

Material Test Report

Heat Code: JGM

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

54940 TULTITLAN, EDO, MEX

PO: 10492

Sales Order: 95070

Line: 1

Item Code: 0153600100-0020F

Qty Shipped: 30

Item Desc: FLG 06.00 0150 BL RF

Supplier: CMC

Supplier Heat: 3021861

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

nent (%wt)	Ladle	Product	EPCR	A CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
Carbon	0.19				Cr Chrom	Lum	0.08		V 70	440-47-3
Manganese	1.04		1	7439-96-5	Mo Molybo	denum	0.02			
Phosphorous	0.011				V Vanadi	um	0.003			
Sulphur	0.016				Cb Columb	oium	0.000			
Silicon	0.23				C.E.		0.41			
Copper	0.27		1	7440-50-8	CuNiCrMo		0.452			
Nickel	0.08		✓	7440-02-0	CrMo		0.102			
	Manganese Phosphorous Sulphur Silicon Copper	Manganese 1.04 Phosphorous 0.011 Sulphur 0.016 Silicon 0.23 Copper 0.27	Manganese 1.04 Phosphorous 0.011 Sulphur 0.016 Silicon 0.23 Copper 0.27	Manganese 1.04 ✓ Phosphorous 0.011 Sulphur 0.016 Silicon 0.23 Copper 0.27 ✓	Manganese 1.04 ✓ 7439-96-5 Phosphorous 0.011 Sulphur 0.016 Silicon 0.23 Copper 0.27 ✓ 7440-50-8	Manganese 1.04 ✓ 7439-96-5 Mo Molybo Phosphorous 0.011 V Vanadi Sulphur 0.016 Cb Columb Silicon 0.23 C.E. Copper 0.27 ✓ 7440-50-8 CunicrMo	Carbon 0.19 Cr Chromium Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum Phosphorous 0.011 V Vanadium Sulphur 0.016 Cb Columbium Silicon 0.23 C.E. Copper 0.27 ✓ 7440-50-8 CuNiCrMo	Carbon 0.19 Cr Chromium 0.08 Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.011 V Vanadium 0.003 Sulphur 0.016 Cb Columbium 0.000 Silicon 0.23 C.E. 0.41 Copper 0.27 ✓ 7440-50-8 CuNiCrMo 0.452	Carbon 0.19 Cr Chromium 0.08 Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.011 V Vanadium 0.003 Sulphur 0.016 Cb Columbium 0.000 Silicon 0.23 C.E. 0.41 Copper 0.27 ✓ 7440-50-8 CuNiCrMo 0.452	Carbon 0.19 Cr Chromium 0.08 ✓ 7.439-96-5 Manganese 1.04 ✓ 7439-96-5 Mo Molybdenum 0.02 Phosphorous 0.011 V Vanadium 0.003 Sulphur 0.016 Cb Columbium 0.000 Silicon 0.23 C.E. 0.41 Copper 0.27 ✓ 7440-50-8 Cunicrmo 0.452

Mechanical T	Other				
Test Lab	AFG	MILL		CMC-TEXAS	
Test Bar Size	SACRIFICIAL PIECE	MHC		3021861	
HBW	170 - 170				
Elg (%)	30				
RA (%)	52				
Tensile Specimen Size (in)	.498				
Tensile (ksi)	80.6				
Yield (ksi)	47.5				
Gauge Length	2				
		:			
		:			
		;			

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.:

207624

Certification Date:

5/11/2011

Violadas Lepare Nicholas Tepovich - Metallurgic Lab Manager