

Material Test Report

Heat Code: TEW

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.
 PO: 21
 Sales Order: 112787
 Line: 9

 5100 WESTHEIMER ROAD
 Item Code: 0302300100-0020F
 Qty Shipped: 30

 SUITE 200
 Item Desc: FLG 03.00 0300 SO RF

 Houston, TX 77056
 Supplier: CMC
 Supplier Heat: 3030041

Spec: ASTM A105/A105M-(11a)/ASME SA 105/SA 105M-(08a) Section II Part A

Elen	nent (%wt)	Ladle	Product	EPCR	A CAS#	Element (%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19				Cr Chromium	80.0		V 7	440-47-3
Mn	Manganese	1.02		✓	7439-96-5	Mo Molybdenum	0.02			
P	Phosphorous	0.013			1	V Vanadium	0.003			
S	Sulphur	0.014				Cb Columbium	0.002			
Si	Silicon	0.24				C.E.	0.40			
Cu	Copper	0.23		✓	7440-50-8	CuNiCrMo	0.395			
Ni	Nickel	0.07		✓	7440-02-d	CrMo	0.095			

Mechanical T	esting	Other			
Test Lab	. AFG	MILL	CMC-TEXAS		
Test Bar Size	Sacrificial Piece	MHC	3030041		
HBW	163 - 163	EF	Y		
Elg (%)	31	•			
RA (%)	61 `	<u>:</u>			
Tensile Specimen Size (in)	.497				
Tensile (ksí)	78.6				
Yield (ksi)	45.4	:			
Gauge Length	2	•			
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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 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 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 rumber 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.:

242277

Certification Date:

7/11/2012

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

Nielalas Teparel

Nicholas Tepovich - Metallurgic Lab Manager