



**NORTH AMERICAN
STAINLESS**

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Pi-mat

Certificate: 369943 01	Mail To: EARLE M. JORGENSEN COMPANY 1900 MITCHELL BLVD. SCHAUMBURG IL 60193	Ship To: EARLE M. JORGENSEN COMPANY 1900 MITCHELL BLVD. SCHAUMBURG IL 60193	Date: 1/10/2018 Page: 1 Of 1
Customer: 0245 001			Steel: 316/316L
NAS Order: LP 76786 37		Heat Treat Code: 44,763	Finish: Cold Draw
Your Order: P840049-423	Item Code: 525402		Dia/Thk: .3750 in
			Leg Length:
			Length: 144.00 in
			Corrosion: ASTM A262/15 Prac A/E OK

PRODUCT DESCRIPTION:

HEATED TO 1900F MIN & QUENCHED; GRAIN SIZE= 4-6
Round Bar, Annealed, Cold Draw
UNS 31600/31603 EN 10204 3.1, ASTM A484/16
ASTM A276/17, ASTM A479/17, ASTM A182/16a CHEM ONLY,
ASME SA479/13, ASME SA182/13 CHEM ONLY, ASTM F899/12b
AMS 5648M/AMS 5653H, AMS QQS-763D, QQS 763F
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8M
ASTM A193/16-ASME SA193/13 CL 1 GR B8M

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

R 381811

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BJ20167	3022								

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/14a

NAS Heat	Supplier Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
633L		US	.020	.22	16.64	.36	1.43	2.029	.034	10.51	.028	.0210
			SI %									
			.22									

MECHANICAL PROPERTIES

Id o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BJ20167 R L	218.0	93.53	105.32	73.43	30.70

Oct 10/19

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS

Technical
Dept. Mgr.

[Signature]
KRIS LARK

NAS