



Material Test Report

Heat Code: CYN

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

ISO 9001:2000 Certified Sales: (713) 868-4421 Fax: (713) 455-8366

PLESA ANAHUAC Y CIAS	PO: 5393	Sales Order: 67243	Line: 20
SA DE CV AV. VALLE DE LAS	Item Code: 0601600402-0021F	Qty Shipped: 7	
AIAMEDAS 66-0	Item Desc: FLG 06.00 0600 WN RJ XH A105	NRM COFFR	
54940 TUITITILAN, EDO MEX	Supplier: CMC	Supplier Heat: J85060	
Spec: ASTM A 105/A 105M-(05)/ASME SA 105/SA 105M-(08a) Section II Part A - Normalized			

Element	(%wt)	Ladle	Product	EPCRA CAS#	Element	(%wt)	Ladle	Product	EPCRA CAS#
C	Carbon	0.20			Ni	Nickel	0.12		7440-02-0
Mn	Manganese	0.74		7439-96-5	Cr	Chromium	0.22		7440-47-3
P	Phosphorous	0.007			Mo	Molybdenum	0.030		
S	Sulphur	0.032			V	Vanadium	0.002		
Si	Silicon	0.23			Cb	Columbium	0.001		
Cu	Copper	0.32		7440-50-8	C.E.		0.40		

Mechanical		Heat Treat	
Test Lab	AFG	Norm. Temp. (F)	1675
Test Bar Size	SACRIFICIAL PIECE	Norm. (Hrs)	4.0
HHW	149-149	Norm. Cooling Type	AIR
RLg (%)	28.0	Norm. Location	AFG
RA (%)	52.0	Other	Y
Tensile Specimen Size (in)	0.496		
Tensile (ksi)	76.1		
Yield (ksi)	44.8		
Gauge Length	2.00		

Product compliant with NACE MR0175, latest edition and dimensions to ANSI B16.5
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.: 153967

Certification Date: 11/12/2008

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

Nicholas Tepovich - Metallurgic Lab Manager