

Classifications			
SAW solid wire:			SAW flux:
EN ISO 24598-A	EN ISO 24598-B	AWS A5.23	EN ISO 14174
S S CrMo ₂	SU 2C1M	EB3	SA FB 1 65 DC H5
SAW wire/flux combination			
EN ISO 24598-A	EN ISO 24598-B	AWS A5.23	AWS A5.23M
S S CrMo ₂ FB	S 55 3 FB SU 2C1M	F8P2-EB3-B3	F55P3-EB3-B3

Characteristics and typical fields of application

Sub-arc wire/flux combination suited for 2.25 % Cr 1 % Mo alloyed boiler, plate and tube steels and also particularly for cracking plants in the crude oil industry. Approved in long-term condition up to +600 °C service temperature. The deposit is noted for its excellent mechanical properties. Easy slag detachability and smooth bead surface are additional quality features of this combination. For information regarding the sub-arc welding flux BÖHLER BB 24 see our detailed data sheet. *For step cooling applications we can offer a special product programme.

Base materials

Creep resistance steels and similar alloyed cast steels, QT-steels similar alloyed up to 980 MPa tensile strength, similar alloyed case hardening steels, nitriding steels
1.7380 10CrMo9-10, 1.7276 10CrMo11, 1.7281 16CrMo9-3, 1.7383 11CrMo9-10, 1.7379 G17CrMo9-10, 1.7382 G19CrMo9-10
ASTM A 182 Gr. F22; A 213 Gr. T22; A 234 Gr. WP22; 335 Gr. P22; A 336 Gr. F22; A 426 Gr. CP22

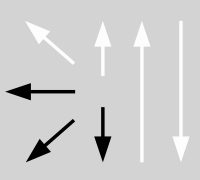
Typical analysis of the wire and of all-weld metal (wt.-%)

	C	Si	Mn	Cr	Mo	P	As	Sb	Sn
SAW wire wt.-%	0.12	0.1	0.6	2.6	0.95				
all-weld metal %	0.08	0.25	0.7	2.4	0.95	≤ 0.010	≤ 0.015	≤ 0.005	≤ 0.01

Mechanical properties of all-weld metal

Condition	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	-30 °C
a	≥ 470	550 – 700	≥ 18	≥ 47	≥ 27
a annealed, 670 – 720 °C / 2h / furnace down to 300 °C / air					

Operating data

	Polarity: DC (+) / DC (-)	Redrying of sub-arc flux: 300 – 350 °C / 2 – 10 h	ø (mm)
			2.5
			3.0
			4.0

Preheating, interpass temperature and post weld heat treatment are determined by the base metal.

Approvals

Wire/flux combination: TÜV (7812.)

Wire: TÜV (02605.), KTA 1408.1 (8060.), SEPROZ, CE