

Cellulosic electrode

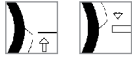
Classification

AWS A5.1-91 : E6010
 EN 499-94 : E 42 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	TÜV
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-V(J)	
					-20°C	-29°C
Required: AWS A5.1-91		min. 331	min. 414	min. 22		27
EN 499-94		min. 420	500-640	min. 20	47	
Typical values	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: metal can	Pieces / unit (nominal)	490	305	215	135
	Net weight/unit (kg)	7.5	7.7	8.3	8.2

Identification Imprint: 6010-FW5P

Tip colour: none

Fleetweld® 5P: rev. EN 15

Materials to be welded

Steel	Code	Type
Pipe material	EN 10208-1	L 210, L 240
	EN 10208-2	L 240 , L 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 - 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
2.5x350	40-70	DC+				15.3		
3.2x350	65-130	DC+				25.2		
4.0x350	90-175	DC+				38.6		
5.0x350	140-225	DC+				60.7		

* stub end = 35 mm

Welding parameters, optimum fill passes

Welding position Diameter (mm)	PF/5G up Current (A)	PG/5G down
2.5	55	65
3.2	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