



**NORTH AMERICAN
STAINLESS**

METALLURGICAL TEST REPORT

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

Certificate: 366188 03 Mail To:

Ship To:

Date: 12/27/2017 Page: 1 Of 1

Steel: 316/316L

Finish: Cold Finish

Dia/Thk: 3.1250 in

Leg Length:

Length: 144.00 in

Corrosion: ASTM A262/15 Prac A/E OK

Customer: 0245 001

NAS Order: LP 74913 17

Red Ratio: 7.7 :1

Heat Treat Code: 44,361

Your Order:

Item Code: 521656

PRODUCT DESCRIPTION:

HEATED TO 1900F MIN & QUENCHED; GRAIN SIZE= 6-8
Round Bar, Annealed, Smooth Turned, Cold Finished
UNS S31600/S31603, 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
AMS 5648M/AMS 5653H, AMS QQS-763D, QQS 763F
NACE MR0175-03/MR0103-05 (MID RADIUS ONLY),
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8M
ASTM A193/16-ASME SA193/13 CL 1 GR B8M(EXC PAR 6.2)

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 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 373 + 50

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BJ21648	3103								

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 %
624J		US	.023	.32	16.69	.45	1.33	2.077	.037	10.58	.033	.0285
			SI %									
			.22									

MECHANICAL PROPERTIES

	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ21648	R L	188.0	49.00	91.00	66.00	43.00

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.

KRIS LARK

NAS