

Material Test Report

Heat Code: WDJ

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. 12700 NORTHBOROUGH DR STE 646 Houston, TX 77067	PO: 232	Sales Order: 136529	Line: 4
	Item Code: 0301400102-0020F		Qty Shipped: 10
	Item Desc: FLG 04.00 0300 WN RF XH		
	Supplier: CMC		Supplier Heat: 3038557
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	0.21				Cr	Chromium	0.09		✓	7440-47-3
Mn	Manganese	1.05		✓	7439-96-5	Mo	Molybdenum	0.04			
P	Phosphorous	0.011				V	Vanadium	0.002			
S	Sulphur	0.022				Cb	Columbium	0.000			
Si	Silicon	0.22				C.E.		0.43			
Cu	Copper	0.18		✓	7440-50-8	CuNiCrMo		0.423			
Ni	Nickel	0.11		✓	7440-02-0	CrMo		0.133			

Mechanical Testing			Other		
Test Lab		AFG	MILL		CMC
Test Bar Size		Sacrificial Piece	MHC		3038557
HBW		170 - 170	Country of Origin		USA
Elg (%)		30.0	EF		Y
RA (%)		56.0	DESC:		TAG: LINE# 80
Tensile Specimen Size (in)		.501	DESC2:		PO# 4510245171
Tensile (ksi)		82.5			
Yield (ksi)		47.9			
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.: 303815

Certification Date: 6/13/2014

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

Rina Sang - Metallurgical Lab Manager