

## High strength cellulosic electrode

### Classification

AWS A5.5 :E7010 - G  
ISO 2560-A :E 42 2 Mo C 25

### General description

Cellulosic coated electrode for vertical down pipe welding  
Suitable for pipe with strengths X52 trough X65  
Popular with welders  
Easy operability  
Low susceptibility to wagon tracks, windows and pinholes

### Welding positions



ISO/ASME PG/5Gdown

### Current type

DC electr. +

### Approvals

LR	TÜV
3,3Y	+

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

C	Mn	Si	Mo	V
0.12	0.35	0.12	0.35	0.02

### Mechanical properties, all weld metal

	Condition	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact (ISO), J	
					-20°C	-29°C
Required	AWS A5.5 ISO 2560-A	min.390 min.420	min.480 500-640	min. 22 min. 20	not required min. 47	
Typical values after welding	AW	430	520	26	75	50

### Packaging, available sizes and identification

		2.5	3.2	4.0	4.8	5.0	5.6
		Diameter (mm)					
	Length (mm)	350	350	350	350	350	350
Unit:	Pieces / unit (nominal)	440	295	195	145	125	105
Metal can	Net weight/unit (kg)	6.9	7.7	7.4	8.3	7.8	8.1

Identification	Imprint: Eles® C 7010 - G	Tip colour: none
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Eles® C 7010 - G : rev. EN 20
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## Materials to be welded

Steel	Code	Type
Pipe material	EN 10208-2	L360, L 415,
	EN 10216-1/ EN 10217-1	P355
	API 5LX	X52, X56, X60, X65
	Gaz de France	X52, X63

## 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)	Quantity of electrodes per 1kg of weldmetal (pcs.)	kg Electrodes/ kg weldmetal (1/N)
2.5x350	40 - 70	DC+				15.7		
3.2x350	75 - 130	DC+				26.0		
4.0x350	90 - 185	DC+				40.0		
4.8x350	140-185	DC+				57.2		
5.0x350	140-225	DC+				62.3		
5.6x350	160-250	DC+				77.1		

\*stub end = 35 mm

## Welding parameters,optimum fill passes

Welding position	PA/5Gdown
Diameter (mm)	Current (A)
2.5	65
3.2	110
4.0	150
4.8	165
5.0	165
5.6	190

## Application Advice

Preheating pipe material L360 and L415 required acc.EN 1011-1

Pipeclamps to be removed after finishing root pass,start welding"hot pass"immediately (within 5 min.) after root pass

Use electrode directly from metal cans

Use Elex C 6010 for lower hardness in the root pass