



Material Test Report

Heat Code: TLE

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: 42	Sales Order: 116720	Line: 20
	Item Code: 0601910102-0021F		Qty Shipped: 5
	Item Desc: FLG 10.00 0600 WN RF XH		
	Supplier:		Supplier Heat: 3M80605

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	0.20				Ni	Nickel	0.06		✓	7440-02-0
Mn	Manganese	1.00		✓	7439-96-5	Cr	Chromium	0.12		✓	7440-47-3
P	Phosphorous	0.011				Mo	Molybdenum	0.01			
S	Sulphur	0.016				V	Vanadium	0.002			
Si	Silicon	0.18				Cb	Columbium	0.001			
Cu	Copper	0.18		✓	7440-50-8	C.E.		0.41			

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	
Elg (%)	36	: Norm. Location		AFG	
RA (%)	66				
Tensile Specimen Size (in)	.498		Other		
Tensile (ksi)	74.6	: MC		3M80605	
Yield (ksi)	46.6				
Gauge Length	2				

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 9001:200 and in compliance to PED 97/23/EC, Section 4.3

Tensile Testing Per ASIM E8; Brinell Hardness Per ASIM 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.: 256659
 Certification Date: 1/7/2013

Mandar Hingwe - Dir. of Quality and Metallurgy