



# Material Test Report

Heat Code: HLV

ISO 9001:2000 Certified

An Ameri-Forge Group Company  
 13770 Industrial Rd. Houston, TX 77015  
 Sales: (713) 868-4421 Fax: (713) 455-8386

PLESA ANAHUAC Y CIAS SA DE CV AV. VALLE DE LAS ALAMEDAS 66-0 54940 TULTITLAN, EDO, MEX	PO: 7995	Sales Order: 74164	Line: 14
	Item Code: 0601600102-0021F		Qty Shipped: 20
	Item Desc: FLG 06.00 0600 WN RF XH		
	Supplier: CMC		Supplier Heat: 3015367
Spec: ASTM A105/A105M-(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		✓	7439-96-5	Ni	Nickel	0.07		✓	7440-02-0
Mn	Manganese	1.10				Cr	Chromium	0.11		✓	7440-47-3
P	Phosphorous	0.009				Mo	Molybdenum	0.031			
S	Sulphur	0.020				V	Vanadium	0.002			
Si	Silicon	0.27				Cb	Columbium	0.001			
Cu	Copper	0.18		✓	7440-50-8	C.E.		0.43			

Mechanical Testing			Heat Treat		
Test Lab		AFG	Norm. Temp. (F)		1675
Test Bar Size		Test Piece	Norm. (Hrs)		4
HBW		159 - 159	Norm. Cooling Type		AIR
Elg (%)		34	Norm. Location		AFG
RA (%)		63	Other		
Tensile Specimen Size (in)		.498	MILL		CMC-TEXAS
Tensile (ksi)		77.2	MHC		3015367
Yield (ksi)		48.7	PLESA ANAHUAC Y CIAS. S.A. DE C.V. CONTROL DE CALIDAD FECHA <u>18 May 2010</u> <u>3881</u> FIRMA <u>E. RUIZ</u>		
Gauge Length		2			

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. 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.: 182180  
 Certification Date: 4/30/2010

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 Nicholas Tepovich - Metallurgic Lab Manager