

**COFFER®**  
an **AF Global** Company

# Material Test Report

Heat Code: XRE

ISO 9001:2008 Certified

An Ameri-Forge Group Company  
13770 Industrial Rd. Houston, TX 77016  
Sales: (713) 868-4421 Fax: (713) 465-8366

PLESA STEEL INC. 12700 NORTHBOROUGH DR STE 646 Houston, TX 77067	PO: 232	Sales Order: 136529	Line: 1
	Item Code: 0303800100-0020F		Qty Shipped: 10
	Item Desc: FLG 08.00 0300 BL RF		
	Supplier: ASW Steel Inc.		Supplier Heat: 76811
Spec: ASTM A105/A105M-(13)/ASME SA 105/SA 105M-(13) Section II Part A			

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.20				Cr	Chromium	0.15			✓ 7440-47-3
Mn	Manganese	1.05		✓	7439-96-5	Mo	Molybdenum	0.02			
P	Phosphorous	0.009				V	Vanadium	0.004			
S	Sulphur	0.002				Cb	Columbium	0.004			
Si	Silicon	0.19				C.E.		0.42			
Cu	Copper	0.17		✓	7440-50-8	CuNiCrMo		0.409			
Ni	Nickel	0.07		✓	7440-02-0	CrMo		0.169			

Mechanical Testing			Other	
Test Lab	AFG		MILL	ASW STEEL
Test Bar Size	SACRIFICIAL PIECE		MHC	76811
HBW	167 - 170			
Elg (%)	30			
RA (%)	70			
Tensile Specimen Size (in)	.494			
Tensile (ksi)	82.1			
Yield (ksi)	47.5			
Gauge Length	2			

- \* No Weld repair performed.
- \* Ladle Chemical Analysis results are reported from the raw material suppliers MTR.
- \* 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.
- \* When reported on MTR: Tensile Testing Per ASTM E8; Brinell Hardness Per ASTM E10; Charpy Testing Per ASTM E23
- \* AF Global manufactures materials according to a certified Quality Management System conforming to ISO 9001:2008 and PED 97/23/EC, Annex 1, Section 4.3

Product compliant with NACE MR0175 / ISO 15156 latest edition and dimensions to ASME B16.5 - 2013

The recording of false, fictitious, or fraudulent statement or entries on this document may be punishable as a felony under federal statute.  
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.: 303817  
Certification Date: 6/13/2014

*Rina Sane*  
Rina Sane - Metallurgical Lab Manager

This report is issued in compliance with the requirements of EN10204 3.1 / ISO 10474 3.1.b