

Classification

SAW solid wire:			SAW flux:
EN ISO 14343-A	EN ISO 14343-B	AWS A5.9	EN ISO 14174
S 22 9 3 N L	SS2209	ER2209	SA FB 2 DC

Characteristics and typical fields of application

Sub-arc wire/flux combination for welding the Duplex stainless steels 1.4462 / S31803. Smooth beads, easy slag removal without any slag residues and good welding characteristics even for fillet welds are very much appreciated by users.

Suitable for service temperatures from -40 °C to $+250\text{ °C}$. The pitting index PRE_N is > 35 .

BÖHLER BB 202 is a fluoride-basic agglomerated flux. For CVN requirements lower than -40 °C we recommend our flux BÖHLER BB 203. For information regarding the sub-arc welding fluxes BÖHLER BB 202 and BB 203 see our detailed data sheets.

Base materials

Same-alloyed duplex stainless steels, as well as similar-alloyed, ferritic-austenitic steels with higher tensile strength

1.4462 X2CrNiMoN22-5-3, 1.4362 X2CrNiN23-4,
1.4462 X2CrNiMoN22-5-3 with 1.4583 X10CrNiMoNb18-12
or other stainless steel grades
UNS S31803, S32205

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

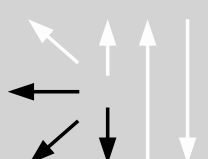
	C	Si	Mn	Cr	Ni	Mo	N		PRE_N
SAW wire wt-%	≤ 0.015	0.40	1.6	22.8	8.8	3.2	0.15		36.0
all-weld metal %	0.013	0.50	1.1	22.5	8.8	3.2	0.14		35.0

Mechanical properties of all-weld metal

Condition	Yield strength	Tensile strength	Elongation	Impact work	
	$R_{p0.2}$	R_m	A ($L_0=5d_0$)	ISO-V KV J	
	MPa	MPa	%	+20 °C	-40 °C
u	≥ 550	≥ 750	≥ 27	≥ 100	≥ 32

u untreated, as welded

Operating data

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

TÜV (09173.), ABS (ER 2209), DNV (X), GL (4462 TM), LR (X), CE