



1303 North Service Road East, Unit #1, Oakville, ON L6H 1A7
Phone: (905)842-1700;Fax: (905)842-5802

304/L Round Bar Over 4 Inch

MATERIAL SPECIFICATIONS

PREPARED BY: H. POPE

REVISION DATE: 03/15/13

MATERIAL	STAINLESS ROUND BAR 304/304L 4 1/8" TO 20"	ROUGH TURNED 12-14' R/L DUAL CERTIFIED	RMS 125-250
-----------------	---	--	-------------

SPECIFICATIONS	<p>ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS AISI 304,304L UNS# S30400/S30403 DIN# WNR 1.4301/1.4307</p> <p>ASTM A182, ASTM A193 B8 CL1, ASTM A262 PRACTICE E, ASTM A276, ASTM A314, ASTM A320 B8 CL1, ASTM A388, ASTM A479, ASTM A484 ASME SA182, ASME SA193 B8 CL1, ASME SA320 B8 CL1, ASME SA479 AMS 5639, AMS 5647, SAE-AMS-S-7720A, QQ-S-763F COND A, MIL-S-862 B, NACE MR 0175, MR0103, EN 10088-3, EN 10204-3.1, EN 10222-5, EN 10272</p>
-----------------------	--

<u>CHEMICAL ANALYSIS</u>	<u>MECHANICAL PROPERTIES</u>
Carbon (C) .03	Tensile Strength 75 KSI (U.T.S.)
Chromium (Cr) 18.00/20.00	Yield Strength 30KSI (Yield)
Cobalt (Co) aim .10 max	Elongation 40% (Ei. or Elong.)
Copper (Cu) 1.00 aim .75 max	Reduction of Area 50% (R.A. or Red.)
Manganeses (Mn) 2.00 aim 1.50-1.75	Hardness 140/241 Max (RB,RC,or BHN)
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 A262-02 PRACTICE E

MACRO ETCH TEST & MICRO STRUCTURE TO BE SATISFACTORY

ULTRASONIC TESTED AS PER ASTM A388

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 AND TIME (HOURS SOAKED) MUST BE REPORTED

FINISHED CONDITION, MELT AND HOT WORKING PRACTICES (FORGED OR ROLLED) MUST BE REPORTED

ROUGH TURNED BAR TO 8" 125 RMS MAXIMUM, OVER 8" 250 RMS MAXIMUM FINISH AS PER ASTM A484

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

COLOUR CODE RED

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