Dual Shield II 71 Ultra

AWS A5.20 E71T-1C/12C / JIS Z3313 T492T1-1CA-U

Description

- Dual Shield II 71 Ultra is an all-position flux cored wire that is designed to exhibit exceptional low temperature impact toughness with 100% CO_2 shielding. Normally, the Impact toughness of E71T-1 flux cored electrodes diminshed when straight CO_2 shielding is used, but the patented formulation of Dual Shield II 71 Ultra reverses that situation. As a result of these improved properties, this electrode is qualified to the Navy's "HY"classification. To be approved to this classification, the weld metal must have higher CVN values and lower diffusible hydrogen than standard E71T-1 electrodes.

Shielding Gas : 100%CO_2

Application

- Dual Shield II 71 Ultra is designed to join low and medium carbon steel. In many instances it can be used as a replacement for E7018 low hydrogen electrodes. Although it is not qualified to join HY-80 and HY-100 to themselves, the military classification allows Dual Shield II 71 Ultra to be used for attaching steels of less than 80 ksi yield strength to HY-80 and HY-100.

Typical Mechanical Properties of All Weld Metal

Yield Point N/mm²{kgf/mm²}	Tensile Strength N/mm²{kgf/mm²}	Elongation (%)	Impact Value J(kgf · m)		PWHT
			-20℃	-30℃	
517 {53}	602 {61}	28	84 {8.5}	68 {6.9}	As-Welded
503 {51}	592 {60}	30	49 {5.0}	35 {3.6}	620℃×8hr

Typical Undiluted Weld Metal Analysis %

C	Mn	Si	P	S
0.05	1.15	0.36	0.013	0.012

Approvals

ABS, LR, DNV, GL, JIS