



# WB4645E M.M.A. WELDING ELECTRODE

<b>Classifications</b>	~AWS A5.4-92 : E2553-17		BSEN 1600-97 : E25 9 CuNL R 1 2								
<b>Product Description</b>	All positional, rutile coated, duplex electrode having excellent deslag and bead profile.										
<b>Applications</b>	<p>Used mainly for welding and repairing cast alloys, which are then solution heat treated realising 30/40% ferrite.</p> <p>Typical proprietary alloys Langley Alloys, Ferralium®, Creusot Uranus 55, 50M®, APV Lake and Elliot DPH, ASTM A351, A744-CD4MCu and A240.</p> <p>Used extensively in the offshore / oil &amp; gas industries and chemical / petro-chem plants.</p>										
<b>All-Weld Metal Composition (Weight %)</b>		C	Mn	Si	S	P	Mo	Cr	Ni	Cu	N
	<b>min.</b>	0.01	0.80	0.70	-	-	2.5	24.0	7.5	1.5	0.10
	<b>max.</b>	0.03	1.50	1.00	0.020	0.025	4.0	27.0	10.5	3.5	0.25
<b>Typical All-Weld Metal Mechanical Properties</b>	Ultimate Tensile Strength		N/mm <sup>2</sup>		927						
	Yield Stress/0.2% Proof Stress		N/mm <sup>2</sup>		765						
	Elongation on 5D		%		21						
	Impact Energy CV @ +20°C as-welded		Joules		33						

<b>Electrode Dia (mm)</b>	1.6mm	2.0mm	2.5mm	3.2mm	4.0mm	5.0mm	6.0mm
<b>Electrode Length (mm)</b>	-	-	350	350	350	350	-
<b>Current Range (Amps)</b>	<b>min.</b>	-	60	80	100	130	-
	<b>max.</b>	-	90	120	150	210	-
<b>Packaging Information</b>							
<b>Kg Per Packet</b>	-	-	5	5	5	5	-
<b>Approx. Pieces Per Kg</b>	-	-	50	30	19	12	-
<b>Storage and Re-baking</b>	<p><b>Storage</b> 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 staked on top of another.</p> <p><b>Re-drying</b> 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.</p>						

## Current Conditions AC OCV70 DC +/- and Welding Positions

