



# PLATE BENDING

All our plate rolls are custom built and engineered with years of experience to have the maximum drive torque throughout the entire speed range, unlike many competitors who only have maximum drive torque available at low speed. We only use hydraulic drive as standard for all models to help the operator produce the best bending results. A SweBend machine will result in the highest ROI compared to any competitive machine.

# "Eliminate" flat ends

Through Swedish engineering SweBend has proven to be THE best at virtually eliminating flat ends. Our machines produce high enough forces from the bending rolls to reduce the flat ends to a bare minimum. No matter what anyone tells you, in the end, reducing the length of flat ends comes down to raw bending force, and SweBend uses world-renowned Swedish manufacturing standards and unmatched competence to produce the strongest machines with the highest roll power on the market.

# The best rolls for amazing results

Our rolls are induction hardened roll forgings produced by well-known German steel mills such as DiroStahl. The roll material is ALWAYS individually tailored to meet our customer's exact requirements which gives the best precision, durability and quality.

# Razor sharp bending precision through electronic roll parallelism

For outstanding bending precision, our plate bending machines are equipped with a razor sharp roll parallelism control system with a tolerance of +/- 0.1mm (0.004"). This precision parallel system is powered by control systems from Beckhoff, a leader in industrial automation and controls.



# **§** UNMATCHED FREEDOM

As standard, your machine will be equipped with the SweBend Bluetooth Control unit, which is a hand-held wireless control unit that gives the operator full freedom to control all machine functions from anywhere in the room.



# **POWERFUL CONTROL**

Equip your machine with our perfectly tuned and operator-friendly SEVEN CNC control system that will ensure market leading quality, greatly reduce previous production times and reduce learning time & skill training. Ask us about it!

All machine sizes are designed with the know-how SweBend engineers achieved over a long period of years and with extra attention to even the smallest details that truly will make a big difference in the long run. Anyone can build a plate roll but very few know what is required to achieve market-leading performance, and make it last for decades!

# SWEBEN

SweBend designs and produces the strongest and most user-friendly machines on the market. You can be sure to get the highest drive torque and strongest bending power compared to any other plate roll of the same size.

A SweBend machine is a machine which...

- has the lowest total cost of ownership of any competitive machine.
- is customized to meet each customer's specific requirements. We use our vast knowledge to dimension each part of the machine to be balanced perfectly for our customer.
- · has heavily proportioned frame and mechanical parts.
- has top hydraulic and electronic components from the best suppliers.
- has cutting edge quality and induction hardened roll forgings from well-known German steel mills.
- has bearings from SKF (the world famous Swedish bearing company) throughout the entire machine which will keep it rolling, rolling and rolling!





# **SPECIAL REQUIREMENTS**

With our standard range of models as a foundation, we design and produce custom-built and adapted plate rolls for specific customer needs. This can mean producing a machine with a unique roll diameter, special roll length or even a customized shape of the rolls. Request help with integrating the machine in your product line, demand special features and ask for what you think is impossible; we'll gladly prove you wrong!



# **MADE IN SWEDEN - BECAUSE QUALITY MATTERS**

Means a machine that guarantees the **highest quality** in *all details* resulting in **longer lifetime**, **less maintenance** and repairs, **higher output**, better production quality and an **unmatched return-on-investment!** 

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Perfect for bending companies and job shops (see the PB4 for machines for production applications). The PB3 (Plate Bending 3 roll) series is the strongest 3 roll machine ever made. These are versatile and universal machines. Through advanced engineering and knowledge of components, we can guarantee the highest prebending power and drive torque compared to all similar sized machines on the market. The bending roll power is the key factor in bending.

Higher power → fewer passes → higher production capacity → higher profit → shorter pay-off

SweBend has developed a new complete standard range of three roll plate bending machines, starting with the PB3-4-2 (top roll Ø100 mm (4"), length 650mm (2') and stretching all the way up to the giant PB3-40-12 (top roll Ø1000 mm (40"), length 3650mm (12')). We will of course also deliver other lengths, shorter as well as longer, up to 8000 mm (26') length. Our machines handle plate thickness range 1mm – 250mm (18 ga. – 10"), in virtually any grade of steel or other material.

