



# Material Test Report

Heat Code: UXB

ISO 9001:2008 Certified

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

PLESA STEEL INC. 5100 WESTHEIMER ROAD SUITE 200 Houston, TX 77056	PO: 82	Sales Order: 122004	Line: 8
	Item Code: 0601400102-0021F		Qty Shipped: 20
	Item Desc: FLG 04.00 0600 WN RF XH		
	Supplier: CMC		Supplier Heat: 3035173

Spec: ASTM A105/A105N-(12)/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	0.10		✓	7440-02-0
Mn	Manganese	1.08		✓	7439-96-5	Cr	Chromium	0.09		✓	7440-47-3
P	Phosphorous	0.012				Mo	Molybdenum	0.027			
S	Sulphur	0.025				V	Vanadium	0.002			
Si	Silicon	0.22				Cb	Columbium	0.004			
Cu	Copper	0.26		✓	7440-50-8	C.E.		0.42			

Mechanical Testing				Heat Treat			
Test Lab		AFG		: Norm. Temp. (F)		1675	
Test Bar Size		Sacrificial Piece		: Norm. (Hrs)		4	
HBW		159 - 159		: Norm. Cooling Type		AIR	
Elg (%)		32		: Norm. Location		AFG	
RA (%)		59					
Tensile Specimen Size (in)		.495					<b>Other</b>
Tensile (ksi)		80.2		: MILL		CMC-TEXAS	
Yield (ksi)		52.6		: MHC		3035173	
Gauge Length		2		: Country of Origin		USA (US)	
				: EF		Y	
				: DESC:		P91072-00802-13	
				: DESC2:		LINE 49	

Product compliant with NACE MR0175 / ISO 15156 and NACE MR0103 / ISO 15156 latest edition and dimensions to ANSI 816.5 - 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. Yield strength was determined using the .2% offset method. 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. Made in USA.  
 No welding performed.  
 AmeriForge manufactures materials according to a certified Quality Management System conforming to ISO 9001:2008 and in compliance to PED 97/23/EC, Section 4.3  
 Tensile Testing Per RSTM E8; Brinell Hardness Per ASTM E10

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.: 263703  
 Certification Date: 3/25/2013

*M. Hingwe*  
 Mandar Hingwe - Dir. of Quality and Metallurgy