

Dual Shield T-5

AWS A5.20 E71T-5M-J / JIS Z3313 T490T5-1C(M)A-U

Description

- Dual Shield T-5 is a basic slag flux cored wire which produces weld deposits comparable to those of E7018 electrodes in terms of crack-resistance, ductility, and toughness. Small diameter wires, such as 0.045"(1.2mm) and 1/16"(1.6mm) can be used in all positions.

Application

- Dual Shield T-5 is especially recommended for medium to heavy fabrication of a number of mild steels where superior toughness and crack resistance are required. It is very attractive in situations where mild steel is being joined to quenched and tempered low alloy high strength steels because the basic slag gives extremely low diffusible hydrogen levels.

Welding procedure

- This product should be run using a constant speed wire feeder and a constant potential power source. Straight polarity (electrode negative) operation should be employed when welding out-of-position. This reduces penetration and minimizes weld puddle size. Reverse polarity (electrode positive) can be used in the flat and horizontal position in order to increase weld penetration. When used in the flat and horizontal positions, operation is similar to that of Dual Shield T-75, but the slag volume is somewhat lower. Either carbon dioxide or argon carbon dioxide mixtures may be used as a shielding gas. Spatter will decrease as the percentage of argon in the shielding gas increases.

Typical Mechanical Properties of All Weld Metal (All weld Metal Using 75% Argon/25% CO₂)

Yield Point N/mm ² {kgf/mm ² }	Tensile Strength N/mm ² {kgf/mm ² }	Elongation (%)	Impact Value J(kgf · m)			PWHT
			-20 °C	-40 °C	-50 °C	
440 {45}	560 {57}	31	130 {13.3}	95 {9.7}	80 {8.2}	As-Welded
355 {36}	510 {52}	34	167 {16.3}	126 {12.3}	121 {11.8}	620 °C x 2hr

Typical Undiluted Weld Metal Analysis %

C	Mn	Si	P	S
0.13	1.40	0.65	0.012	0.004

Approvals

ABS, LR, DNV, BV, GL, JIS