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PF02 Rev 2 (10/15/2013)

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CERTIFIED MATERIAL TEST REPORT

Customer: Cust. P.O.: 2560	Customer Part No:
Item #: 002	Tag:
Material Spec: ASTM A182-20 F51 QA Desc: SOLUTION ANNEALED Description: FORGED WITH ALLOWANCE TO FINISH TO 10.75" OD X 2.75" TH	Patriot Forge Shop Order# Q0842-1 Pce.Dash#s: 1 Cert Pcs: 1

MILL DATA		HEAT # 901833		MILL NAME: COGNE SPECIALITY STEEL USA INC																
C	Mn	P	S	Si	Cr	Mo	Ni	N	Al	Ti	Cu	Sn	V	W	Co	B	Ca			
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
.013	1.11	.023	.0005	.45	22.42	3.15	5.74	.17	.014	.010	.22	.005	.050	.020	.05	.0023	.0029			

HEAT TREATMENT					
Description	Temperature (F)	Soak Time (H.M)	Cooling	Load No	Other Info
ANNEAL	1925	4.00	WATER QUENCH	1007055	Start Temp: 60 End Temp: 61
FURNACE LOAD ADDITIONAL COMMENTS					
WATER QUENCHED BELOW 500F					

MECHANICAL PROPERTIES - TENSILE							
Yield	Ultimate	Elongation	Red of Area	Offset	Location	Direction	Comment
(P.S.I.)	(P.S.I.)	(in 2" %)	(%)	(%)			
75000	104000	40	78	0.2			

ADDITIONAL QUALITY STATEMENTS

THIS CERTIFICATE CONFORMS TO THE REQUIREMENTS OF EUROPEAN NORM EN 10204, INSPECTION CERTIFICATE 3.1

METALLURGICALLY PROCESSED PER NACE MR0103 & MR0175/ISO 15156 ED 2015

****REVISED 03-03-22 - ADD EN & NACE STATEMENTS****

TEST NUMBER: 161091

SHIP WEIGHT: 151 LBS

* NO WELD REPAIR WAS PERFORMED ON THESE PARTS.

* These forgings have not come into direct contact with mercury or any of its compounds, nor with any mercury containing device during manufacturing, testing, inspection or storage.

* All products supplied are in compliance with the quality requirements of the purchase order and specifications identified unless stated otherwise on this CMTR. All products outlined on this CMTR were produced in accordance with our quality manual.

FORGED IN CANADA

Date: February 17, 2022

Q.A. Assistant

Alison Fiddes

PATRIOT FORGE CO.

QUALITY ASSURANCE