



Material Test Report

Heat Code: JNR

ISO 9001:2008 Certified

An Ameri-Forge Group Company
 13770 Industrial Rd. Houston, TX 77015
 Sales: (713) 868-4421 Fax: (713) 455-8366

PLESA ANAHUAC Y CIAS	PO: 11500	Sales Order: 101970	Line: 3
SA DE CV AV. VALLE DE LAS	Item Code: 0601300101-0021F		Qty Shipped: 10
ALAMEDAS 66-0	Item Desc: FLG 03.00 0600 WN RF STD		
54940 TULTITLAN, EDO, MEX	Supplier: CMC	Supplier Heat: 3023066	
Spec: ASTM A105/A105N-(10)/ASME SA 105/SA 105N-(08a) Section II Part A - Normalized			

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19				Ni	Nickel	0.07		✓	7440-02-0
Mn	Manganese	1.00		✓	7439-96-5	Cr	Chromium	0.09		✓	7440-47-3
P	Phosphorous	0.011				Mo	Molybdenum	0.016			
S	Sulphur	0.011				V	Vanadium	0.003			
Si	Silicon	0.22				Cb	Columbium	0.001			
Cu	Copper	0.20		✓	7440-50-8	C.E.		0.40			

Mechanical Testing				Heat Treat			
Test Lab	AFG	Norm. Temp. (F)	1675				
Test Bar Size	Sacrificial Piece	Norm. (Hrs)	4				
HBW	152 - 152	Norm. Cooling Type	AIR				
Elg (%)	34.0	Norm. Location	AFG				
RA (%)	65.0						
Tensile Specimen Size (in)	.250						
Tensile (ksi)	79.8						
Yield (ksi)	50.1						
Gauge Length	1						
		MILL				CMC-TEXAS	
		MHC				3023066	
		EF				Y	

Product compliant with NACE MR0175 and NACE MR0103 latest edition and dimensions to ANSI B16.5 - 2009
 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 welding performed.

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.: 222490
 Certification Date: 11/2/2011

Nicholas Tepovich - Metallurgic Lab Manager