



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

17-4 Double H1150 Round Bar

MATERIAL SPECIFICATIONS

PREPARED BY: H POPE

REVISION DATE: 03/15/2013

MATERIAL	STAINLESS ROUND BAR 17-4 H1150 19-22' RANDOM LENGTHS	DOUBLE AGED SIZE 1 TO 4" SMOOTH TURNED SIZES OVER 4 INCH - ROUGH TURNED
-----------------	----------------------------------------------------------------	--------------------------------------------------------------------------------------

SPECIFICATIONS	ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS UNS# S17400 ASTM A564 - TYPE 630 COND H1150 DOUBLE, ASTM A388, ASTM A484 ASME SA564 - TYPE 630, AMS 5643, AMS 2303, API 6A PSL LEVEL 3 NACE MR-0175 / ISO 15156, NACE MR 0103, EN 10204.3.1
-----------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<u>CHEMICAL ANALYSIS</u>	<u>MECHANICAL PROPERTIES</u>	Condition: HH1150
Carbon (C) .07	Tensile Strength (U.T.S.)	135 KSI
Chromium (Cr) 15.00/17.50	Yield Strength (Yield)	105 KSI
Columbium + Tantalum (Cb+Ta) .15/.45	Elongation (El. or Elong.)	18%
Copper (Cu) 3.00/5.00	Reduction of Area (R.A. or Red.)	55%
Manganeses (Mn) 1.00	Hardness	33 RC maximum
Molybdenum (Mo) 3.00/5.00	RC or BHN	29/277 minimum
Nickel (Ni) .04	Impact Charpy-V min.	30 ft/lb at -75 Deg. F
Phosphorous (P) 1.00		
Silicon (Si) .03		
Sulfur (S)		

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
REPORT ULTRASONIC TESTED TO API 6A PSL 1-3 VOLUMETRIC NDE OF 7.4.2.3.15
SEPARATE ULTRASONIC TEST REPORT REQUIRED
CHARPY-V-NOTCH IMPACT TESTING TO 30 FT/LB AT -75 DEG. F
FREE FROM MERCURY CONTAMINATION STATEMENT
NO WELD OR WELD REPAIR STATEMENT
HEAT TREATMENT AND AGED PROCESS MUST BE REPORTED
FINISH CONDITION AND MELT PROCESS MUST BE REPORTED
REPORT BOTH SURFACE AND MID RADIUS HARDNESS
REPORT FREQUENCY & SEVERITY RATING AS PER AMS 2303
GRADE AND HEAT NUMBER MUST BE METAL STAMPED AT BOTH ENDS ON SIZES 1" DIA. AND LARGER
COLOR CODE ORANGE
BUNDLE WEIGHT - 2200 LBS MAXIMUM

OTHER PROPERTIES

HARDNESS TESTED AT SURFACE
AND MID-RADIUS
BOTH TEST NOT TO EXCEED
33 RC MAXIMUM

AGED PROCESS

SOLUTION. ANNEALED 1900 DEG.F - 1 HR MIN.
AIR COOL/OIL QUENCH TO BELOW 90 DEG F
AGE @ 1150 F - 4 HRS, AIR COOL BELOW 90 F
AGE @ 1150 F - 4 HRS, AIR COOL

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/POSITION PRINTED
ALL TEST REPORTS MUST BE SIGNED BY AUTHORIZED PERSON.