

PLATEBENDING MACHINES

SWEBEN

WWW.SWEBEND.COM



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 <u>will</u> 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 bearings from SKF (the world famous Swedish bearing company) throughout the entire machine which will keep it rolling, rolling and rolling!
- has cutting edge quality and induction hardened roll forgings from well-known German steel mills.
- has top hydraulic and electronic components from the best suppliers.
- has heavily proportioned frame and mechanical parts.

POWERFUL, PRECISE & RELIABLE



Тне PB3s-22-26

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**!





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 \emptyset 100 mm (4"), length 650mm (2') and stretching all the way up to the giant PB3-40-12 (top roll \emptyset 1000 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					
STANDARD	OPTIONAL				
 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 Sur 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 	 Customized roll crowning Special rolls with contour, grooves etc., to allow bending plates with flanges and/or ribs Changeable top roll for rolling diameters smaller than possible with the standard top roll (Extra Top Roll) Cone bending device (key or roll) Special color and design Oil cooling system Top support/lifting device with electro-mechanical or hydraulic operation Side supports Calibration Systems And much more 				
THE PB3 SERIES					

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CAPACITY TABLE

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.

Model PB3-6-3 PB3-6-4 PB3-6-5 PB3-6-6 PB3-6-8 PB3-6-10	Roll length mm 1000	Top mm	Bottom mm	Pb 3*TRD mm	RB 5*TRD	RB 8*TRD	Motor Size
2B3-6-4 2B3-6-5 2B3-6-6 2B3-6-8		mm	mm	mm	mm		
B3-6-4 B3-6-5 B3-6-6 B3-6-8	1000			11011	mm	mm	kW
B3-6-4 B3-6-5 B3-6-6 B3-6-8	1000						
B3-6-5 B3-6-6 B3-6-8		152	152	6	8	9	4
B3-6-6 B3-6-8	1250	152	152	5.5	7	8	4
B3-6-6 B3-6-8	1525	152	152	5	6	7	4
B3-6-8	2000	152	152	4.5	5.5	6	4
	2500	152	152	4	5	5.5	4
DJ-0-10	3050	152	152	3.5	4.5	5	4
	3030	152	152	5.5	4.5	5	+
B3-8-3	1000	203	203	12	16	18	5.5
B3-8-4	1250	203	203	11	15	17	5.5
B3-8-5	1525	203	203	10	14	16	5.5
B3-8-6	2000	203	203	8	13	15	5.5
B3-8-8	2500	203	203	7	11	13	5.5
B3-8-10	3050	203	203	6	9	11	5.5
°B3-8-12	3650	203	203	5	7	9	5.5
D2 40 4	4050	054	054	45	00	04	7.5
PB3-10-4	1250	254	254	15	22	24	7.5
PB3-10-5	1525	254	254	14	20	22	7.5
°B3-10-6	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
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
PB3-12-12	3650	305	305	11	17	20	15
001212						20	10
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
	+						22
PB3-14-12	3650	356	356	15	27	30	
	1525	406	381	37	45	50	30
PB3-16-5				-	-		
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
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
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
PB3-20-10	3650	508	482	30	40	45	55
20 20 12		000	102		10	10	00
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
PB3-22-0	3050	559	510	45	59		
PB3-22-10 PB3-22-12	3050	559	510	37	59 55	62 58	70
D3-22-12	3030	228	510	57	55	50	70
DB3 24 F	1525	610	550	75	90	05	90
PB3-24-5 PB3-24-6	1525 2000	610 610	559 559	75 65	<u> </u>	95 85	90
PB3-24-8	2500	610	559	55	70	75	90

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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.

STANDARD O	
51/11/2/11/2	PTIONAL
 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 (optional on PB4-4 and PB4-5 models) Emergency stop devices 	ustomized roll crowning upport rolls under the lower roll EVEN – SweBend's own trademarked raphical CNC SYSTEM urbo Production" kits in combination with NC ecial rolls with contour, grooves etc., to low bending plates with flanges and/or ribs tegration in production cells, including ommunication with other software systems hangeable top roll for rolling diameters naller than possible with the standard top roll one bending device (key or roll) aterial ejection devices ate handling equipment (feed tables, lifters & loaders) becial color and design alibration Systems de supports op support with electro-mechanical or varaulic operation and much more

THE PB4 SERIES



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.

