

# AROSTA® 309MO

## TOP FEATURES

- High corrosion resistance
- Specially developed for welding stainless steel to mild steel and root runs in cladding
- Suitable for repair welding in dissimilar joints and steels difficult to weld
- Weldable on AC and DC+ polarity

## TYPICAL APPLICATIONS

- Buffer layers and clad steels
- Dissimilar joints
- Hardenable steels

## CLASSIFICATION

AWS A5.4	E309LMo-16
EN ISO 3581-A	E 23 12 2 L R 3 2

## CURRENT TYPE

DC+/AC

## WELDING POSITIONS

All position, except vertical down

## APPROVALS

ABS	LR	BV	DNV	TÜV	DB
+	+	+	+	+	+

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

	C	Mn	Si	Cr	Ni	Mo	FN
Min.	not specified	not specified	not specified	22.0	11.0	2.0	not specified
Max.	0.04	2.5	1.2	25.0	14.0	3.0	not specified
Typical	0.02	0.8	0.8	23.0	12.5	2.7	15-25

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded		AWS A5.4	ISO 3581-A	Typical
Tensile strength	(MPa)	min. 520	min. 550	700
0.2% Proof strength	(MPa)	not specified	min. 350	580
Elongation (%)		30	25	30
Impact ISO-V (J)	+20°C	not specified	not specified	57
	-20°C	not specified	not specified	50
	-60°C	not specified	not specified	45

## OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 350	40-80
3.2 x 350	60-80
4.0 x 350	80-150
5.0 x 450	140-190

## PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	CBOH	85	2.0	528633-1
3.2 x 350	CBOX	112	4.2	528824-1
4.0 x 350	CBOX	77	4.3	528930-1
5.0 x 450	CBOX	50	5.5	528947-1

### 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](http://www.lincolnelectric.eu) for any updated information.