Eleal® 1100

Aluminium electrode

Classification

AWS A5.3	:E1100*
ISO 18273	:Al 1080A (Al 99.8 (A))

* Deviation:see remarks

Temperature Range

Pressure parts

Oxidation resistance

General description

Aluminium electrode.
Especially for welding pure aluminium.
Good weldability, no porosity.

Welding positions

ISO/ASME PA/1G PB/2F

Current type

DC electr. +

Chemical composition (w%),typical,all weld metal

Al	Si	Fe	Cu	Mn	Zn	Others
99.8 min	0.085 max	0.13 max	0.02 max	0.02 max	0.03 max	0.02 max

Mechanical properties,all weld metal

	Condition	0.2% Yield Strength (N/mm^2)	Tensile Strength (N/mm^2)	Elongation (%)	Hardness HB
Typical values after welding	AW	30	80	30	

Packaging, available sizes and identification

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Unit:	Pieces / unit (nominal)	217	143	98
Box	Net weight/unit (kg)	2.0	2.0	2.0

Identification Imprint: Eleal® 1100 Tip colour: none

Eleal® 1100 : rev.EN 20

Materials to be welded

Type	W.Nr.
Al99.8	3.0285
Al99	3.0205

Calculation data

Size Diam.x length (mm)	Current range type (A)	Current	Arc time - per electrode at max.current - (s)*	Energy E (kJ)	Dep.rate H (kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal (pcs)	kg Electrodes/ kg weldmetal (1/N)
2.5x350	60-90	DC+				9.2		
3.2x350	80-110	DC+				14.0		
4.0x350	100-140	DC+				20.4		

* stub end = 35 mm

Welding parameters,optimum fill passes

Welding positions Diameter (mm)	PA/1G Current (A)	PB/2F	PC/2G	PF/3G up	PE/4G	PF/5G up
2.5	80	80				
3.2	100	100				
4.0	130	130				

Remarks

Deviations:chemical composition::

Cu = max 0.02% AWS: Cu = 0.05 – 0.20%

Application advice

If the thickness is more than 10 mm,it is advisable to preheat at 150 - 250°C