



WB4422E M.M.A. WELDING ELECTRODE

Classifications

AWS A5.4-92 : E347-16

BSEN 1600-97 : E19 9Nb R 1 2

Product Description

All positional, rutile coated stainless steel electrode depositing Niobium stabilised 347 weld metal. Excellent deslag and outstanding welding properties.

Applications

Suitable for the repair and welding of 304, 321 and 327 Niobium stabilised stainless steels to give freedom from intergranular attack.

Typical grades include:- wrought BS321s31, 347S31, BSEN 1.4541, 1.4550, ASTM/ASME 321, 347, DIN 1.4541, 1.4543, 1.4546, 1.4550. Cast 347C17, CF8C and 1.4552.

Ferrite in the 3-8 FN range.

All-Weld Metal Composition (Weight %)

	C	Mn	Si	S	P	Mo	Cr	Ni	Cu	Nb
min.	0.04	0.5	0.60	-	-	-	18.0	9.0	-	10xC
max.	0.08	2.0	0.90	0.020	0.025	0.20	21.0	11.0	0.15	1.1

Typical All-Weld Metal Mechanical Properties

Ultimate Tensile Strength	N/mm ²	640
Yield Stress/0.2% Proof Stress	N/mm ²	370
Elongation on 5D	%	27
Impact Energy CV @ +20°C as-welded	Joules	85

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.	-	-	60	80	100	130	-
max.	-	-	90	120	150	210	-

Packaging Information

Kg Per Vac-Pac	-	-	2	2	2	2	-
Approx. Pieces Per Kg	-	-	50	30	19	12	-

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

