

Classification

EN ISO 14174

SA FB 2 DC

Characteristics and typical fields of application

BÖHLER BB 203 is an agglomerated fluoride-basic flux with high basicity for joint welding of soft martensitic CrNi-steels and austenitic CrNi(Mo)-steels especially for thick walled components with high restraint and where low hydrogen contents are important. BÖHLER BB 203 produces well contoured and smooth welding beads. It offers especially low flux consumption. Beside good slag detachability the flux features good fillet weld capabilities. The weld deposits show high purity and good mechanical properties.

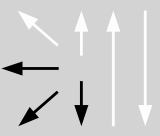
Base materials

Soft- martensitic Cr-Ni-steels and unstabilised or stabilised austenitic CrNi(Mo)-steels as well as high corrosion resistant fully austenitic Cr-Ni-Mo-steels

Composition of sub-arc welding flux (wt. %)

	SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃	CaF ₂
wt.-%	20	26	18	32

Operating data

	Polarity DC (+) / DC (-)	Basicity acc. to Boniszewski: 2.7 weight %
		Bulk density: 1.0 kg / dm ³
		Grain size acc. to EN ISO 14174: 2 – 12 (0.2 – 1.25 mm)
		Flux consumption: 0.8 kg flux per kg wire
		Redrying: 300 – 350 °C, 2 – 10 h

Typical Composition of All-weld Metal with different Wires

SAW wires	C	Si	Mn	Cr	Ni	Mo	Nb	Cu	N
BÖHLER CN 13/4-UP	0.015	0.65	0.7	11.8	4.7	0.5			
BÖHLER CN 22/9 N-UP	0.013	0.5	1.1	22.5	8.8	3.2			0.14
BÖHLER CN 24/9 LDX-UP	0.02	0.65	0.4	23.5	7.7	< 0.5			0.13
BÖHLER SKWAM-UP	0.15	0.65	0.55	16.5	0.4	1.1			
BÖHLER ASN 5-UP	≤ 0.02	0.40	4.5	18.5	17.3	4.3			0.15
BÖHLER A 7 CN-UP	0.06	0.80	6.0	18.7	9.0				

Classification of the wires

	EN ISO 14343-A	AWS A5.9
BÖHLER CN 13/4-UP	S 13 4	ER410NiMo (mod.)
BÖHLER CN 22/9 N-UP	S 22 9 3 N L	ER2209
BÖHLER CN 24/9 LDX-UP	S 23 7 N L	ER2307
BÖHLER SKWAM-UP	S Z17 Mo	-
BÖHLER ASN 5-UP	S Z18 16 5 NL	ER317L (mod.)
BÖHLER A 7 CN-UP	S 18 8 Mn	ER307 (mod.)

Approvals

Approval is available for BÖHLER BB 203 together with BÖHLER-wires:

TÜV: EAS 2-UP, EAS 4 M-UP, SAS 2-UP, SAS 4-UP, CN 20/25 M-UP, CN 22/9 N-UP

SEPROZ: CN 13/4-UP, CN 20/25 M-UP