**FEATURES** 

OPTIONAL

Top Roll)

Customized roll crowning

Special rolls with contour, grooves etc., to allow

Changeable top roll for rolling diameters smaller

than possible with the standard top roll (Extra

electro-mechanical or hydraulic operation

bending plates with flanges and/or ribs

Cone bending device (key or roll)

Top support/lifting device with

· Special color and design

Oil cooling system

Calibration Systems

And much more ...

Side supports

# STANDARD

- Double-pinch pyramid design, enabling prebending at both ends of the plate
- Razor sharp electronic control of roll parallelism (+/-0.1mm (0.004") tolerance)
- Wireless control unit with variable speed joysticks and digital readouts
- Hardened & ground rolls with polished roll finish.
- Easy prebending and rolling in either direction
- Tiltable bending rolls
- Variable rotation speed
- Four digital readouts (one for each end of both lower rolls)
- 3 hydraulically driven rolls
- SKF bearings only
- Top electrical & hydraulic components from the best suppliers.
- Hydraulic opening mechanism (drop end) for unloading finished rolled product
- Emergency stop devices
- CE-Certification

SWEBEN 3

# THE PB3



Our machine sizes can handle plate thickness 1 - 250 mm (18 ga. - 10"). Please let us know your specific requirements and we will guide you to the right machine. Don't worry - we can bend almost everything!

TRD = Top Roll Diameter.

Prebending is a finished bending operation after only one pass.

Circular bending (Roll bending) is method of bending through several passes, hence the increased capacity.

		ROLL DI	AMETERS	PREBENDING	NDING CIRCULAR ROLLING		
Model	Roll length	Top Bottom		PB 3*TRD	RB 5*TRD	RB 8*TRD	Motor Size
Wiodei	mm	mm	mm	mm	mm	mm	kW
PB3-6-3	1000	152	152	6	8	9	4
PB3-6-4	1250	152	152	5.5	7	8	4
PB3-6-5	1525	152	152	5	6	7	4
PB3-6-6	2000	152	152	4.5	5.5	6	4
PB3-6-8	2500	152	152	4	5	5.5	4
PB3-6-10	3050	152	152	3.5	4.5	5	4
PB3-8-3	1000	202	202	12	16	10	
	1000	203	203		16	18	5.5
PB3-8-4 PB3-8-5	1250	203	203	11	15	17	5.5
	1525	203	203	10	14	16	5.5
PB3-8-6	2000	203	203	8	13	15	5.5
PB3-8-8	2500	203	203	7	11	13	5.5
PB3-8-10	3050	203	203	6	9	11	5.5
PB3-8-12	3650	203	203	5	7	9	5.5
PB3-10-4	1250	254	254	15	22	24	7.5
PB3-10-5	1525	254	254	14	20	22	7.5
PB3-10-6	2000	254	254	13	18	20	7.5
PB3-10-8	2500	254	254	11	16	18	7.5
PB3-10-10	3050	254	254	9	14	16	7.5
PB3-10-12	3650	254	254	8	12	14	7.5
			1				
PB3-12-5	1525	305	305	19	28	30	15
PB3-12-6	2000	305	305	17	24	26	15
PB3-12-8	2500	305	305	15	21	24	15
PB3-12-10	3050	305	305	13	19	22	15
PB3-12-10					17		15
PB3-12-12	3650	305	305	11	1/	20	15
DD2 11 F	4505	256	256	20		40	22
PB3-14-5	1525	356	356	29	37	40	22
PB3-14-6	2000	356	356	25	35	37	22
PB3-14-8	2500	356	356	22	32	35	22
PB3-14-10	3050	356	356	18	29	32	22
PB3-14-12	3650	356	356	15	27	30	22
				3			
PB3-16-5	1525	406	381	37	45	50	30
PB3-16-6	2000	406	381	33	40	45	30
PB3-16-8	2500	406	381	29	36	40	30
PB3-16-10	3050	406	381	25	32	35	30
PB3-16-12	3650	406	381	21	28	31	30
P B 3-10-12	3630	406	301	21	20	31	30
PB3-18-5	1525	457	432	44	55	60	45
PB3-18-6	2000	457	432	38	51	55	45
PB3-18-8	2500	457	432	35	45	48	45
PB3-18-10	3050	457	432	31	42	45	45
PB3-18-12	3650	457	432	28	38	40	45
			1				
PB3-20-5	1525	508	482	50	60	65	55
PB3-20-6	2000	508	482	45	55	60	55
PB3-20-8	2500	508	482	40	50	55	55
PB3-20-10	3050	508	482	35	45	50	55
PB3-20-12	3650	508	482	30	40	45	55
PB3-22-5	1525	559	510	56	82	87	70
PB3-22-6	2000	559	510	50	73	76	70
PB3-22-8	2500	559	510	45	65	68	70
PB3-22-10	3050	559	510	40	59	62	70
PB3-22-12	3650	559	510	37	55	58	70
20 22.12	3030	333	310	3,	33	50	,,
PB3-24-5	1525	610	559	75	90	95	90
PB3-24-6						85	90
	2000	610	559	65	80		
PB3-24-8	2500	610	559	55	70	75	90
PB3-24-10	3050	610	559	50	65	70	90
PB3-24-12	3650	610	559	45	60	65	90
PB3-28-5	1525	711	660	90	115	125	125
PB3-28-6	2000	711	660	85	107	115	125
PB3-28-8	2500	711	660	80	99	106	125
PB3-28-10	3050	711	660	75	92	98	125
PB3-28-12	3650	711	660	70	85	90	125

