Böhler P 23-UP / BB 430

Flux/wire combination, low alloyed, creep resistant

Classifications

SAW solid wire:		SAW flux:
EN ISO 24598-A	**AWS A5.23**	**EN ISO 14174**
S ZCrWV2 1.5	EB23	SA FB 1 55 AC

SAW wire/flux combination

EN ISO 24598-A	
S S ZCrWV2 1.5 FB	

Characteristics and typical fields of application

Böhler B 23-UP is a matching filler metal for welding high temperature and creep resistant steels such as HCM2S (P23/T23 acc. to ASTM A213 code case 2199), pipe or tube material.

BB 430 is an agglomerated welding flux of the fluoride-basic type with high basicity. For information regarding the sub-arc welding flux BÖHLER BB 430 see our detailed data sheet.

Base materials

HCM2S, ASTM A 182 Gr. F23; A 213 Gr. T23 (code case 2199); A335 Gr. P23

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

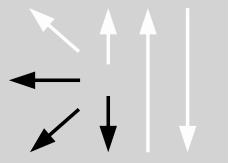
	C	Si	Mn	Cr	W	V	Nb
wt.-%	0.07	0.35	0.5	2.2	1.7	0.22	0.04
	0.06	0.4	0.6	2.1	1.6	0.18	0.04

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
a	≥ 500	≥ 600	≥ 15	≥ 54

a annealed 740 °C/2 h

Operating data



Polarity:	**Redrying of sub arc flux:**	**ø (mm)**
DC (+)	300 – 350 °C, 2 – 10 h	2.0 2.5 3.0

Preheat and interpass temp.: 200 – 300 °C. Heat input ≤ 2,0 kJ/mm.

Approvals

Wire/flux combination: TÜV (10556.), CE