

ELECTRODE FOR 5% Cr -0.5% Mo STEELS

EURO 502-15

CODING:

AWS: E 502-15

CHARACTERISTICS:

EURO 502-15 is a basic coated electrode specially meant for welding 5% Cr-0.5%Mo steels used for pipes and tubes which are mainly used in chemical, oil and petroleum industries. The weld deposit is air hardening alloy and is resistant to corrosion, oxidations and creep at high temp.550°C.

USES:

EURO 502-15 is suitable for welding 5% Cr-0.5% Mo steels in the form of pipes and tubes which are used in chemical industries, oil refineries and mining plants where high resistance to corrosion and creep at high temp is desired.

NOTED FEATURES:

1. Electrode is easy to operate on AC as well as DC+.
2. Air hardening weld deposit resistant to corrosion and creep at high temp.
3. Well suited to weld chromium molybdenum steel pipes and tubes.
4. Sound and stable arc with easy striking and restriking characteristics.
5. Fine rippled bead and easily removable slag.

CURRENT CONDITIONS:

SIZE mm		2.50 X 350	3.15 X 350	4.00 X 350	5.00 X 350
CURRENT-Amps	DC+	60-90	90-130	130-170	170-210

CHEMICAL ANALYSIS OF THE WELD METAL:

Element	C	Mn	Si	Cr	Mo
%	0.10max	1.0max	0.90max	4.0-6.0	0.45-0.65

MECHANICAL PROPERTIES OF THE WELD METAL:

1. Ultimate Tensile Strength(N/mm²) : 500-520
2. Elongation(%) on 50mm gauge length : 22-24

SPECIAL INSTRUCTIONS:

1. Electrodes must be redried @ 350°C for one hour cool to 100°C and maintain @ 100°C before use.
2. Preheating the work piece upto 300°C is necessary depending upon the thickness of the plate. Maintain the temp. of the workpiece @300°C till welding is completed.
3. Heat the job slowly to 750°C and maintain @750°C for 2-3 hours.
4. Cool the job very slowly to avoid cracking of weld metal and heat affected zone.
5. Avoid weaving and make thinner welds.
6. Use smaller gauge electrodes with lower current and shorter arc to avoid excess heat.