

Fidelity Stainless



1303 North Service Road East, Unit #1, Oakville, ON L6H 1A7

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304/L "Mill-Edged" Flat Bar

MATERIAL SPECIFICATIONS

PREPARED BY: H. POPE

REVISION DATE: 03/15/2013

MATERIAL	STAINLESS FLAT BAR 304/304L 12-14' R/L	HOT ROLLED, ANNEALED AND PICKLED DUAL CERTIFIED
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SPECIFICATIONS	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS AISI 304,304L UNS# S30400/S30403, ASTM A182, ASTM A262 PRACTICE E, ASTM A276, ASTM A314, ASTM A479, ASTM A484, ASME SA 182, ASME SA 479, ASME SA484, AMS 5639, AMS 5647, QQ-S-763F COND. A, EN 10204-3.1	
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<u>CHEMICAL ANALYSIS</u>			<u>MECHANICAL PROPERTIES</u>	
Carbon (C)	.03		Tensile Strength (U.T.S.)	75 KSI
Chromium (Cr)	18.00/20.00		Yield Strength (Yield)	30 KSI
Cobalt (Co)		aim .10 max	Elongation (Ei. or Elong.)	40%
Copper (Cu)	1.00	aim .75 max	Reduction of Area (R.A. or Red.)	50%
Manganeses (Mn)	2.00		Hardness (RB,RC,or BHN,HB)	140/241 BHN MAX (Aim 170-233)
Molybdenum (Mo)	1.00	aim .75 max		
Nickel (Ni)	8.00/10.50			
Nitrogen (N)	.10			
Phosphorous (P)	.045			
Silicon (Si)	1.00			
Sulfur (S)	.03	aim .02-.03		

All singular chemistry values are
MAXIMUM unless otherwise noted

All mechanical properties are
MINIMUM unless otherwise noted

OTHER TEST(S) AND/OR REQUIREMENTS

INTERGRANULAR CORROSION TEST (FREE FROM CONTINUOUS CARBIDE)

AS PER ASTM A262-01 PRACTICE E

MACRO ETCH TEST & MICRO STRUCTURE TO BE SATISFACTORY AS PER QQS-763

MERCURY FREE CONTAMINATION STATEMENT

FREE FROM RADIOACTIVE CONTAMINATION

NO WELDING OR WELD REPAIR STATEMENT

REPORT GRAIN SIZE PER ASTM E112-96

SOLUTION ANNEALED CONDITION A PER ASTM A479 AT 1040C/1900F MINIMUM AND WATER QUENCHED.

HEAT TREATMENT: TEMPERATURE, TIME (HOURS SOAKED) AND COOLING MUST BE REPORTED.

FINISHED CONDITION, MELT AND HOT WORKING PRACTICES TO BE REPORTED.

GRADE, SIZE AND HEAT NUMBERS MUST BE METAL STAMPED AT BOTH ENDS ON SIZES 1" DIA. AND LARGER
COLOUR CODE RED

BUNDLE WEIGHT - 2200 LBS MAXIMUM. ONE HEAT AND SIZE PER BUNDLE.

IMPORTANT:

ORIGINAL CERTIFICATES OF CHEMICAL & PHYSICAL ANALYSIS REQUIRED TWO (2) WEEKS BEFORE
SHIPMENT ARRIVES

ALL TEST REPORTS MUST STATE COUNTRY OF ORIGIN

ALL TEST REPORTS MUST HAVE THE SIGNATURE NAME AND TITLE PRINTED.

ALL TEST REPORTS MUST BE SIGNED BY AUTHORIZED PERSON.