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SWEBEN 3

SWEBEN 3

The PB4 (Plate Bending 4 roll) series with the optional SweBend SEVEN CNC system is ideal for repetitive series production. The double pinch bending mechanism allows for optimal results in only one pass, which equals reduced production time! The bending precision and ease of use allows for the mass production of complex shapes and radii transitions. Through advanced engineering and knowledge of components we can guarantee the highest prebending power and drive torque compared to all similar sized machines on the market.

The PB4 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 (20") up to 8 000 mm (26'), SweBend will always offer the best machine customized for your application. All machines are designed and engineered using the latest 3D CAD systems, are heavily proportioned, and have more bending power compared to any other plate bending machine on the market. Our machines handle plate thickness in the range 1mm – 250mm (18 ga. – 10"), in virtually any grade of steel or other material.

# **FEATURES**

# STANDARD

- Double-pinch design, enabling prebending at both ends of the plate
- Razor sharp electronic control of roll parallelism (+/-0.1mm (0.004") tolerance)
- Wireless control unit with variable speed joy sticks and digital readouts
- Hardened & ground rolls with polished finish.
- Easy prebending and rolling in either direction
- Tiltable bending rolls
- Variable rotation speed
- Four digital readouts (both ends of both side rolls)
- Top and lower roll hydraulically driven
- SKF bearings only
- Top electrical & hydraulic components from the best suppliers.
- Hydraulic opening mechanism (drop end) for unloading finished rolled product, including hydraulic raising of the top roll when the drop end is opened (optional on PB4-4 and PB4-5 models)
- Emergency stop devices
- CE-Certification

# OPTIONAL

- · Customized roll crowning
- Support rolls under the lower roll
- SEVEN SweBend's own trademarked Graphical CNC SYSTEM
- "Turbo Production" kits in combination with CNC
- Special rolls with contour, grooves etc., to allow bending plates with flanges and/or ribs
- Integration in production cells, including communication with other software systems
- Changeable top roll for rolling diameters smaller than possible with the standard top roll
- Cone bending device (key or roll)
- Material ejection devices
- Plate handling equipment (feed tables, lifters & loaders)
- Special color and design
- Calibration Systems
- Side supports
- Top support with electro-mechanical or hydraulic operation
- · And much more ...



Our machine sizes can handle plate thickness 1 - 250 mm (18 ga. – 10"). Please let us know your specific requirements and we will guide you to the right machine. Don't worry – we can bend almost everything!

TRD = Top Roll Diameter.

