

Fidelity Stainless



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316/L "MII-Edged" Flat Bar

PREPARED BY: H. POPE

REVISION DATE: 03/15/13

MATERIAL SPECIFICATIONS

MATERIAL	STAINLESS FLAT BAR 316/316L R/L 12'-14'	HOT ROLLED, ANNEALED AND PICKLED DUAL CERTIFIED
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SPECIFICATIONS	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS AISI 316,316L, UNS S316/S31603 ASTM A182, ASTM A262 PRACTICE E, ASTM A276, ASTM A314, ASTM A479, ASTM A484 ASME SA182, ASME SA479, ASME SA484, AMS 5648, AMS 5653, QQS-763F COND. A, EN 10204-3.1
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<u>CHEMICAL ANALYSIS</u>	<u>MECHANICAL PROPERTIES</u>
Carbon © .03	Tensile Strength 75 KSI (U.T.S.)
Chromium (Cr) 16.00/18.00	Yield Strength 30KSI (Yield)
Cobalt (Co) aim .10 max	Elongation 40% (Ei. or Elong.)
Copper (Cu) 1.000 aim .75 max	Reduction of Area 50% (R.A. or Red.)
Manganes (Mn) 2.000	Hardness 140/223 BHN (RB,RC,or BHN) (Aim 150-180)
Molybdenum (Mo) 2.00/3.00	
Nickel (Ni) 10.00/14.00	
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 GREEN
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
TEST REPORTS MUST HAVE THE SIGNATURE NAME AND TITLE PRINTED
ALL TEST REPORTS MUST BE SIGNED BY AUTHORIZED PERSON