

CLASSIFICATION

AWS A5.5	E8018-W2-H4R ¹⁾	A-Nr	10	¹⁾ Deviation, see remarks - ²⁾ Nearest classification
ISO 2560-A	E 46 5 MnNi 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/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)			
				-18°C	-20°C	-40°C	-50°C
Required: AWS A5.5 ISO 2560-A Typical values	min. 460 min. 460	min. 550 530-680	min. 19 min. 20 25	min. 27			
AW	540	610			115	100	min. 47 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

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	Energy	Dep. rate	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
			- per electrode at max. current - (S)*	E(kJ)	H(kg/h)			
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 ±25°C after removal from cardboard boxes

Deviations: chemical composition:

Mn = 1.4 - 1.9%

Si = 0.15 - 0.60%

Cr = 0.1%

Ni = 0.7 - 1.0%

Cu = 0.3 - 0.5%

AWS: Mn = 0.50 - 1.30%

AWS: Si = 0.35 - 0.80%

AWS: Cr = 0.45 - 0.70%

AWS: Ni = 0.40 - 0.80%

EN: Cu max. 0.3%