

ULTRAMET 309H (Arosta 309H)

MMA (SMAW)

STAINLESS STEEL ELECTRODE

PRODUCT DESCRIPTION

A rutile basic all position stainless steel electrode
Specially developed for high temperature applications like industrial furnaces (ovens)
High resistance to oxidation up to 1050°C
Weldable on AC and DC

ASME IX QUALIFICATION

QW432	F-No 5
QW442	A-No 8
Mat-Nr	1.4829

CLASSIFICATIONS

AWS A5.4M	E309H-16*
ISO 3581	E 23 12 R 3 2*

TEMPERATURE RANGE

Pressurized parts	-10...+400°C
Oxidation resistance	to 1100°C

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G



PH/5Gu

CURRENT TYPE

AC/DC +/-

HIGH TEMPERATURE ALLOYS

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	Cr	Ni	FN
Min.	--	--	--	20.0	10.0	--
Max.	0.15	2.5	1.2	23.0	13.0	--
Typical	0.10	0.8	1.6	22.0	11.0	3.8

ALL-WELD MECHANICAL PROPERTIES

As welded	AWS A5.4	ISO 3581-A	Typical
Tensile strength [MPa]	min. 550	min. 550	700
0.2% proof strength [MPa]	--	min. 350	500
Elongation [%]	30	25	30
Impact ISO-V(J) +20°C	--	--	50

TYPICAL OPERATING PARAMETERS, DC +VE ONLY

Diameter (mm)	2.5	3.2
min. A	40	60
max. A	110	120

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				pack	carton	pack	carton
CARDBOARD BOX	2.5	350	UM309H-25	-	-	-	-
	3.2	350	UM309H-32	-	-	-	-

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.