Prebending is a finished bending operation after only one pass.

Circular bending (Roll bending) is method of bending through several passes, hence the increased capacity.

			ROLL DIAMETERS		PREBENDING	CIRCULAR		A CONTRACTOR OF THE PARTY OF TH
Machine	Roll length mm	Top mm	mm mm	Side mm	PB 3*TRD mm	RB 5*TRD mm	RB 8*TRD	Motor Size kW
	3,1,1,1							
PB4-4-3	1000	105	102	102	3.5	4.5	5	2.2
PB4-4-4	1250	105	102	102	3	4	4.5	2.2
PB4-4-5	1525	105	102	102	2.5	3.5	4	2.2
PB4-4-6	2000	105	102	102	2	3	3.5	2.2
PB4-6-3	1000	152	152	140	6	8	9	4
PB4-6-4	1250	152	152	140	5.5	7	8	4
PB4-6-5	1525	152	152	140	5	6	7	4
PB4-6-6	2000	152	152	140	4.5	5.5	6	4
PB4-6-8 PB4-6-10	2500 3050	152 152	152 152	140 140	3.5	5 4.5	5.5 5	4
PB4-6-10	3030	152	152	140	5.5	4.5	3	- 4
PB4-8-3	1000	203	203	160	12	16	18	7.5
PB4-8-4	1250	203	203	160	11	15	17	7.5
PB4-8-5	1525	203	203	160	10	14	16	7.5
PB4-8-6	2000	203	203	160	8	13	15	7.5
PB4-8-8 PB4-8-10	2500 3050	203	203	160 160	7 6	11 9	13 11	7.5 7.5
PB4-8-12	3650	203	203	160	5	7	9	7.5
			Ī					
PB4-10-4	1250	254	254	203	15	22	24	11
PB4-10-5	1525	254	254	203	14	20	22	11
PB4-10-6	2000	254	254	203	13	18	20	11
PB4-10-8 PB4-10-10	2500 3050	254 254	254 254	203 203	11 9	16 14	18 16	11 11
PB4-10-12	3650	254	254	203	8	12	14	11
PB4-12-5	1525	305	305	260	19	28	30	22
PB4-12-6	2000	305	305	260	17	24	26	22
PB4-12-8	2500	305	305	260	15	21	24	22
PB4-12-10 PB4-12-12	3050 3650	305 305	305 305	260 260	13 11	19 17	22 20	22
	3030	303	303	200			20	
PB4-14-5	1525	356	356	315	29	37	40	30
PB4-14-6	2000	356	356	315	25	35	37	30
PB4-14-8	2500	356	356	315	22	32	35	30
PB4-14-10 PB4-14-12	3050	356 356	356	315 315	18	29 27	32 30	30 30
PB4-14-12	3650	336	356	313	15	21	30	30
PB4-16-5	1525	406	406	345	37	45	50	45
PB4-16-6	2000	406	406	345	33	40	45	45
PB4-16-8	2500	406	406	345	29	36	40	45
PB4-16-10	3050	406	406	345	25	32	35	45
PB4-16-12	3650	406	406	345	21	28	31	45
PB4-18-5	1525	457	457	390	44	55	60	67
PB4-18-6	2000	457	457	390	38	51	55	67
PB4-18-8	2500	457	457	390	35	45	48	67
PB4-18-10	3050	457	457	390	31	42	45	67
PB4-18-12	3650	457	457	390	28	38	40	67
PB4-20-5	1525	508	508	419	50	60	65	90
PB4-20-6	2000	508	508	419	45	55	60	90
PB4-20-8	2500	508	508	419	40	50	55	90
PB4-20-10	3050	508	508	419	35	45	50	90
PB4-20-12	3650	508	508	419	30	40	45	90
PB4-22-5	1525	559	559	457	56	82	87	110
PB4-22-6	2000	559	559	457	50	73	76	110
PB4-22-8	2500	559	559	457	45	65	68	110
PB4-22-10	3050	559	559	457	40	59	62	110
PB4-22-12	3650	559	559	457	37	55	58	110
	1555							
PB4-24-5 PB4-24-6	1525 2000	610 610	610 610	495 495	75 65	90 80	95 85	120 120
PB4-24-6 PB4-24-8	2500	610	610	495	55	70	75	120
PB4-24-8 PB4-24-10	3050	610	610	495	50	65	70	120
PB4-24-12	3650	610	610	495	45	60	65	120
PB4-28-5	1525	711	711	571	90	115	125	165
PB4-28-6	2000	711	711	571	85	107	115	165
PB4-28-8 PB4-28-10	2500	711	711	571 571	80 75	99 92	106 98	165
PB4-28-10 PB4-28-12	3050 3650	711	711 711	571	75	92 85	98	165 165





