

# Fidelity Stainless



855 Steeles Avenue East, Milton, Ontario L9T 5H3  
 Phone: (289)-851-1076 Fax: (289)-851-1079

## 15-5 Type 1 VAR

### MATERIAL SPECIFICATIONS

PREPARED BY: M. POPE

REVISION DATE: 12/10/23

<b>MATERIAL</b>	STAINLESS ROUND BAR 15-5 HR - Solution Annealed Ground 12-14' R/L
-----------------	--

<b>SPCIFICATIONS</b>	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS 15-5PH (VAR) = DIN WL 1.4545.9  AMS 5659T TYPE 1 (VAR). AMS-STD-2154E, TYPE 1, CLASS A.
----------------------	---

<u>CHEMICAL ANALYSIS</u>		<u>MECHANICAL PROPERTIES</u>		<u>NON-METALLIC INCLUSIONS</u>	
	MAX		MIN	AMS 2300	
Carbon (C)	.07	Tensile Strength	190 KSI		
Silicon (Si)	1.0	(U.T.S.)			Severity / Frequency
Manganses (Mn)	1.0	Yield Strength	170 KSI		
Phosphorous (P)	.03	(Yield)		Seat	
Sulfur (S)	0.015	Elongation	10%	Max	0.50 / 0.25
Nickel (Ni)	3.50 / 5.50	(Ei. or Elong.)			
Chrome (Cr)	14.0 / 15.50	Reduction of Area	35%		
Molybdenum (Mo)	.50	(R.A. or Red.)			
Copper (Cu)	2.50 / 4.50	Hardness	1/2 R 363 HBW - MAX		
Niobium (Nb)	0.15 / 0.45		Ferrite L 2% - MAX		

All singular chemistry values are  
MAXIMUM unless otherwise noted

All mechanical properties are  
MINIMUM unless otherwise noted

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

SOLUTION TREATMENT 1900 +/- 25 DEGREE FAHRENHEIT FOR MIN 30 MINUTES/INCH  
 MECHANICAL PROPERTIES TESTED AS PER H900 CONDITION  
 ULTRASONIC TESTED AS PER AMS-STD-2154E, TYPE 1, CLASS A  
 MACRO ETCH B / MACRO ETCH T TO ASTM A604  
 MATERIAL IS FREE FROM KNOWN CONTENT WITH MERCURY AND RADIUM  
 MATERIAL IS FREE FROM WELDS OR WELDING REPAIRS  
 MATERIAL IS FREE FROM RESIDUAL RADIOACTIVITY  
 MATERIAL IS DECARBURIZATION FREE  
 GRADE AND HEAT NUMBERS MUST BE METAL STAMPED AT BOTH ENDS ON SIZES 1" DIA. AND LARGER  
 COLOUR CODE WHITE  
 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