

# Fidelity Stainless



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## 303 Round Bar Under 1 Inch

### MATERIAL SPECIFICATIONS

PREPARED BY: M POPE

REVISION DATE: 05/25/23

<b>MATERIAL</b>	STAINLESS ROUND BAR 303 1/8" TO 15/16"	SMOOTH TURNED 12-14' R/L	50 RMS
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<b>SPECIFICATIONS</b>	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS AISI 303 UNS# S30300 DIN# WNR 1.4305  ASTM A314, ASTM A320 B8F CL1, ASTM A484, ASTM A582 ASME SA 320 B8F CL1, AMS 5640-TYPE 1, QQ-S-764B AMD2 COND. A MIL-S-862 B, EN 10088-3, EN 10204-3.1
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<u>CHEMICAL ANALYSIS</u>			<u>MECHANICAL PROPERTIES</u>		
Carbon ( C )	.15	aim .02-.08	Tensile Strength (U.T.S.)	up to 1/2" over 1/2"	85/125 KSI <b>75 KSI</b>
Chromium (Cr)	17.00/19.00		Yield Strength (Yield)		25 KSI
Cobalt (Co)		report content	Elongation (Ei. or Elong.)		30%
Copper (Cu)	.75		Reduction of Area (R.A. or Red.)		40%
Manganses (Mn)	2.00		Hardness (RB,RC,or BHN)		140/255 Aim 160-180
Molybdenum (Mo)	.75				
Nickel (Ni)	8.00/10.00				
Nitrogen (N)		report content			
Phosphorous (P)	.20				
Silicon (Si)	1.00				
Sulfur (S)	.25 min	aim .32-.35			

All singular chemistry values are  
MAXIMUM unless otherwise noted

All mechanical properties are  
MINIMUM unless otherwise noted

### OTHER TEST(S) AND/OR REQUIREMENTS

MACRO ETCH TEST & MICRO STRUCTURE TO BE SATISFACTORY  
 MERCURY FREE CONTAMINATION STATEMENT  
 FREE FROM RADIOACTIVE CONTAMINATION  
 NO WELDING OR WELD REPAIR STATEMENT  
 EDDY CURRENT TESTED  
 REPORT GRAIN SIZE AS PER ASTM E 112-96  
 SOLUTION ANNEALED CONDITION A TEMP. 1040C/1900F MINIMUM AND WATER QUENCHED  
 HEAT TREATMENT TEMPERATURE AND TIME (HOURS SOAKED) MUST BE REPORTED  
 FINISHED CONDITION (RMS 50 MAX) AS PER ASTM A484, MELT AND HOT WORKING PRACTICES TO BE REPORTED  
 GRADE AND HEAT NUMBER MUST BE METAL STAMPED AT BOTH ENDS OF BAR 1" AND OVER  
 COLOUR CODE BLUE  
 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 AUTHORIZED PERSON