

Material Test Report

Heat Code: TYB

An Ameri-Forge Group Company 13770 Industrial Rd. Houston, TX 77015

Line: 11

ISO 9001:2008 Certified

Sales: (713) 868-4421 Fax: (713) 455-8366

PLESA STEEL INC. PO: 21 Sales Order: 112787 Item Code: 0151400101-0020F 5100 WESTHEIMER ROAD SUITE 200 Item Desc: FLG 04.00 0150 WN RF STD

Qty Shipped: 150

Houston, TX 77056 Supplier: CMC

Supplier Heat: 3031959

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

S Sulphur	0.20 1.01 0.012 0.015	· · · · · · · · · · · · · · · · · · ·	✓ 7439	-96-5	Cr Chromi Mo Molybo	ienum	0.07 0.02	· · · · · · · · · · · · · · · · · · ·	7	440-47-3
P Phosphorous S Sulphur	0.012		√ 7439	-96-5						
S Sulphur					1					
	0.015				V Vanadi	um	0.002			
Si Silicon	0.015				Cb Columb	oium	0.002			
	0.23				C.E.		0.41			
Cu Copper	0.27		√ 7440	-50-8	CuNiCrMo		0.445			
Ni Nickel	0.08		✓ 7440	-02-0	CrMo		0.095			

		-1			
Mechanical T	Other				
Test Lab	AFG	MILL		CMC-TEXAS	
Test Bar Size	Sacrificial Piece	MHC		3031959	
HBW	179 - 179	EF		Y	
Elg (%)	26				
RA (%)	50				
Tensile Specimen Size (in)	.494				
Tensile (ksi)	80.6				
Yield (ksi)	50.3				
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

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 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.:

245394

Certification Date:

8/20/2012

Nicholas Tepovich - Metallurgic Lab Manager

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