

## AROSTA® 309Mo

MMA (SMAW)

## STAINLESS STEEL ELECTRODE

## PRODUCT DESCRIPTION

A high CrNiMo alloyed all position rutile-basic electrode  
 High corrosion resistance  
 Specially developed for welding stainless steel to mild steel and root runs in cladding  
 max. plate thickness in butt welds ~ 12mm  
 Suitable for repair welding in dissimilar joints and steels difficult to weld  
 Weldable on AC and DC+ polarity

## CLASSIFICATIONS

AWS A5.4M E309L Mo-16  
 ISO 3581 E 23 12 2 L R 3 2  
 APPROVALS ABS, BV, DNV/GL, LR, RINA, RMRS, TÜV, DB

## ASME IX QUALIFICATION

QW432 F-No 5  
 QW442 A-No 8  
 Mat-Nr 1.4459

## WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G



PH/5Gu

## CURRENT TYPE

AC / DC +

## TEMPERATURE RANGE

Pressurized parts -60...+300°C  
 Oxidation resistance n.a

## CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	Cr	Ni	Mo	FN
Min.	--	--	--	22.0	11.0	2.0	--
Max.	0.04	2.5	1.2	25.0	14.0	3.0	--
Typical	0.02	0.8	0.8	23.0	12.5	2.7	15-25

## ALL-WELD MECHANICAL PROPERTIES

As welded	AWS A5.4	ISO 3581-A	Typical
Tensile strength (MPa)	min. 520	min. 550	700
0.2% proof strength (MPa)	--	min. 350	580
Elongation (%)	30	25	30
Impact ISO-V(J)	--	--	57
+20°C	--	--	50
-20°C	--	--	45
-60°C	--	--	

## TYPICAL OPERATING PARAMETERS, DC +VE ONLY

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
min. A	30	40	60	80	140
max. A	60	80	80	150	190

## PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				pack	box	pack	box
CARDBOARD BOX	2.0	300	528626	180	900	2.4	12.5
	2.5	350	528633	110	550	2.6	13.5
	3.2	350	528824	120	360	4.7	14.7
	4.0	350	528930	85	255	4.8	14.9
	5.0	450	528947	55	165	5.4	16.8
SRP	2.5	350	21501132	41	492	1.0	12.5
	3.2	350	21501133	33	264	1.3	10.8

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to [www.specialalloys.eu](http://www.specialalloys.eu) for any updated information.