

# STARINOX 312

## TOP FEATURES

- The microstructure of the higher strength weld metal consists of ferritic-austenitic Cr-Ni steel, with ~30% delta-ferrite, and is highly crack resistant, rust-proof and non-scaling <1100°C.
- Very good weldability, weld metal transfer is in fine droplets with easy slag removal.
- Very good weld bead shape.

## CLASSIFICATION

AWS A5.4 E312-16\*  
EN ISO 3581-A E Z (29 9) R 12

\*Nearest classification

## CURRENT TYPE

AC, DC+

## WELDING POSITIONS

All position, except vertical down

## APPROVALS

DB	CE
+	+

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

C	Mn	Si	Cr	Ni	Ferrite
0.08	1	1.2	28	12	25-50

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Required	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) +20°C	Hardness (HB)
AWS A5.4	AW	not specified	≥660	≥22	not specified	not specified
EN ISO 3581-A	AW	not specified	≥660	≥15	not specified	not specified
Typical values	AW	≥450	≥650	≥20	≥30	220

\*AW: As-welded

## OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
3.2 x 350	75-115
4.0 x 350	90-140

## 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	W100258738
3.2 x 350	VPMD	58	2.0	W100258739
4.0 x 350	VPMD	40	1.9	W100258740

## 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.  
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