

PHOENIX 120K

Unalloyed basic coated stick electrode

Main benefit

Basic coated stick electrode for high quality welds for unalloyed steels up to 420 MPa yield strength.



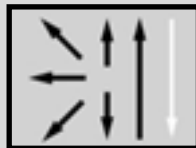
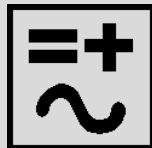
Product features	Product benefits	User benefits
» Basic coated	» Pure, cryogenic weld metal	» Big field of applications for higher demands » Suitable for service temperatures down to -50 °C
» Low hydrogen content in the weld metal	» Avoids hydrogen induced cracking	» Safer welding, CTOD tested
» Designed for high demand welds	» Many 3 rd party approvals	» Welding for high demanding industries with required approvals
» Available in Dry System vacuum packs	» Welding directly out of the package without re-drying	» Less time for preparation, always safe packed, fresh stick electrodes



Typical applications

- » Steel constructions
- » Ship building
- » Pressure vessels
- » Offshore industry

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Classifications		Operating data	
EN ISO 2560-A	AWS A5.1 / SFA-5.1	Welding positions	Polarity
E 42 5 B 3 2 H5	E7018-1		
		for root pass DC (-) Ø 2.5 mm and 3.2 mm	

Mechanical properties, all weld metal (single values typical)			
	C	Si	Mn
	0.07	0.35	1.2

Mechanische Eigenschaften, Schweißgut (typische Einzelwerte)						
	Condition	Yield strength $R_{p0.2\%}$ MPa	Tensile strength R_m MPa	Elongation A ($L_0 = 5d_0$) %	CVN Impact toughness ISO-V KV J	
					20 °C	-50 °C
	As welded	430 (≥ 420)	540 (500 - 640)	22 (≥ 20)	180	≥ 47

Steels to be welded	
EN	ASTM
S235JRG2 - S355J2, E295, E335, C 35; boiler steels P235GH, P265GH, P295GH, P355GH; fine grained structural steels up to S420N; shipbuilding steels A, B, D, E; offshore steels; pipe steels P265, P295, L290NB - L415NB, L290MB - L415MB; X 42 - X 60; cast steel E200, GE240, GE260	TM A27 and A36 Gr. all, A214, A242 Gr. 1-5, A266 Gr. 1, 2, 4, A283 Gr. A, B, C, D, A285 Gr. A, B, C, A299 Gr. A, B, A328, A366, A515 Gr. 60, 65, 70, A516 Gr. 55, A570 Gr. 30, 33, 36, 40, 45, A572 Gr. 42, 50, A606 Gr. all, A607 Gr. 45, A656 Gr. 50, 60, A668 Gr. A, B, A907 Gr. 30, 33, 36, 40, A841, A851 Gr. 1, 2, A935 Gr. 45, A936 Gr. 50

Approvals
TÜV (00348), DB (10.014.83), ABS, BV, DNV GL, LR

Carton Packaging	Dry System Vacuum Packaging
 <p>Weight: ~ 4.1 kg</p> <p>Diameter: 2.5 x 250 mm 2.5 x 350 mm 3.2 x 350 mm 3.2 x 450 mm 4.0 x 350 mm 4.0 x 450 mm 5.0 x 450 mm 6.0 x 450 mm</p>	 <p>Weight: DrySys 20: ~1.2 kg DrySys 30: ~ 2.1 kg</p> <p>Diameter: 2.5 x 350 mm 3.2 x 350 mm 3.2 x 450 mm 4.0 x 350 mm 4.0 x 450 mm 5.0 x 450 mm 6.0 x 450 mm</p>