Conarc® 55CT

EMR SAHARA®

CLASSIFICATION

AWS A5.5	E8018-W2-H4R [1]	**A-Nr**	10	[1]Deviation,see remarks - [2]Nearest classification
ISO 2560-A	E 46 5 Mn1Ni B 3 2 H5 [2]	**F-Nr**	4	
		9606 FM	2	

GENERAL DESCRIPTION

All position electrode for welding weather resistant steel like Cor-Ten, Patinax etc...
Basic extremely low hydrogen electrode
Excellent mechanical properties (impact down to -50°C)
Also available in vacuum sealed Sahara ReadyPack®(SRP): HDM< 3 ml/100g

WELDING POSITIONS (ISO/ASME)

PA/1G PB/2F PC/2G PF/3Gu PE/4G PH/5Gu

CURRENT TYPE

AC / DC +/-

APPROVALS

LR

4Y42H5

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si	P	S	Ni	Cu	HDM
0.05	1.5	0.4	0.010	0.015	0.9	0.4	3 ml/100 g

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	0.2% Proof strength (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Impact ISO-V(J) -18°C	-20°C	-40°C	-50°C
Required: AWS A5.5		min. 460	min. 550	min. 19	min. 27			
ISO 2560-A		min. 460	530-680	min. 20				min. 47
Typical values	AW	540	610	25		115	100	60

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Carton + PE foil	**Pieces / unit**	140	120	-
	Net weight/unit (kg)	2.7	4.5	-
SRP	**Pieces / unit**	69	50	27
	Net weight/unit (kg)	1.4	1.9	1.5

Identification Imprint: CONARC 55CT Tip Color: black

Conarc®55CT: rev. C-EN28-01/02/16

Conarc® 55CT

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades/Code	Type
Weather resisting steels	
EN 10025-5	S235 J0W
	S235 J2W
	S355 J0W
	S355 J2W
	S355 K2G1W

Weather resistant steels like Cor-Ten®,Patinax®-F,Patinax®-37 and similar Ni- and Cu-alloyed steels

CALCULATION DATA

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time - per electrode at max. current - (S)*	Energy - per electrode at max. current - E(kJ)	Dep. rate - per electrode at max. current - H(kg/h)	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
2.5x350	55-85	DC+	53	81	0.77	19.7	88	1.74
3.2x350	80-145	DC+	70	223	1.2	36.9	43	1.60
4.0x350	120-185	DC+	77	355	1.6	54.1	29	1.59
5.0x450	180-270	DC+	104	784	2.4	105.2	15	1.53

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PH/5Gup
2.5	110A	110A	115A	110A	105A	110A
3.2	140A	120A	145A	120A	120A	120A
4.0	150A	140A	150A	140A	135A	140A
5.0	220A	210A	210A	170A		

REMARKS / APPLICATION ADVICE

Redry electrodes 2-4h 350 ±25ºC after removal from cardboard boxes

Deviations:chemical composition:

Mn = 1.4 - 1.9%	AWS:Mn = 0.50 - 1.30%
Si = 0.15 - 0.60%	AWS:Si = 0.35 - 0.80%
Cr = 0.1%	AWS:Cr = 0.45 - 0.70%
Ni = 0.7 - 1.0%	AWS: Ni = 0.40 - 0.80%
Cu = 0.3 - 0.5%	EN:Cu max.0.3%