



WB4102E M.M.A. WELDING ELECTRODE

Classifications

AWS A5.4-2006 E410-26

BSEN1600-97:E13 R 6 3

Product Description

Rutile/basic coated, Martensitic stainless steel electrode made on mild steel core wire, with metal powder additions to the coating. Having exceptional deslag and arc stability, this electrode produces a recovery of ~ 140%.

Applications

WB4102E is suitable for the welding of high strength Martensitic (12%Cr, type 410) stainless steels. Developed primary for CA-15 & BS410C21 castings.

Typical applications:- hydrocrackers, reaction vessels, valves bodies and turbine sections.

All-Weld Metal Composition (Weight %)

	C	Mn	Si	S	P	Mo	Cr	Ni	Cu
min.	0.05	0.50	0.20	-	-	0.2	11.0	0.30	-
max.	0.12	1.00	0.50	0.020	0.025	0.5	13.5	0.60	0.050

Typical All-Weld Metal Mechanical Properties

Ultimate Tensile Strength	N/mm ²	610
Yield Stress/0.2% Proof Stress	N/mm ²	455
Elongation on 5D	%	34
Impact Energy CV @ stress relieved @ 740°C / 1Hr	Joules	-

Electrode Dia (mm)	1.6mm	2.0mm	2.5mm	3.2mm	4.0mm	5.0mm	6.0mm
Electrode Length (mm)	-	-	350	350	350	350	-
Current Range (Amps)	min.	-	70	90	120	160	-
	max.	-	110	140	180	220	-

Packaging Information

Kg Per Vac-Pac	-	-	2	2	2	2	-
Approx. Pieces Per Kg	-	-	36	17	11	7	-

Storage and Re-baking

Storage

It is recommended that the WB range of electrodes are stored in a dry heated store at a minimum temperature of 18°C, and a maximum relative humidity of 60%. To avoid damage to the coatings no more than 6 cartons should be stacked on top of another.

Re-drying

Re-dry @ 350°C for 2 hours and then transfer to holding oven and hold @ 100 - 200°C, or 50-100°C in heated quiver.

Current Conditions AC (OCV70) /DC + and Welding Positions

