

AROSTA® 309Mo

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 E309LMo-16
 ISO 3581 E 23 12 2 L R 3 2
 APPROVALS ABS, BV, DNV/GL, LR, RINA, 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) +20°C	--	--	57
-20°C	--	--	50
-60°C	--	--	45

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	carton	pack	carton
CARDBOARD BOX	2.0	300	528626-1	130	780	1.7	10.2
	2.5	350	528633-1	85	510	2.0	12.0
	3.2	350	528824-1	112	336	4.2	12.6
	4.0	350	528930-1	77	231	4.3	12.9
	5.0	450	528947-1	50	150	5.5	16.5
SRP	2.5	350	21501132-1	41	492	1.0	12.0
	3.2	350	21501133-1	33	264	1.2	9.6

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 for any updated information.