

SHIELD-COR 15



- ▲ Self-shielded Flux Cored wire.
- ▲ For Single Pass applications Only.
- ▲ Versatile, All Positional Capabilities.
- ▲ Excellent Tolerance to Joint Misalignment or Poor Joint Fit-up.
- ▲ Smooth Rippled Fillets with Good Edge Wetting.
- ▲ Ideal for Welding Thin Section Mild and Galvanised Steels.

Classifications:

AS 2203.1: ETPS-GNn-W500A. CM2.
AWS/ASME-SFA A5.20: E71T-GS.

Description and Applications:

Shield-Cor 15 is an all positional self-shielded flux cored wire recommended for single pass welding applications only. It is excellent for single-pass lap, fillet and butt welding of thin gauged galvanised and mild steels.

Shield-Cor 15 is used with DC electrode negative polarity which minimises the risk of burn through on thin plate. Travel speeds are high and deposition efficiencies are higher than that of general purpose rutile type electrodes.

Welding characteristics are superb with a smooth arc action, low spatter losses, and an easy-to-remove full covering light slag. The smooth arc transfer gives Shield-Cor 15 improved tolerance to joint misalignment or poor fit-up. Smooth stable arcing and excellent fillet shape and edge wetting are achieved when welding galvanised steel fixtures.

When 'tuned in' to the optimum current and voltage settings the wide range of wire sizes (0.8mm and 0.9mm) can easily be used in all welding positions, including vertical-up/down and overhead, on materials as thin as 1.0mm. Applications include the general purpose fabrication or repair of mild and galvanised steel fixtures and structures including gates, fences, steel frames, galvanised tanks and ornamental iron work etc.

TYPICAL ALL WELD METAL ANALYSIS:

C: 0.25%	Mn: 0.70%	Si: 0.40%
Al: 2.10%	S: 0.004%	P: 0.007%

TYPICAL DIFFUSIBLE HYDROGEN LEVELS TO AS3752:

15.0 - 20.0 mls of hydrogen / 100gms of deposited weld metal *.

* - for "as manufactured" product using the recommended E.S.O. lengths.

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

Yield Stress	430 MPa
Tensile Strength	600 MPa
Elongation	21%

RECOMMENDED SHIELDING GAS:

Not Required.





Actual weld metal mechanical properties achieved with Shield-Cor 15 are influenced by many factors including, base metal analysis, welding parameters / heat input used, number of weld passes and run placement etc. Please consult your nearest CIGWELD branch for welding procedure recommendations.

Packaging Data:

Wire Diam. (mm)	Type	Pack Weight	Pack Part No.
0.8	100mm spool	0.45kg x (4/ctn)	721956
0.8	200mm Handispool	4.5kg	721923
0.9	100mm Minispool	0.45kg x (4/ctn)	721976
0.9	200mm Handispool	4.5kg	721924
1.2	200mm Handispool	4.5kg	720302

**Operating Data:**

All welding conditions recommended below are for use with semi-automatic operation and DC electrode negative only.

Wire Diameter (mm)	Current Range (amps)	Voltage Range (volts)	CTWD	Welding Positions
0.8	90-150	14-16	10-12	 Flat
0.9	110-180	15-17	12-15	
1.2	180-230	16-18	15-20	
0.8	80-140	14-16	10-12	 HV Fillet
0.9	100-175	15-17	12-15	
1.2	150-200	16-18	15-20	
0.8	60-120	14-16	10-12	 Vertical up
0.9	80-150	15-17	12-15	
1.2	130-180	16-18	15-20	
0.8	60-120	14-16	10-12	 Overhead
0.9	80-150	15-17	12-15	
1.2	130-180	16-18	15-20	

These machine settings are a guide only. Actual voltage, welding current and CTWD used will depend on machine characteristics, plate thickness, run size, shielding gas and operator technique etc.