

Basic high recovery electrode

Classification

AWS A5.1-91 : E7028 H4R
 EN 499-94 : E 42 2 B 53 H5

General description

Basic, low hydrogen electrode
 150% recovery
 Easy slag release
 Fillet welds and horizontal V- and X-welds
 Excellent weldability on AC and DC
 Transformers with OCV > 70V recommended
 Also available in vacuum sealed Sahara ReadyPack® (SRP)

Welding positions



ISO/ASME PA/1G PB/2F PC/2G

Current type

AC / DC electr. + / -

Approvals

ABS	BV	CTL	DB	DNV	FORCE	GL	LR	TÜV
3H,3Y	3,3YH	+	+	3YH5	+	3YH10	3,3YH15	+

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

C	Mn	Si	H ₂ O
0.07	0.95	0.4	4 ml/100 g

Mechanical properties, all weld metal

	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)	
					-18°C	-20°C
Required: AWS A5.1-91		min. 399	min. 482	min. 22	min. 27	
EN 499-94		min. 420	500-640	min. 20	min. 47	
Typical values	AW	540	580	27	75	

Packaging, available sizes and identification

	Diameter (mm)	3.2	4.0	5.0	6.0
	Length (mm)	450	450	450	450
Unit box	Pieces / unit (nominal)	90	55	35	25
	Net weight/unit (kg)	5.9	5.3	5.2	5.3
Unit: SRP	Pieces/unit	28	23	18	
	Net weight/unit (kg)	1.9	1.6	2.7	

Identification Imprint: 7028/Conarc L150 Tip colour: yellow

Conarc® L150: rev. EN 15

Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S185, S235, S275, S355
Ship plates	ASTM A131	Grade A, B, D, AH32 to EH40
Cast steel	EN 10213-2	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240, L290, L360, L415, L445
	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1, P235T2, P275T1
	EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	EN 10113-2	S275, S275, S355, S420
	EN 10113-3	S275, S355, S420

Calculation Data

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time - per electrode at max. current - (s)*	Energy E(kJ)	Dep.rate - H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ kg weldmetal 1/N
3.2 x 450	140 - 160	AC/DC+	84	375	1.7	64.8	26	1.67
4.0 x 450	175 - 220	AC/DC+	80	555	2.6	97.8	17	1.69
5.0 x 450	275 - 325	AC/DC+	75	838	4.4	155.7	11	1.72
6.0 x 450	325 - 350	AC/DC+	85	1260	5.4	209.4	8	1.64

* stub end 35 mm

Welding parameters, optimum fill passes

Welding position Diameter (mm)	PA/1G Current (A)	PB/2F	PC/2G
3.2	150	150	140
4.0	210	200	190
5.0	310	280	
6.0	360	300	

Application Advice

Electrodes after removal from cardboard boxes redry 2-4h 350 ± 25°C
Transformers with OCV > 70 V recommended