BÖHLER CN 18/11-UP // BB 202

SAW wire/flux combination, high-alloyed, creep resistant

Classifications

SAW solid wire:			SAW flux:
EN ISO 14343-A	**EN ISO 14343-B**	**AWS A5.9**	**EN ISO 14174**
S 19 9 H	SS19-10H	ER19-10H	S A FB 2 DC

Characteristics and typical fields of application

Sub-arc wire/flux combination for high quality joint weld on high temperature austenitic CrNi-steels at service temperature up to +700 °C (+300 °C in the case of wet corrosion).

The controlled ferrite content (3-8FN) ensures hot cracking resistance. The deposit is insusceptible to sigma phase embrittlement.

For information regarding the sub-arc welding flux BÖHLER BB 202 see our detailed data sheet. Steels to German material no. 1.4550 and 1.4551 which are approved for the high temperature range up to +550 °C, can also be welded.

Base materials

Similar alloyed creep resistant steels

1.4948 X6CrNi18-10, 1.4878 X8CrNiTi18-10, 1.4940 X7CrNiTi18-10, 1.4912 X7CrNiNb18-10

AISI 304 H, 321 H, 347 H

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

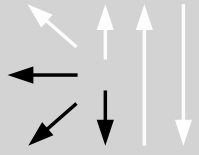
	C	Si	Mn	Cr	Ni		FN
SAW wire wt-%	0.05	0.40	1.6	18.8	9.3		
all-weld metal %	0.04	0.5	1.3	18.5	9.3		3-8

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
u	≥ 320	≥ 550	≥ 30	≥ 32

u untreated, as welded

Operating data



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

Preheating is not required, only in case of wall thickness above 25 mm preheat up to 150 °C. The interpass temperature should not exceed 200 °C.

Approvals

CE