



# Material Test Report

Heat Code: VOK

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

ISO 9001:2008 Certified

PLESA STEEL INC. 5100 WESTHEIMER ROAD SUITE 200 Houston, TX 77056	PO: 127	Sales Order: 128180	Line: 1
	Item Code: 0301200102-0020F		Qty Shipped: 40
	Item Desc: FLG 02.00 0300 WN RF XH		
	Supplier: CMC		Supplier Heat: 3037502
Spec: ASTM A105/A105M-(12)/ASME SA 105/SA 105M-(13) Section II Part A			

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19				Cr	Chromium	0.10		✓	7440-47-3
Mn	Manganese	0.96		✓	7439-96-5	Mo	Molybdenum	0.03			
P	Phosphorous	0.011				V	Vanadium	0.004			
S	Sulphur	0.016				Cb	Columbium	0.000			
Si	Silicon	0.24				C.E.		0.40			
Cu	Copper	0.21		✓	7440-50-8	CuNiCrMo		0.444			
Ni	Nickel	0.10		✓	7440-02-0	CrMo		0.134			

Mechanical Testing				Other			
Test Lab	AFG			MILL	CMC		
Test Bar Size	Sacrificial Piece			MHC	3037502		
HBW	167 - 167			Country of Origin	USA		
Elg (%)	27			EF	Y		
RA (%)	61			DESC:	Tag:LADISH-30-2-80		
Tensile Specimen Size (in)	.246						
Tensile (ksi)	80.7						
Yield (ksi)	46.8						
Gauge Length	1						

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  
 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 MRO175 / ISO 15156 latest edition and dimensions to ASME B16.5 - 2013  
 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 1988) 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.: 278452  
 Certification Date: 9/19/2013

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