CARBO CEL 80

International standards	EN ISO 2560-A	E 46 3 1 Ni C 25
	AWS A 5.5	E8010-P1

Approvals ---

Typical applications and characteristics

Cellulose-coated electrode for vertical-down welding for high strength large diameter pipelines. Highly economical compared with conventional vertical-up welding. Especially recommended for hot pass filler and cover layers. Practice has shown a temperature of 150°C (300°F) to be sufficient for preheating purposes. Wall thickness over 20 mm (3/4 inch) should in any case be preheated, regardless of the carbon level, and the preheating temperature should be raised to about 200°C (390°F).
Usability in sour gas involving applications (acc. Hic test NACE TM-0284)

Operating temperature From -30° C up to +450° C

Base materials L290NB-L415NB, L290MB-L415MB, -L485MB, S235JRS1-S235J4S, X42-X70

Mechanical properties of all-weld metal

(typical values **)**

Tensile strength R_m N/mm²	Yield strength R_{eL} N/mm²	Elongation A_5 %	Impact strength ISO – V J - 30°C
560-650	> 460	> 20	> 47

Weld metal analysis (typical, wt. %)

C	Si	Mn	Ni
0,14	0,2	0,9	0,6

Current = +

Welding positions PA, PB, PC, PD, PE, PF, PG

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	40 – 80	530	1060	16,2	8,5	17,0
3,2 x 350	60 – 110	330	660	26,5	9,0	18,0
4,0 x 350	90 – 140	230	460	40,1	9,5	19,0
5,0 x 350	120 – 180	160	320	60,8	10,0	20,0

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