

# Fidelity Stainless



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## 316/L Hexagon Bar

### MATERIAL SPECIFICATIONS

PREPARED BY: H. POPE

REVISION DATE: 03/15/13

<b>MATERIAL</b>	STAINLESS HEXAGON BAR 316/316L R/L 12-14'	COLD DRAWN DUAL CERTIFIED
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<b>SPECIFICATIONS</b>	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS AISI 316,316L, UNS- S316/S31603  ASTM A182, ASTM A193 B8M CL1, ASTM A262 PRACTICE E, ASTM A276, ASTM A314, ASTM A320 B8M CL1, ASTM A388, ASTM A479, ASTM A484, ASME SA182, ASME SA193 B8M CL 1, ASME SA320 B8M CL1, ASME SA479, AMS 5648, AMS 5653, QQ-S-763F COND A, MIL-S-862 B, SAE-AMS-S-7720A, NACE MR 0175, NACE MR 0103, EN 10204-3.1
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<u>CHEMICAL ANALYSIS</u>	<u>MECHANICAL PROPERTIES</u>
Carbon (C) .03	Tensile Strength 75 KSI (U.T.S.)
Chromium (Cr) 16.00/18.00	Yield Strength 30 KSI (Yield)
Cobalt aim .20 max	Elongation 40% (Ei. or Elong.)
Copper (Cu) 1.00 aim .75 max	Reduction of Area 50% (R.A. or Red.)
Manganes (Mn) 2.00	Hardness 140/223 BHN MAX (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

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 MINIMUM AND WATER QUENCHED

HEAT TREATMENT, FINISHED CONDITION AND MELTING PROCESS MUST BE REPORTED

HEAT NUMBERS MUST BE METAL STAMPED AT BOTH ENDS ON SIZES 1" DIA. AND LARGER

COLOUR CODE GREEN

BUNDLE WEIGHT - 2200 LBS MAXIMUM

### 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