

**ROCKWELD 307**

Rockweld 307 is a high-alloy, crack resistant electrode particularly suitable for difficult to weld steels, as well as for joining dissimilar steels and manganese-alloyed steels. It is also suitable as a buffer layer when hardsurfacing. Also suitable for the joining of 14% Manganese steel, armour plate, dissimilar and problem steels and may also be used for the welding and hardsurfacing of rails and railway equipment. At temperatures



above 300°C, 14% manganese steels begin to lose ductility. In order to obtain a sound joint on manganese-alloyed steels, carefully bevel the weld groove by grinding. Work hardened surfaces should be removed by grinding and the parent metal must be free of rust, oil and dirt. Use stringer bead only, keeping heat input as low as possible.

**CLASSIFICATIONS**

AWS	A5.4	E307-16 (Nearest)
DIN	8556	E 18 8 Mn R 36 140

**CHEMICAL ANALYSIS**

% Carbon	<0.07
% Chromium	20.00
% Nickel	8.00
% Manganese	5.5
% Molybdenum	1.000

**TYPICAL MECHANICAL PROPERTIES  
ALL WELD METAL**

Tensile Strength	590 - 690 MPa
Yield Strength	> 350 MPa
Elongation on 5d	> 28%

**PACKING DATA**

(DC + or AC (OCV))

Diameter (mm)	Current (A)	Item Number	Pack Mass (Kg)
2.50	60-90	078-042	3 x 5
3.20	120-150	078-044	3 x 5
4.00	180-210	078-046	3 x 5

The information contained or otherwise referenced herein is presented only as typical without guarantee or warranty, and Afrox expressly disclaims any liability incurred from any reliance thereon. No data is to be construed as recommended for any welding condition or technique not controlled by Afrox.

For more information contact the Afrox Customer Service Centre,  
tel: 0860 020202 or e-mail: [customer.service@afrox.boc.com](mailto:customer.service@afrox.boc.com)  
Website: [www.afrox.com](http://www.afrox.com)

