



# Material Test Report

Heat Code: UVR

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

ISO 9001:2008 Certified

Sales: (713) 868-4421 Fax: (713) 455-8366

PLESA STEEL INC. 5100 WESTHEIMER ROAD SUITE 200 Houston, TX 77056	PO: 42	Sales Order: 116720	Line: 19
	Item Code: 0601910180-0021F	Qty Shipped: 5	
	Item Desc: FLG 10.00 0600 WN RF 80		
	Supplier:	Supplier Heat: 4M84429	
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	1.06		✓	7439-96-5	Cr	Chromium	0.19		✓	7440-47-3
P	Phosphorous	0.016				Mo	Molybdenum	0.01			
S	Sulphur	0.008				V	Vanadium	0.003			
Si	Silicon	0.18				Cb	Columbium	0.001			
Cu	Copper	0.24		✓	7440-50-8	C.E.		0.43			

Mechanical Testing				Heat Treat			
Test Lab		AFG		Norm. Temp. (F)		1675	
Test Bar Size		Sacrificial Piece		Norm. (Hrs)		4	
HBW		143 - 143		Norm. Cooling Type		AIR	
Elq (%)		37		Norm. Location		AFG	
RA (%)		69					
Tensile Specimen Size (in)		.248			Other		
Tensile (ksi)		77.7		MHC		4M84429	
Yield (ksi)							
Gauge Length							

Product compliant with NACE MR0175 / ISO 15156 and NACE MR0103 / ISO 15156 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. 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 ASTM 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.: 256660  
 Certification Date: 1/7/2013

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