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SAW flux, aluminate-basic type

Classification

EN ISO 14174

SA AB 1 67 AC H5

Characteristics and typical fields of application

BÖHLER BB 400 is an agglomerated flux of aluminate basic type designed for joining and surfacing applications with general-purpose structural steels, fine grained structural steels, boiler and pipe steels. The flux is characterized by its low silicon and moderate manganese pickup. It can be used on DC and AC. Its good welding characteristics and the technological properties of the weld metal produced with different wires permit universal use.

Base materials

Structural steels, fine grained structural steels, boiler steels, pipe steels

Composition of sub-arc welding flux (wt. %)					
	SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂	
wt%	20	30	28	16	

Operating data

P	olarity	Basicity acc. to Boniszewski:	2.3 Mol. %	1.7 weight %
DC (+) / DC (-)	Grain size acc. to EN ISO 14174:	3 – 20 (0.3 – 2	2.0 mm)
←	AC	Flux consumption:	1.0 kg flux pe	r kg wire
		Redrying:	300 – 350 °C	, 2h

Typical Composition of all-weld Metal with different Wires					
SAW wires	C	Si	Mn		

OAW WIES	C	51	IVILI	IVIO
BÖHLER EMS 2	0.06	0.35	1.35	
BÖHLER EMS 2 Mo	0.06	0.35	1.35	0.35
BÖHLER EMS 3	0.07	0.35	1.60	
	Wire classification			
	EN ISO 14171-A		AWS A5.17	
	EN ISO 14171-A		AWS A5.17	
BÖHLER EMS 2	EN ISO 14171-A S2		AWS A5.17 EM12K	
BÖHLER EMS 2 BÖHLER EMS 2 Mo	EN ISO 14171-A S2 S2Mo		AWS A5.17 EM12K EA2	
BÖHLER EMS 2 BÖHLER EMS 2 Mo BÖHLER EMS 3	EN ISO 14171-A S2 S2Mo S3		AWS A5.17 EM12K EA2 EH10K	

Approvals

DB (51.014.03)

Approval is available for BÖHLER BB 400 together with the BÖHLER-wires: TÜV, DB: EMS 2, EMS 2 Mo