29.9 SUPER R (Limarosta 312)

TOP FEATURES

- Rutile-basic high CrNi-alloyed all position electrode
- Excellent for repair welding
- Especially developed for steels difficult to weld, such as armour plates, austenitic Mn-steels and high C-steels
- Excellent weldability and self releasing slag
- Weldable on AC and DC+ polarity

TYPICAL APPLICATIONS

- Medium and high carbon hardenable steels

CLASSIFICATION

AWS A5.4	E312-17
EN ISO 3581-A	E 29 9 R 1 2

CURRENT TYPE

DC+/AC

WELDING POSITIONS

All position, except vertical down

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Min.	not specified	not specified	not specified	not specified	not specified	28.0	8.0	not specified	not specified
Max.	0.15	1.5	1.2	0.025	0.035	31.0	10.5	0.5	0.75
Typical	0.1	0.8	1	0.01	0.02	29	9.5	0.1	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded		Min.	Typical
Tensile strength	(MPa)	660	830
0.2% Proof strength	(MPa)	450	700
Elongation (%)	4d	22*	26
	5d	15	25
Reduction of area (%)		not specified	30
Hardness	HV	not specified	280

*Minimum elongation required by AWS not always obtained.

A high tensile strength with moderate ductility is typical for multipass all-weld test specimens but these properties may be altered under conditions of high dilution from base material for which this electrode is intended. Dilution typically raises ductility.

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 350	60-90
3.2 x 350	75-120
4.0 x 350	100-155

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	VPMD	90	1.9	299SR-25-2
3.2 x 350	VPMD	40	1.9	299SR-32-2
4.0 x 350	VPMD	58	2.0	299SR-40-2

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:

Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.