

54940 TULTITLAN, EDO, MEX

Material Test Report

Heat Code: YKH

An Ameri-Forge Group Company 13770 Industrial Rd. Houston, TX 77015 Sales: (713) 868-4421 Fax: (713) 455-8366

ISO 9001:2008 Certified

PO: 3050 Sales Order: 60057 Line: 24 PLESA ANAHUAC Y CIAS Item Code: 0601300101-0021F Qty Shipped: 40 SA DE CV AV. VALLE DE LAS Item Desc: FLG 03.00 0600 WN RF STD ALAMEDAS 66-0 Supplier: CMC Supplier Heat: 257033

Spec: ASTM A105/A105N-(10)/ASME SA 105/SA 105N-(08a) Section II Part A - Normalized

Elen	nent	(%wt)	Ladle	Product	EPCRA	CAS#	Eleme	ent	(%wt)	Ladie	Product	EPCR/	A CAS#
С	Carbon		0.19				Ni	Nickel		0.08		✓	7440-02-0
Mn	Mangane	ese	0.81		✓ ·	7439-96-5	Cr	Chromiu	ım	0.09		✓	7440-47-3
P	Phospho	rous	0.011				Mo 1	Molybde	enum	0.016			
S	Sulphur	•	0.029				v	Vanadiu	ım	0.002			
Si	Silicon	1	0.20				Cb	Columbi	ium	0.001			
Cu	Copper		0.29		✓ .	7440-50-8	C.E.			0.37127			
							:						

		<u> </u>				
Mechanical To	esting	Heat Treat				
Test Lab	AFG	Norm. Temp. (F)	1675			
Test Bar Size	SACRIFICIAL PIECE	Norm. (Hrs)	4			
HBW	149 - 153	Norm. Cooling Type	AIR			
Elg (%)	40	Norm. Location	AFG			
RA (%)	60	:				
Tensile Specimen Size (in)	.250	Oth	er			
Tensile (ksi)	74.5	MILL	CMC			
Yield (ksi)	45.3	MHC	257033			
Gauge Length	1	EF	Y			
		:				
		:				
		•				

Product compliant with NACE MR0175 and NACE MR0103 latest edition and dimensions to ANSI B16.5. 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 welding performed.

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.:

202635

Certification Date:

3/11/2011

Nicholas Tepovich - Metallurgic Lab Manager