Spec: ASTM A105/A105M-(10)/ASME SA 105/SA 105M-(08a) Section II Part A

Elen	nent (%wt)	Ladle	Product	EPCRA CAS#	Element (%wt)	Ladle	Product	EPCRA CAS#
С	Carbon	0.20			Cr Chromium	80.0		✓ 7440-47-3
Mn	Manganese	1.09		✓ 7439-96-9	Mo Molybdenum	0.02		
P	Phosphorous	800.0			V Vanadium	0.002		
s	Sulphur	0.020			Cb Columbium	0.001		
Si	Silicon	0.22			C.E.	0.42		
Cu	Copper	0.22		✓ 7440-50-8	CuNiCrMo	0.401		
Ni	Nickel	80.0		√ 7440-02-0	CrMo	0.101		
					:			

Mechanical To	esting		Other		
Test Lab	AFG	MILL	CMC-TEXAS		
Test Bar Size	Test Piece	мнс	3015365		
HBW	156 - 156				
Elg (%)	34.0	:			
RA (%)	61.0				
Tensile Specimen Size (in)	.497				
Tensile (ksi)	76.3				
Yield (ksi)	43.6				
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/

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.:

193007

Certification Date:

10/25/2010

Nicholas Tepovich - Metallurgic Lab Manager