

MAGNA 393 AC-DC

Magna 393 is an advanced, all-position alloy for stainless steel that offers high corrosion resistance and ease of welding.

VERSATILITY:

Magna 393 can be used for the repair of virtually any type or grade of stainless steel. This superior degree of versatility makes Magna 393 the repair alloy to carry and stock in plants that use stainless equipment, such as food and beverage plants and chemicals processing factories.

Magna 393 is also a must in hotels and any eating establishment because this advanced alloy repairs all grades of stainless, from utensils to counter tops, sinks, cookware and freezer doors and cabinets.

IMPROVED CORROSION RESISTANCE:

Magna 393 features superior resistance to corrosion over ordinary stainless welding alloys due to special alloying elements that improve the weldment's corrosion resistance to reducing media, such as urea. This particular feature makes Magna 393 the repair alloy of choice in fertilizer plants and factories.

EASIER TO USE, EVEN AT LOW AMPERAGE:

In repair welding requiring vertical downhand applications, Magna 393 has no equal. Other welding rods fail this ease-of-use test when welding vertical downhand as the slag runs ahead of the weld.

Magna 393's special 'controlled slag' action enables even inexperienced weldors to make perfect vertical downhand welds on virtually any stainless steel repair. In addition, after welding, the slag blanket is easily removed.

Its superior AC weldability allows Magna 393 to be applied "on site" or in difficult access situations as even small, portable AC open circuit welding machines will give good results, using low amperage.

This good weldability at low amperage also helps minimize burn-through, collapse or stainless discolouration, when welding on thinner stainless pieces.

MECHANICAL PROPERTIES (based on pure weld deposit):

Tensile strength	:	86,000 p.s.i. (59 kg/mm²)
Yield strength	:	51,000 p.s.i. (35 kg/mm²)
Elongation	:	35%
Impact (ISO-V)	:	52 ft./lbs. (70 joules)

APPLICATION

Magna 393 can be applied using either AC current or DC reverse polarity. Steel surfaces to be welded should be degreased using Magna 990 degreaser. No other special preparation is required and pre-heating also is not required.

After setting welding machine within the range given below, tack weld the work piece every 25mm or so (about 1"). It is not necessary to weave the weld but try to maintain a close arc. Peen each pass.

You will find the slag is easily removed and thus should be done at the end of each pass. On vertical downhand applications, the arc transfer will remain even and no problems with the slag running ahead of the weld will be experienced.

Magna 393 will also weld perfectly "in situ", using even low amperage open-circuit AC welding machines, such as when repairs have to be made away from the workshop.

Recommended amperages are:

Metric	Imperial	Gauge	Welding Machine Setting
2.4 mm	3/32"	12	60- 80 amps
3.2 mm	1/8"	10	80- 100 amps