



Material Test Report

Heat Code: zvk

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

ISO 9001:2000 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: 3817	Sales Order: 63247	Line: 13
	Item Code: 0151800101-0020F		Qty Shipped: 100
	Item Desc: FLG 08.00 0150 WN RF STD A105 NHT COFFR		
	Supplier: CMC		Supplier Heat: 261227
Spec: ASTM A 105/A 105M-03/ASME SA 105/SA 105M-04, Melt Practice EF			

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19				Cr	Chromium	0.09		✓	7440-47-3
Mn	Manganese	0.92		✓	7439-96-5	Mo	Molybdenum	0.039			
P	Phosphorous	0.006				V	Vanadium	0.001			
S	Sulphur	0.022				Cb	Columbium	0.002			
Si	Silicon	0.20				C.E.		0.393			
Cu	Copper	0.24		✓	7440-50-8	CuNiCrMo		0.48			
Ni	Nickel	0.11		✓	7440-02-0	CrMo		0.13			

Mechanical			Other		
Test Lab		AFG	Country of Origin		USA (US)
Test Bar Size		SACRIFICIAL PIECE	EF		Y
HBW		156-156			
Elg (%)		33.0			
RA (%)		66.0			
Tensile Specimen Size (in)		0.246			
Tensile (ksi)		75.4			
Yield (ksi)		42.4			
Gauge Length		1.00			

Material on this report is certified to NACE MR-01-75 and DIMS. to ANSI B16.5
Product compliant with NACE MRO175, latest edition.

Product compliant with and meets all requirements of ASTM A105/ASME SA105-05.
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.

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