



PRODUCT DATA SHEET

STAINLESS STEEL ELECTRODES

UNICORD 312



SUMMARY

- > A "universal" high chromium-nickel alloy steel electrode
- > Suitable for joining "hard-to-weld" steels
- > Suitable for a wide range of alloy steels and irons and dissimilar metals
- > A versatile maintenance electrode

IDENTIFICATION

Coating - Grey **Tip** - Plain **Imprint** - E312-16

CLASSIFICATION

- > AS/NZS 4854-B - E312-16
- > AWS A5.4: E312-16

DESCRIPTION AND APPLICATION

Unicord 312 is a "universal" high chromium-nickel alloy steel electrode producing high strength, tough welds in a wide range of alloy steels and irons and dissimilar metals. Smooth running basic rutile formulation gives excellent bead control, high arc stability and low spatter welding. Suitable for joining "hard-to-weld" steels, eg: spring, die steels, irons etc. with tough crack resistant weld metal. It is a versatile maintenance electrode for factory, farm or die shop. Ideal for stainless to mild steel applications, "buffer" layers etc. Use short arc. Preheating may be required on high hardenability materials for satisfactory base material properties.

NOTES ON USAGE

1. Clean up the contaminations on the base metal, groove and pass to pass with stainless steel brush.
2. Maintain short arc length. Moving range should be controlled within 2.5 times of the electrodes diameter when you are welding with weave method.
3. Dry the electrodes at 250–300 °C for 60 minutes before using, then store in a hot box at 100–150 °C during welding process.
4. Use lower current to prevent from cracking and minimize base metal dilution.

OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELD CURRENT RANGE * (A)
3.2	350	70 - 130

*Recommended for DC + or AC (minimum 70 OCV).

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Cr	Ni	Mn	Si	P	S
0.10	28.5	10.0	1.04	0.85	0.030	0.010

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Tensile Strength	790 MPa
Elongation	24%

PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING (KG)		PART NO.
	PACKET	CARTON	
3.2	2.5	12.5	UC31232TT

The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Weldwell expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with the AWS and or AS/NZS specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique by Weldwell.

Issue CA - September 2019