

*p009695-12*

**VIRAJ IMPOEXPO**  
(A DIVISION OF VIRAJ PROFILES LTD.)

10 IMPERIAL CHAMBERS, FIRST FLOOR,  
WILSON ROAD, BALLARD ESTATE,  
MUMBAI - 400 008 (INDIA)

**TEST CERTIFICATE**

**CUSTOMER :**  
UNIVERSAL STAINLESS AND ALLOYS INC.  
1255 FEWSTER DRIVE  
MISSISSUAGA ONTARIO,  
CANADA L4W 1A2.

**ORDER NO.**  
P007695

**PACKING LIST NO.**    **INSPECTION NO.**    **DATE**  
IMP/17620            IMP/17620/11    04/04/2007

**GRADE**  
316/316L

**BUNDLE NO** 222386, 222508,

**DESCRIPTION :**  
STAINLESS STEEL BRIGHT BARS

**ROUGH TURNED**

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT LBS
8 1/2 INCH	ROUND	RT	11 FT - 18 FT	2	5708

**CHEMICAL ANALYSIS**

**HEAT NO:** 74404

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Co
0.022	1.77	0.45	0.020	0.039	10.65	16.75	2.04	0.38	0.069	0.20

**TEST RESULT**

.2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
37	60	59	74	167	5

**Specifications:**

MATERIAL CONFIRMS TO AISI 316, AISI 316L, UNS#S31600/S31603, ASTM A276-00A, ASTM A 484-00, ASTM A182  
ASTM A183-01B B8M CL1, ASME SA 193-00 B8M CL1, ASTM A479-01, ASME SA479-01, AMS 5648H, AMS 5653H,  
MIL-S-7720A AM2, RMS 50, QQ-S-763F, NACE MR 0175-03, EN 10204-3.1B, I.G.C TEST SATISFACTORY ACCORD  
A282-01 PRACTICE E.

**Remarks:**

FREE FROM MERCURY CONTAMINATION, FREE FROM WELDING OR WELD REPAIRS,  
MACRO & MICRO STRUCTURE SATISFACTORY, SOLUTION ANNEALED AS PER ASTM A479 AT 1900 F AND WATER QUENCHED  
MELTING PROCESS:AOD.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

*S. Suvama*  
**WORKS INSPECTOR**  
S. Suvama