Elex® C 6010

Cellulosic electrode

Classification

AWS A5.1	:E6010
ISO 2560-A	:E42 2 C 25

General description

Cellulosic coated electrode for pipe and general welding
Gives high ductility root welds
Very deep penetration ensures sound root pass
Easy striking, easy slag release
High volume of generated gas eliminates porosity
Reduces problems from dirt and oil on surface

Welding positions

ISO/ASME PF/5G up PG/5G down

Current type

DC electr.+

Approvals

LR	TUV
3	+

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

C	Mn	Si
0.15	0.44	0.2

Mechanical properties,all weld metal

		Condition	Yield strength, (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)	Impact (ISO), J -20°C	Impact (ISO), J - 29°C
Required	AWS A5.1		min.331	min.414	min.22		27
	ISO 2560-A		min.420	500-640	min.20	47	
Typical values after welding		AW	440	520	26	60	50

Packaging,available sizes and identification

	Diameter (mm)	2.5	3.2	4.0	5.0
	Length (mm)	350	350	350	350
Unit:	Pieces / unit (nominal)	490	300	205	130
metal can	Net weight/unit (kg)	7.5	7.6	7.9	7.9

Identification Imprint: Elex® C 6010 Tip colour: none **Elex® C 6010 : rev. EN 20**

Materials to be welded

Steel	Code	Type
Pipe material	EN 10208-1	L 210, L 240
	EN 10208-8	L 240, 290, L 360
	EN 10216-1/10217-1	P 235, P 275, P 355
	API 5LX	X42, X46, X52
	Gaz de France	X42, X46, X52

Calculation data

Sizes Diam.x length (mm)	Current range (A)	Current type	Arc time (s)*	Energy E(kJ)	Dep.rate H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ 1 kg weldmetal (1/N)
			- per electrode at max.current -					
2.5x350	40-70	DC+				15.3		
3.2x350	65-130	DC+				25.2		
4.0x350	90-175	DC+				38.6		
5.0-350	140-225	DC+				60.7		

* stub end = 35 mm

Welding parameters,optimum fill passes

Welding position	PF/5G up	PG/5G down
Diameter (mm)	Current (A)	
2.5	55	65
3.5	90	110
4.0	130	150
5.0	150	165

Application advice

Preheating pipe material L360 (X52) required (acc.EN 1011-1)
Pipeclamps to be removed after finishing root pass,start welding hot pass within 5 min after root pass
Use electrodes directly from metal cans