BÖHLER FOX SKWA

Stick electrode, high-alloyed, stainless

Classification

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 17 B 2 2	E430-15

Characteristics and typical fields of application

Basic coated core wire alloyed electrode with good welding characteristics in all positions except vertical-down. Mainly used for surfacing on sealing faces of gas, water and steam valves to meet stainless and wear resistant overlays. After mechanical preparation,two layer build up should remain at least.

Joint welding of similar, stainless and heat resistant Cr-steels provides a very good ability to polishing. Scaling resistance up to 900 °C

Hydrogen content in weld deposit < 5 ml/100 g.

Base materials

Surfacings: all weld-able backing materials, unalloyed and low-alloyed.

Joint welds: corrosion resistant Cr-steels as well as other similar-alloyed steels with C-contents up to 0.20 % (repair welding). Be careful with dilution and welding technology.

1.4510 X3CrTi17

AISI 430Ti, 431

Typical analysis of all-weld metal

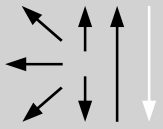
	C	Si	Mn	Cr
wt.-%	0.08	0.40	0.30	17.00

Mechanical properties of all-weld metal – typical values (min.values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Brinell-hardness
	MPa	MPa	%	HB
u				**250**
a	**370** (≥ 300)	**560** (≥ 450)	**23** (≥ 15)	**200**

u untreated, as welded
a annealed, 750 °C/2 h / furnace

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø mm	L mm	Amps A
DC (+)	120 – 200 °C, min. 2 h	FOX SKWA 430-15 E 17 B	2.5 3.2 4.0 5.0	300 350 350 450	60 – 80 80 – 110 110 – 140 140 – 180

The hardness of the deposit is greatly influenced by the degree of dilution with the base metal (depending on the relevant welding conditions) and by its chemical composition. As a general rule it can be observed that the higher the degree of dilution and the C-content of the base metal, the higher the deposit hardness.

Approvals

KTA 1408.1 (8098.00), CE