

Material Test Report

Coffer Corp.
An AFGlobal Company
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Heat Code: AXP

ISO 9001:2008 Certified

PLESA STEEL INC. 00012015	PO: 441	Sales Order: 155907	Line: 3
5100 WESTHEIMER RD STE 200	Item Code: 0152300100-0020F	Qty Shipped: 50	
Houston, TX 77056	Item Desc: ELG 03.00 0150 SO RF A105	NHT COFFER	
Supplier: CMC-TEXAS		Supplier Heat: 3063478	
Spec: ASTM A105/A105M-(14)/ASME SA 105/SA 105M-(15) Section II Part A			

Element	(%wt)	Ladle	Product	EPCRA	CAS#	Element	(%wt)	Ladle	Product	EPCRA	CAS#
C	Carbon	0.19	✓	7439-96-5		Cr	Chromium	0.07		✓	7440-47-3
Mn	Manganese	1.01				Mo	Molybdenum	0.01			
P	Phosphorous	0.011				V	Vanadium	0.000			
S	Sulphur	0.022				Cb	Columbium	0.001			
Si	Silicon	0.26				C.E.		0.39			
Cu	Copper	0.19	✓	7440-50-8		CuNiCrMoV		0.342			
Ni	Nickel	0.07	✓	7440-02-0		CrMo		0.082			

Mechanical Testing

Test Lab	AFG
Test Bar Size	Sacrificial Piece
HEW	170 - 170
Elg (%)	27
RA (%)	59
Tensile Specimen Size (In)	.246
Tensile (ksi)	83.7
Yield (ksi)	47.9
Gauge Length (in)	1

EF Fully Killed

Other

Y Y

Product compliant with NACE MR0175/ISO 15156-2:2009, Annex A (A.2.1.2, A2.1.3).

- * No Weld repair performed.
- * Ladle Chemical Analysis results are reported from the raw material suppliers MTR.
- * Tensile taken from a round specimen. Measurement of elongation after fracture.
- * Yield strength was determined using the .2% offset method, unless otherwise specified.
- * 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.
- * When reported on MTR: Tensile Testing Per ASTM E8; Brinell Hardness Per ASTM E10; Charpy Testing Per ASTM E23
- * AF Global manufactures materials according to a certified Quality Management System conforming to ISO 9001:2008 and PED 2014/68/EU, Annex 1, Section 4.3

Unless otherwise noted on PO, Dimensions of all standard pipe flanges and flange fittings (NPS 1/2 to NPS 24) per ASME B16.5-2013, large diameter steel flanges (NPS 26 to 60) per ASME B16.47-2011, Orifice flanges per ASME B16.36-2015, Steel pipeline flanges (NPS 1/2 to 60) per MSS SP-44.

The recording of false, fictitious, or fraudulent statement or entries on this document may be punishable as a felony under federal statute.

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.: 1260052

Certification Date: 10/7/2016

Issued By: Juan Diaz



Rina Sane - Metallurgical Lab Manager