

Material Test Report

Heat Code: JAL

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

Item Code: 0303300100-0020F

Sales Order: 95732 Line: 1

ALAMEDAS 66-0

Item Desc: FLG 03.00 0300 BL RF

Qty Shipped: 20

54940 TULTITLAN, EDO, MEX

Supplier: CMC

PO: 10589

Supplier Heat: 3019787

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

nent (%wt)	Ladie	Product	EPCR4	CAS#	Element	(%wt)	Ladie	Product	EPCR/	CAS#
Carbon	0.20				Cr Chrom	ium	0.05		/	7440-47-3
Manganese	1.04		✓ ·	7439-96-5	Mo Molybo	denum	0.02			
Phosphorous	0.005				V Vanadi	ium	0.003			
Sulphur	0.014				:Cb Columb	oium	0.001			
Silicon	0.23				C.E.		0.41			
Copper	0.22		✓ :	7440-50-8	CuNiCrMo		0.372			
Nickel	0.08		✓ :	7440-02-0	CrMo		0.072			
	Carbon Manganese Phosphorous Sulphur Silicon Copper	Carbon 0.20 Manganese 1.04 Phosphorous 0.005 Sulphur 0.014 Silicon 0.23 Copper 0.22	Carbon 0.20 Manganese 1.04 Phosphorous 0.005 Sulphur 0.014 Silicon 0.23 Copper 0.22	Carbon 0.20 Manganese 1.04 ✓ Phosphorous 0.005 Sulphur 0.014 Silicon 0.23 Copper 0.22 ✓	Carbon 0.20 Manganese 1.04 ✓ 7439-96-5 Phosphorous 0.005 Sulphur 0.014 Silicon 0.23 Copper 0.22 ✓ 7440-50-8	Carbon 0.20 Cr Chrom. Manganese 1.04 ✓ 7439-96-5 Mo Molybo Phosphorous 0.005 V Vanad: Sulphur 0.014 Cb Columb Silicon 0.23 C.E. Copper 0.22 ✓ 7440-50-8 CuNiCrMo	Carbon 0.20 Cr Chromium Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum Phosphorous 0.005 V Vanadium Sulphur 0.014 Cb Columbium Silicon 0.23 C.E. Copper 0.22 ✓ 7440-50-8 CuNiCrMo	Carbon 0.20 Cr Chromium 0.05 Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.005 V Vanadium 0.003 Sulphur 0.014 Cb Columbium 0.001 Silicon 0.23 C.E. 0.41 Copper 0.22 ✓ 7440-50-8 CuNiCrMo 0.372	Carbon 0.20 Cr Chromium 0.05 Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.005 V Vanadium 0.003 Sulphur 0.014 Cb Columbium 0.001 Silicon 0.23 C.E. 0.41 Copper 0.22 ✓ 7440-50-8 CuNiCrMo 0.372	Carbon 0.20 Cr Chromium 0.05 ✓ Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.005 V Vanadium 0.003 Sulphur 0.014 Cb Columbium 0.001 Silicon 0.23 C.E. 0.41 Copper 0.22 ✓ 7440-50-8 CuNiCrMo 0.372

Mechanical To	esting		Other		
Test Lab	AFG	MILL	CMC-SEGUIN TX		
Test Bar Size	TEST PIECE	MHC	3019787		
HBW	152 - 152	EF	Y		
Elg (%)	31.0	Fully Killed	Y		
RA (%)	65.0				
Tensile Specimen Size (in)	.248				
Tensile (ksi)	79.9				
Yield (ksi)	49.8				
Gauge Length	1				
		•			
		'			
		:			
		•			
		:			

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.

Product compliant with NACE MR0175, latest edition and dimensions to ASME B16.5

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.:

209229

Certification Date:

5/26/2011

Nicholas Tepovich - Metallurgic Lab Manager