# SWEBEN

### Genuine Swedish Craftmanship, Proven results



## FOUR ROLL PLATE BENDING MACHINES PB4

www.SWEBEND.com

## **PB4** series

**PB4** (<u>P</u>late <u>B</u>ending <u>4</u> roll) series from SweBend offers twelve different standard size ranges, from PB4-4 with top roll diameter 102 mm (4") up to PB4-28 with top roll diameter 711 mm (28").

With roll lengths from 500 mm up to 9 000 mm, SweBend can always offer the correct machine type for all applications. All machines are extremely sturdy in design and have more bending power compared to any other plate bending machine on the market.



**PB4-12-4** with special top roll Ø260 mm, length 1250 mm)

With SweBend PB4 you always get:

- Variable speed via proportional valve (-s) as standard on all models!
- Higher side roll power (=bending power) compared to any competitor's machine with equal size of top roll!
- Higher drive torque (=rolling power) compared to any competitor machine with equal size of top roll!
- A machine designed with focus on quality, power & user-friendliness!
- Made in Sweden means a machine that guarantees the highest quality in all details resulting in longer lifetime, less maintenance & repairs, higher output, better production quality and an unmatched return-oninvestment!



Cone bending device with hardened key Hardened cone roller is also available if desired



**PB4-8-6** (top roll Ø203 mm, length 2000 mm) Equipped with CNC, hydraulic lifting roll & powered support rolls under the lower roll

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**PB4-8-3** (top roll Ø203 mm, length 1000 mm) Machine equipped with CNC, electro-mechanical top support and hydraulic side support

#### Wireless control unit via BlueTooth

SweBend PB4 machines offer as standard the most user-friendly control panel on the market. All functions of the machine, including side roll parallelism, are operated from the control box. This unique control was developed by SweBend and may also be retrofit on older machines.



Wireless control unit uses four standard AA (LR6) batteries



Powered support rolls (optional equipment) under the lower roll to "adjust" roll crowning and compensate for roll deflection.

#### **Optional Equipment for SweBend PB4 series**

- Cone bending device (key or roll)
- Side supports in various designs
- Lifting rolls & top supports, electro-mechanical or hydraulically operated, including ejection devices
- Support roll systems for the bending rolls
- Industry's best & powerful CNC system!
- Integration in production cells, including communication with other software systems
- Complete material handling systems
- Special rolls with contour, grooves etc, to allow bending plates with flanges and/or ribs
- "Turbo Production" kits and more





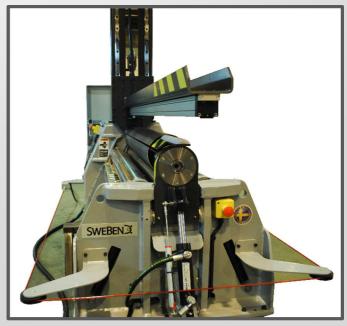
#### Standard features of SweBend PB4 series

- Hardened & Ground rolls
- Electronic control of side roll parallelism
- Four digital readouts ( = both side roll ends)
- Wireless control unit with joysticks
- SKF bearings only!
- Well-known & top quality brands for all standard electric and hydraulic components.

#### **Special requirements**

With our standard range of models as foundation, and with a broad range of optional equipment, we also design & produce specialty plate rolls when required. This can be special roll diameter or roll length or even shape of the rolls.

Never hesitate to ask us for advice!



PB4-4-4 CNC with high speed turbo kit, special lifting bar & ejection device for extremely small diameters

## **Capacity table for SweBend PB4 machines**

		Prebending		Circular Bending			]
Machine	Length	1,5*TRD	3*TRD	3*TRD	5*TRD	8*TRD	Motor Size
	mm	mm	mm	mm	mm	mm	kW
РВ4-4-3	1000	3,0	3,5	4	4,5	5	2,2
PB4-6-3	1000	5,5	6	7	8	9	4
PB4-8-3	1000	10	12	14	16	18	7,5
PB4-4-4	1250	2,5	3,0	4	4,0	5	2,2
PB4-6-4	1250	5	5,5	6	7	8	4
PB4-8-4	1250	9	11	13	15	17	7,5
PB4-10-4	1250	13	15	20	22	24	11
PB4-4-5	1525	2,0	2,5	3	3,5	4	2,2
PB4-6-5	1525	4,5	5	5,5	6	7	4
PB4-8-5	1525	8	10	12	14	16	7,5
PB4-10-5	1525	12	14	18	20	22	11
PB4-12-5	1525	17	19	24	28	30	22
PB4-14-5	1525	27	29	32	37	40	30
PB4-16-5	1525	34	37	40	45	50	45
PB4-18-5	1525	40	44	50	55	60	67
PB4-20-5	1525	45	50	55	60	65	90
PB4-22-5	1525	53	56	70	82	87	110
PB4-24-5	1525	65	75	80	90	95	120
PB4-28-5	1525	85	90	100	115	125	165
PB4-4-6	2000	1,5	2,0	2,5	3,0	3,5	2,2
PB4-6-6	2000	4	4,5	5	5,5	6	4
PB4-8-6	2000	7	8	11	13	15	7,5
PB4-10-6	2000	11	13	16	18	20	11
PB4-12-6	2000	15	17	21	24	26	22
PB4-14-6	2000	23	25	30	35	37	30
PB4-16-6	2000	30	33	35	40	45	45
PB4-18-6	2000	35	38	44	51	55	67
PB4-20-6	2000	40	45	50	55	60	90
PB4-22-6	2000	47	50	62	73	76	110
PB4-24-6	2000	57	65	70	80	85	120
PB4-28-6	2000	80 al mild steel wit	85	94	107	115	165

