

## Classifications

SAW solid wire:			SAW flux:
<b>EN ISO 14343-A</b>	<b>EN ISO 14343-B</b>	<b>AWS A5.9</b>	<b>EN ISO 14174</b>
S 13 4	SS(410NiMo)	ER410NiMo (mod.)	SA FB 2 DC

## Characteristics and typical fields of application

Sub-arc wire/flux combination for welding similar soft-martensitic steels like 1.4313 / CA 6 NM. BÖHLER CN 13/4-UP // BB 203 yields a weld deposit featuring very good ductility and CVN toughness as well as high crack resistance.

BÖHLER BB 203 is a fluoride-basic, agglomerated flux providing good operating characteristics, smooth beads and a low hydrogen weld metal (HD ≤ 5 ml/100 g). For information regarding this sub-arc welding flux see our detailed data sheet.

## Base materials

1.4317 GX4CrNi13-4, 1.4313 X3CrNiMo13-4, 1.4407 GX5CrNiMo13-4, 1.4414 GX4CrNiMo13-4  
ACI Gr. CA 6 NM

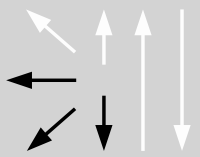
## Typical analysis of the wire and of all-weld metal (wt.-%)

	C	Si	Mn	Cr	Ni	Mo
SAW wire wt-%	0.01	0.65	0.7	12.2	4.8	0.5
all-weld metal %	0.015	0.65	0.7	11.8	4.7	0.5

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
a	≥ 500	≥ 750	≥ 15	≥ 50
a annealed, 600 °C/2 h				

## Operating data

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

Preheat and interpass temperatures in case of thick-walled sections +100 – 160 °C. Maximum heat input 15 kJ / cm. Tempering at 580 – 620 °C.

## Approvals

SEPROZ, CE  
SAW solid wire: SEPROZ