"TUF-37" GRADES

AMERICAN ALLOY STEEL'S TUF-37 QUALITY SA-516 GRADE 60, 65, & 70 MODIFIED STEEL PLATES ARE NORMALIZED, LOW SULFUR, VACUUM DEGASSED, AND CALCIUM / ARGON TREATED FOR SULFIDE SHAPE CONTROL.

American Alloy Steel's TUF-37 is produced to very stringent specifications to provide our customers with reasonable assurance of maximum resistance to notch toughness sensitivity, sulfide stress corrosion cracking, and hydrogen induced cracking. All heats are produced by the electric furnace process; vacuum degassed, and calcium / argon treated during melting for sulfide shape control; and poured by the continuous cast process to provide an extra clean steel. TUF-37 is produced to a fine grain practice in accordance with ASME Specifications SA-516. (Grades 60, 65, & 70) and SA-20 and furnished in the normalized condition. A 0.42 maximum carbon equivalent based on the formula Ce = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15 is normal, but in many cases the CEQ is in the 0.37-0.40 range.

TUF-37 may be ultrasonically examined 100% in accordance with ASME SA-435 or SA-578 Level 1 (or modified to a 1" diameter circle) and/or longitudinal or transverse charpy impact tested in accordance with SA-20 upon request.

"TUF-37" - H.I.C. GRADES

HYDROGEN INDUCED CRACKING RESISTANT CARBON STEEL PLATES CORROSION TOUGH / CRACK RESISTANT TO HYDROGEN SULFIDES (H_2S) FULL OR CUT TO SIZE PLATES AVAILABLE FROM STOCK 1/4" TO 6" THICK X 72", 96", 120", & 144" WIDTHS X 240", 360" AND 480" LENGTHS

TUF-37 HIC Grades are identical to TUF-37 Grades except that: (a) The chemical composition is further restricted to extra low sulfur, phosphorus and residual elements, and (b) Hydrogen Induced Cracking Tests are performed on a PER HEAT PER THICKNESS BASIS in accordance with the National Association of Corrosion Engineers (NACE) Standard TM0284-96 with test solution A (same as the LOW PH solution of NACE Standard TM0177-86). Acceptance criteria is 15.00% maximum Crack Length Ratio (CLR) with Crack Thickness Ratio (CTR) and Crack Sensitivity Ratio (CSR) being reported for information purposes. TUF-37 HIC Grades may be longitudinally and/or transverse Charpy Impact Tested in accordance with SA-20 or other special Impact Testing requirements upon request. In addition, through Thickness (Z-Direction) Tension Tests can be performed in accordance with SA-770, upon your request.

All plates shipped from our stock, or the producing mill, are accompanied with Certified Material Test Reports to assure the ultimate in quality. American Alloy's "TUF-37" and "TUF-37" HIC GRADES are the ultimate in quality...for their intended application. There is no finer quality available. Several thousand tons are available from stock at all times, ranging in thickness from 1/4"-6". Special ULTRASONIC EXAMINATIONS can be performed promptly.

PLATES CAN BE FLAME CUT TO SIZE AND SHIPPED WITHIN YOUR REQUIRED TIME. RUSH ORDERS ARE OUR SPECIALTY...NIGHT OR DAY.