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# SERVICES

# PERFECTLY MATCHED TO YOUR REQUIREMENTS

No two bending applications are the same. Many factors, including material size and thickness, mechanical properties, spring back, diameter, etc. can influence the bending requirements necessary to roll an acceptable part. With the SweBend "Seven" CNC control, we can help take the guess work out of your rolling operation. The powerful operating environment can easily accommodate minor variations that are commonly found in all materials, which gives you the ultimate control over the entire rolling process. SweBend can optimize the number of CNC-controlled axes for your specific bending requirements.



# THE POWER OF "SEVEN"

The Seven CNC control is available in several versions depending on your specific requirements. Choose from CPUs with differing processing speeds, touch screen monitors from 6.5" to 19", enhanced software features and the number of CNC-controlled axes. All Seven CNC controls feature components from Beckhoff of Germany, ensuring top quality and a stable hardware platform for years to come, and all systems come with online support via TeamViewer to assist you with programming questions and troubleshooting any issues with the machine. In addition, the Seven CNC control can be adapted to integrate your auxiliary equipment, such as robots, material handling equipment, etc.

# **FOR NEW & OLD MACHINES**

We'll upgrade your old machine (with or without CNC) and train your operators in only three days!

# **BLUETOOTH CONTROL UNIT**

With our new wireless control device the operator remains in charge but is no longer tied to a stationary control. We listened to our customers and developed a revolutionary control unit that can be used to control almost any type of bending machine in the industry. The SweBend Bluetooth Control Unit allows full control over the operation by letting you control the machine from the best and safest working position.



# TRAINING

Even the best machines require skilled operators, and therefore we offer training as well. This can be done in your workshop, using your specific equipment and products, in order to make it as efficient as possible. We offer general or customer-specific training programs for rolling, CNC controls (basic and advanced) and maintenance.



# **REFURBISHED MACHINES**

With a large network of representatives and agents around the world, we also have new and used bending and forming machines available for quick delivery. Ask us for our selection of such machines.



# **SPARE PARTS**

Even for the very best of machines, things can happen and you may need spare parts urgently. This could be an oil filter, a joystick, a push button, an encoder or a hydraulic valve, but regardless which part it is, do not hesitate to ask us for a quote. Be assured we will always do our utmost to get you the replacement part in the shortest possible time.



# **SERVICE & OVERHAULING**

To get maximum performance from your machines, it is important to keep them in good shape. Let us perform your next service, and at the same time check the overall machine condition for you.

A smaller repair at an early stage is more economical than a unexpected breakdown later on (and those always come when things are really busy, don't they?). We also do full overhauling jobs, modifications and upgrades on old machines. This includes mechanical, hydraulic, electrical and CNC controls.



# **ABOUT** SWEBEN

SweBend is a company specializing in bending and forming technology. The company is located in Hässleholm in the very south of Sweden. Our team of dedicated and experienced engineers and mechanics offers the best possible solutions when it comes to section, plate and tube bending, CNC systems, flights, augers and spiraling machines and rolls and tooling. 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. SweBend's biggest strength is the ability and willingness to customize our machines to meet the exacting requirements of even the most demanding applications.

Customers are quickly seeing that the new choice in bending rolls is SweBend, as evidenced by the large number of orders for SweBend machines.

We believe in strong and lasting commitments with our customers, representatives, agents and co-operation partners around the world. For us, all contacts are treated the way they should be, i.e. promptly and with maximum attention.



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