



Material Test Report

Heat Code: VRU

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	(SalesOrder: 122004	Cine: 5
	Item Code: 0151200102-0020F	Qty Shipped: 100	
	Item Desc: FLG 02.00 0150 WN RF XH		
	Supplier: CMC	Supplier Heat: 3037920	

Spec: ASTM A105/A105M-(12)/ASME SA 105/SA 105M-(08a) Section II Part A

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19				Cr	Chromium	0.09		✓	7440-47-3
Mn	Manganese	1.01		✓	7439-96-5	Mo	Molybdenum	0.03			
P	Phosphorous	0.011				V	Vanadium	0.003			
S	Sulphur	0.018				Cb	Columbium	0.0000			
Si	Silicon	0.24				C.E.		0.41			
Cu	Copper	0.22		✓	7440-50-8	CuNiCrMo		0.442			
Ni	Nickel	0.10		✓	7440-02-0	CrMo		0.122			

Mechanical Testing				Other			
Test Lab		AFG		: MILL		CMC-TEXAS	
Test Bar Size		SACRIFICIAL PIECE		: MHC		3037920	
HBW		170 - 170		: Country of Origin		USA	
Elg (%)		29		: EF		Y	
RA (%)		58					
Tensile Specimen Size (in)		.246					
Tensile (ksi)		85.3					
Yield (ksi)		49.6					
Gauge Length		1					

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 weld repair performed on this product.

Product compliant with NACE MR0175 / ISO 15156 latest edition and dimensions to ANSI B16.5 - 2009

Tensile Testing Per ASIM E8; Brinell Hardness Per ASIM E10

Forged in USA

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.: 263696
 Certification Date: 3/25/2013

Mandar Hingwe - Dir. of Quality and Metallurgy