

AFROX E3CR12

Afrox E3CR12 is a heavily coated 13% chromium alloyed electrode suitable for all-position welding of 13% chromium ferritic steels. The deposited weld metal is sound with a low inclusion content and exhibits good toughness at temperatures down to -20°C. The electrode features a smooth, stable, low spatter arc on DC+. Weld bead appearance is good with a



smooth uniform ripple. The slag is readily removed from the weld surface in all positions. Afrox E3CR12 has been especially developed for the welding of 3CR12 material. The weld metal has similar corrosion properties to that of 3CR12 without over-alloying, i.e. in contrast to the 300 series electrodes.

CLASSIFICATIONS - MIG

AWS	A5.4	E410NiMo (chromium content modified)
DIN	8556	E13 4 B 26 I20
BS EN	1600	E13 4

CHEMICAL ANALYSIS

% Carbon	0.04 max.	% Nickel	4.0 - 5.0
% Manganese	0.5 - 1.0	% Molybdenum	0.40 - 0.70
% Silicon	0.45 max.	% Sulphur	0.020 max.
% Chromium	12.0 - 13.0	% Phosphorous	0.025 max.

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	900 - 1150 MPa
0.2% Proof Stress	700 MPa
Elongation on 5d	10 - 15%
Charpy V-Notch at 20°C	40 - 55J
Charpy V-Notch at -20°C	25 - 35J

PACKING DATA

(DC + or AC (70 OCV min))

Diameter (mm)	Current (A)	Item Number	Pack Mass (Kg)
3.15	80-130	075-843	3 x 5
4.00	125-160	075-844	3 x 5

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