Capacities are valid for normal mild steel with typical yield strength of 260 N/mm<sup>2</sup>. TRD = Top Roll Diameter

		Prebending		Circular Bending			]
Machine	Length	1,5*TRD	3*TRD	3*TRD	5*TRD	8*TRD	Motor Size
	mm	mm	mm	mm	mm	mm	kW
PB4-6-8	2500	3,5	4	4,5	5	5,5	4
PB4-8-8	2500	6	7	9	11	13	7,5
PB4-10-8	2500	9	11	14	16	18	11
PB4-12-8	2500	13	15	18	21	24	22
PB4-14-8	2500	20	22	27	32	35	30
PB4-16-8	2500	26	29	32	36	40	45
PB4-18-8	2500	32	35	38	45	48	67
PB4-20-8	2500	35	40	45	50	55	90
PB4-22-8	2500	42	45	55	65	68	110
PB4-24-8	2500	50	55	60	70	75	120
PB4-28-8	2500	75	80	88	99	106	165
PB4-6-10	3050	3	3,5	4	4,5	5	4
PB4-8-10	3050	5	6	8	9	11	7,5
PB4-10-10	3050	7	9	12	14	16	11
PB4-12-10	3050	11	13	16	19	22	22
PB4-14-10	3050	16	18	24	29	32	30
PB4-16-10	3050	22	25	28	32	35	45
PB4-18-10	3050	28	31	35	42	45	67
PB4-20-10	3050	30	35	40	45	50	90
PB4-22-10	3050	37	40	50	59	62	110
PB4-24-10	3050	45	50	55	65	70	120
PB4-28-10	3050	70	75	81	92	98	165
PB4-8-12	3650	4	5	6	7	9	7,5
PB4-10-12	3650	6	8	10	12	14	11
PB4-12-12	3650	9	11	14	17	20	22
PB4-14-12	3650	13	15	22	27	30	30
PB4-16-12	3650	18	21	24	28	31	45
PB4-18-12	3650	25	28	33	38	40	67
PB4-20-12	3650	27	30	35	40	45	90
PB4-22-12	3650	35	37	47	55	58	110
PB4-24-12	3650	40	45	50	60	65	120
PB4-28-12	3650	65	70	75	85	90	165

## **CNC & Control Systems**



The most advanced & user friendly CNC system on the market

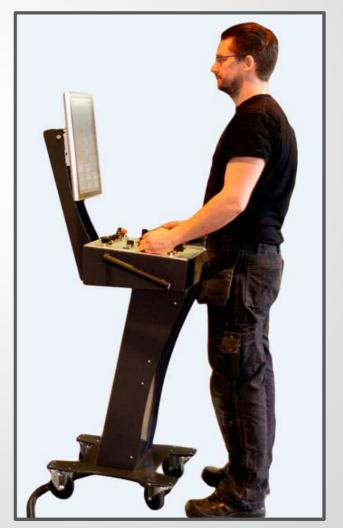


Using linear encoders with highest accuracy and absolute position signal in combination with Beckhoff field bus technology ensures accurate positioning. Also note that the encoders are not affected by oil or dirt since they are completely encapsulated.



#### **CNC** System

All SweBend PB4 machines can easily be equipped with our unique **SEVEN™** CNC system, available in Bronze, Silver or Gold versions, depending on requirements and optional equipment. With in-house development of the software, we offer complete solutions to meet even the toughest demands in terms of flexibility and operator friendliness



Our own designed control panel (here with 19" TFT) on wheels is light & easy to move around. Note that screen can be tilted to match the operators height.



Hardware from Beckhoff offers highest quality

## **Optional Equipment**

All machines in PB4 series can be equipped with a broad range of optional equipment, including various types and sizes of plate lifting devices, specially designed to be as fast and functional as possible.



PB4-8-6 with hydraulic lifting roll in highest position



PB4-8-6 with hydraulic lifting roll in lowest position



Plate infeed arms with alignment utility



PB4-4-4 CNC with high speed turbo kit, special hydraulically operated lifting bar & ejection device for extremely small diameters



Electro-mechanical lifting roll with ejection device



Plate infeed arms with alignment utility

**SweBend** is a Swedish company located in Hässleholm in the very south of Sweden. Our team of dedicated and experienced engineers and mechanics offers you the best possible assistance in the field of bending and forming. Together we have a solid foundation of experience and know-how of what it takes to design, manufacture and install machines that will be a cornerstone in your production.



At **SweBend** we pay attention to the smallest details, since these are often important for the overall functionality as well as performance and endurance.





**SweBend** offers many different sizes of section and plate bending machines, from our smallest model, SB3B-55, designed for narrow and small jobs, throughout a range of standard machines up to our giant Eliminator-400. **SweBend** also offers customer specific machines and special capacities when required.



Design benefits of **SweBend** machines include operator friendly controls such as our own developed wireless **BlueTooth** unit and focus on short lead times to set up the machine for the next job.

Machine frames and mechanical parts are heavily proportioned and all purchased components are only of the highest quality from the best suppliers. We only use bearings from **SKF** – the World famous Swedish Bearing Company.

**Co-operation partner** SweBend has a close co-operation with the World famous German producer of Tube Bending Machines; **Schwarze-Robitec GmbH**. This 110 year old company is a strong partner of **SweBend**, and together we can offer a complete range of machines for all types of bending and forming.

SweBend is the Swedish and Danish representative for Schwarze-Robitec.



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