

MAGNA 307

DESCRIPTION:

Magna 307 is an all position alloy steel electrode developed for construction and repair work on mild steels, particularly 'on site' and in restrictive positions.

Magna 307 has evolved after extensive laboratory research and field testing and offers optimum quality and performance on a wide range of various job conditions.

High Quality Characteristics:

The outstanding properties of Magna 307 will offer a tensile strength of up to 59 Kg. mm² (84,000 p.s.i.) thus ensuring joints of maximum strength.

Ignition and re-ignition qualities are exceptionally good and the ease at which Magna 307 can be applied is remarkable.

Such characteristics will ensure high quality welds, even under adverse conditions, or where the welder has had limited experience.

Coating Chemistry:

Special materials which are easily ionized have been incorporated in the Magna 307 flux coatings.

The ease of ionization permits the establishing and maintenance of the arc at lower welding currents and low open-circuit voltages. Such a characteristic is of great assistance when welding thin sections as the use of low welding currents will prevent burn-through.

The Magna 307 coating forms a 'crucible action' at the tip of the electrode which controls the molecular velocity and stabilizes the arc. The crucible action also generates gases by pyrolysis of the coating together with ions and metal vapours of the core wire, thus producing a fine metallic spray transfer.

The protective gases which exclude atmospheric contaminants from the molten weld metal are highly effective thus ensuring sound, high strength welds.

The slag coating is extremely easy to remove and in most cases is self lifting. This will greatly save valuable time and effort.

APPLICATION

Magna 307 is applied with either a short arc or with the touch weld technique. AC or DC equipment can be used. When DC is used, reverse or straight polarity can be incorporated.

The electrode should be held at an angle of 30-40 degrees to the direction of travel when welding in the downhand position.

For vertical welds, the electrode should be held at approximately 10 degrees from the horizontal for vertical up, and for vertical down it should be held at an approximate angle of 45 degrees from the horizontal.

Recommended Amperages:

Metric	Inches	Gauge	Setting
4.8 mm.	3/16	6	85 - 240 amps
4.0 mm.	5/32	8	65 - 190 amps
3.2 mm.	1/8	10	50 - 160 amps
2.4 mm.	3/32	12	30 - 115 amps