BÖHLER FOX alform® 700

Basic stick electrode, low-alloyed, high strength

Classifications

EN ISO 18275-A	AWS A5.5	AWS A5.5M
E 69 6 Mn2NiCrMo B 4 2 H5	E11018-GH4R	E7618-GH4R
	E11018MH4R (mod.)	E7618MH4R (mod.)

Characteristics and typical fields of application

Basic Mn-Ni-Mo-alloyed electrode with high ductility and crack resistant for high-strength fine-grained constructional steels. Low-temperature ductility at -60°C and resistant to ageing.

Easily weldable in all positions except vertical-down. Very low hydrogen content (acc. to AWS condition HD < 4 ml/100 g).

Base materials

S690 and higher strength grades, thermo mechanically treated fine grain steels
aligned to alform plate 700M

ASTM A 514 Gr. F, H, Q; A 709 Gr. 100 Type E, F, H, Q; A 709 Gr. HPS 100W

Typical analysis of all-weld metal (wt.-%)

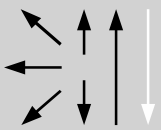
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.05	0.4	1.7	0.4	2.1	0.5

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20°C	-60°C
u	**780** (≥ 690)	**840** (790 – 960)	**20** (≥ 17)	**110**	**60**
s	**750**	**800**	**20**	**80**	
v	**750**	**790**	**20**	**80**	

u untreated, as welded
s stress relieved 580°C/2h / furnace down to 300°C/air
v quenched/tempered 920°C/1h / air and 600°C/2h / furnace down to 300°C/air

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+)	300 – 350°C / min. 2 h	FOX alform® 700 11018-G E 69 6 Mn2NiCrMo B	2.5	350	70 – 100
			3.2	350	100 – 140
			4.0	450	140 – 180
			5.0	450	190 – 230

Preheat, interpass temperature and post weld heat treatment as required by the base metal.

Approvals

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