

Material Test Report

Heat Code: HUD

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

ISO 9001:2008 Certified

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

PLESA ANAHUAC Y CIAS SA DE CV AV. VALLE DE LAS ALAMEDAS 66-0
 PO:
 8671
 Sales Order:
 76145
 Line:
 12

 Item Code:
 0151600102-0020F
 Qty Shipped:
 30

Item Desc: FLG 06.00 0150 WN RF XH

54940 TULTITLAN, EDO, MEX Supplier: CMC Supplier Heat: 3017440

Spec: ASTM A105/A105M-(10)/ASME SA 105/SA 105M-(08a) Section II Part A

Ladle	(%wt)	Element	CAS#	PCRA	Product	Ladie	(%wt)	ement
0.06	mium	Cr Chrom				0.18	n	Carb
0.02	bdenum	Mo Molyb	39-96-5	✓ 74		1.05	nese	Mang
0.003	dium	V Vanad				0.005	horous	Phos
0.001	mbium	Cb Colum				0.023	ur	Sulp
0.39		C.E.				0.23	on	Sili
0.313		CuNiCrMo	40-50-8	✓ 74		0.15	r	Сорр
0.083		CrMo	40-02-0	✓ 74		80.0	1	Nick
0.083		CrMo	40-02-0	✓ 74		80.0	1	Nick
•	0.02 0.003 0.001 0.39 0.313	denum 0.02 ium 0.003 bium 0.001 0.39 0.313	Mo Molybdenum 0.02 V Vanadium 0.003 Cb Columbium 0.001 C.E. 0.39 CuNiCrMo 0.313	39-96-5 Mo Molybdenum 0.02 V Vanadium 0.003 Cb Columbium 0.001 C.E. 0.39 40-50-8 CuNiCrMo 0.313	✓ 7439-96-5 Mo Molybdenum 0.02 V Vanadium 0.003 Cb Columbium 0.001 C.E. 0.39 ✓ 7440-50-8 CuNiCrMo 0.313	✓ 7439-96-5 Mo Molybdenum 0.02 V Vanadium 0.003 Cb Columbium 0.001 C.E. 0.39 ✓ 7440-50-8 CUNICTMO 0.313	1.05	Janese 1.05 ✓ 7439-96-5 Mo Molybdenum 0.02 phorous 0.005 V Vanadium 0.003 con 0.23 Cb Columbium 0.001 con 0.23 C.E. 0.39 er 0.15 ✓ 7440-50-8 Cunicrmo 0.313

		;		
Mechanical T	esting	Other		
Test Lab	AFG	MILL	CMC-TEXAS	
Test Bar Size	TEST PIECE	MHC	3017440	
HBW	149 - 149	EF	Y	
Elg (%)	36.0	Fully Killed	Y	
RA (%)	62.0			
Tensile Specimen Size (in)	.248			
Tensile (ksi)	74.6			
Yield (ksi)	43.9			
Gauge Length	1			
		•		
		•		
		<u>:</u>		
		<u> </u>		
		:		
		•		

Product compliant with and meets all requirements of ASTM A105/ASME SA105, latest edition.

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. 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. Yield strength was determined using the 0.2% offset method.

No weld repair performed on this product.

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.: 190434

Certification Date: 9/20/2010

Nicholas Tepovich - Metallurgic Lab Manager

Vieldelas Tepane

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