Phoenix SH Schwarz 3 TR

Stick electrode, low-alloyed, rutile

Classifications

EN ISO 3580-A	AWS A5.5	AWS A5.5M
E Mo R 1 2	E8013-G	E5513-G

Characteristics and typical fields of application

Rutile covered Mo alloyed electrode with basic additions.

Very good root welding ability; creep resitant to temperatures as high as 500 °C (932 °F); non-porous weld metal and easy handling in out of position work.

Useable on unalloyed and Mo-alloyed pipe and boiler steels. Suitable in boiler constructions.

Base materials

P295GH, P355GH, 16 Mo 3, X 46, X 52, X 60

ASTM A355 Gr. P1; A161-94 Gr. T1; A182M Gr. F1; A204M Gr. A, B, C; A250M Gr. T1

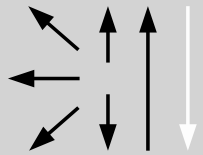
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Mo
wt-%	0.08	0.25	0.55	0.50

Mechanical properties of all-weld metal

Heat-treatment	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
aw	450	530	22	50
sr	430	520	22	55

Operating data



Polarity:	ø (mm)	L mm	Amps A
DC (–) / AC	2.5	250	60 – 90
	2.5	350	60 – 90
	3.2	350	90 – 130
	4.0	350	130 – 180

Approvals

TÜV (01603), DB (10.132.16), CE