

OK 48.00



OK 48.00 is a reliable, all purpose low hydrogen electrode for mild and low-alloy steels. OK 48.00 is an all positional electrode, offering stable arc, reliable and consistent mechanical properties. It secures all welds you have to do from the root to the capping whatever the job, thickness or welding conditions.

- H4 R approved
- Low diffusible hydrogen to reduce the risk for cold cracking
- Outstanding low moisture pick up
- High efficiency bringing productivity
- Extremely good weldability in vertical up position
- Exceptional weld appearance

Classifications

- SFA/AWS A5.1 E7018 H4 R
- EN ISO 2560-A E 42 4 B 42 H5

Industry

- Industrial and General Fabrication
- Civil Construction
- Marine and Offshore
- Energy
- Light Fabrication

Mechanical Properties

	ISO Requirement	Typical
Yield Strength, Mpa	> 420	475
Tensile Strength, MPa	500-640	565
Elongation %	> 20	29

Charpy V-Notch Properties

Test temp, °C (J)	ISO Requirement	Typical
-40	> 47	118



Approvals

- ABS 3YH5
- BV 3Y5
- CE EN 13479
- DB 10.039.12
- DNV 3YH5
- GL 3YH5
- LR 3YH5
- VdTUV 00690
- PRS 3YH5
- RS 3YH5

Weld Metal Analysis %

C	0.06
Si	0.38
Mn	1.08
P	0.02
S	0.02

Parameters in 3G / PF (Vertical Up - AWS)

Diameter	Welding Parameters	Pass & Layer	Plate Thickness	Interpass Temp
2,5 mm	90A / 22V	2x7 and 3x1	15mm	160 - 170°C
3,2 mm	115A / 23V	1x1 and 2x5	15mm	160 - 170°C
4,0 mm	125-135A / 22,5V	2x6	20mm	160 - 170°C

Mechanical Properties in 3G / PF (Vertical Up - AWS)

Requirements	Re > 400 Mpa	Rm > 490 Mpa	A4% > 22 %	Kv (-30°C) average > 27 J
2,5 mm	478	565	32	177
3,2 mm	506	598	31	121
4,0 mm	484	593	30	99

Efficiency

	2,5 x 350	3,2 x 350	4,0 x 450	5,0 x 450
100 g Weld metal / g core wire (*)	129	123	118	119

(*) approximately 10% higher than main competitors' electrodes

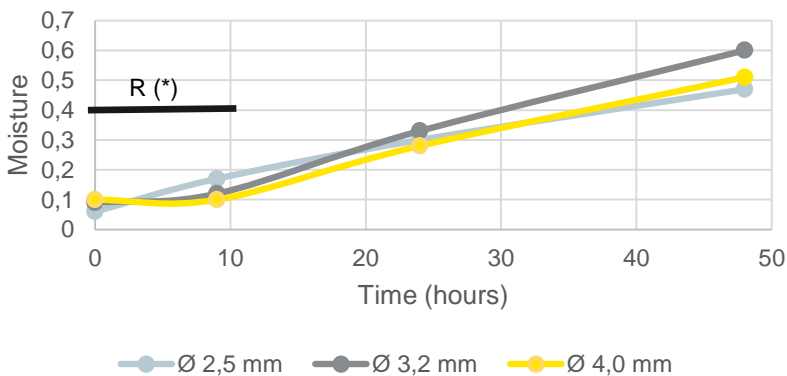
HIC test and SSC test

The two following tests have been performed successfully

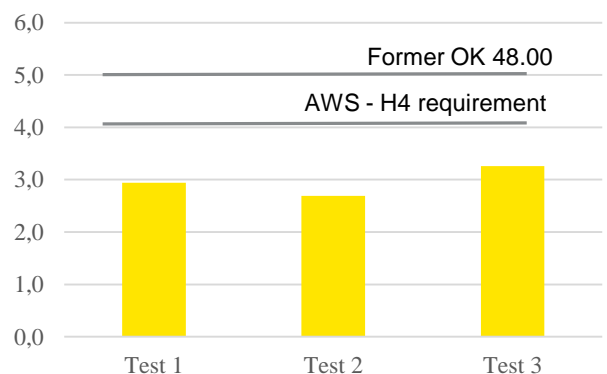
- HIC-testing according to NACE TM 0284-87
- Sulphide Stress Cracking (SSC) test according to NACE TM-0177

Moisture pick-up and Hydrogen content

Moisture Pick-up H₂O O to 1000°C -
27°C/80%HR



Hydrogen content Ø 4,0 mm



(*) AWS requirement : "R" means moisture below 0,4 after 9h exposure



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COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
= ISO 9001 =
= ISO 14001 =
= OHSAS 18001 =