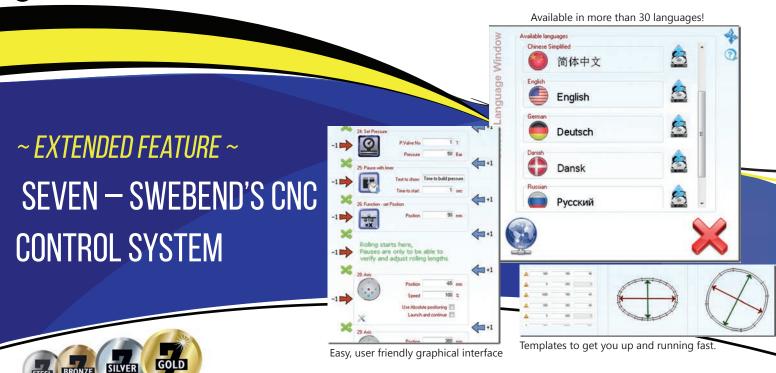
Prebending is a finished bending operation after only one pass.

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

	D. II.		ROLL DIAMETER		PREBENDING		RROLLING	
Machine	Roll length	Тор	Bottom	Side	PB 3*TRD	RB 5*TRD	RB 8*TRD	Motor Size
	mm	mm	mm	mm	mm	mm	mm	kW
	4000	405	400	400	0.5	4.5		
PB4-4-3 PB4-4-4	1000 1250	105 105	102 102	102	3.5	4.5	5 4.5	2.2
PB4-4-4 PB4-4-5	1250	105	102	102	2.5	3.5	4.5	2.2
PB4-4-6	2000	105	102	102	2.5	3	3.5	2.2
D4-4-0	2000	105	102	102	2	5	0.0	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	2500	152	152	140	4.5	5	5.5	4
PB4-6-10	3050	152	152	140	3.5	4.5	5	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	2500	203	203	160	7	11	13	7.5
PB4-8-10	3050	203	203	160	6	9	11	7.5
PB4-8-12	3650	203	203	160	5	7	9	7.5
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	2500	254	254	203	11	16	18	11
PB4-10-10	3050	254	254	203	9	14	16	11
PB4-10-12	3650	254	254	203	8	12	14	11
PB4-12-5	1525	305	305	260	19	28	30	22
PB4-12-5	2000	305	305	260	19	20	26	22
PB4-12-8	2500	305	305	260	17	24	20	22
PB4-12-10	3050	305	305	260	13	19	24	22
PB4-12-10	3650	305	305	260	11	17	20	22
04 12 12	0000	000	000	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	3050	356	356	315	18	29	32	30
PB4-14-12	3650	356	356	315	15	27	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	4505	457	457	200	44	55	60	67
PB4-18-6	1525 2000	457 457	457 457	390 390	44	55 51	60 55	67
PB4-18-8	2500	457	457	390	35	45	48	67
PB4-18-10	3050	457	457	390	31	43	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
PB4-22-10	3650	559	559	457	37	55	58	110
PB4-24-5	1525	610	610	495	75	90	95	120
PB4-24-6	2000	610	610	495	65	80	85	120
PB4-24-8	2500	610	610	495	55	70	75	120
PB4-24-10	3050	610	610	495	50	65	70	120
PB4-24-12	3650	610	610	495	45	60	65	120
042412								
012112		711	711	571	90	115	125	165
	1525	/ ! !						
PB4-28-5				571	85	107	115	165
PB4-28-5 PB4-28-6	2000	711	711	571	85	107	115	165
PB4-28-5				571 571 571	85 80 75	107 99 92	115 106 98	165 165 165

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SWEBEN



THE POWER OF "SEVEN"

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 SEVEN CNC system, we can help take the guess work out of your rolling operation. The precision bending assistant IRMA, will easily accommodate for minor variations that are commonly found in all materials, which gives you the ultimate control over the entire rolling process. Design any shape possible with ADAM - The Automated Design Assistant Manager and create precise production planning with the SEVEN Simulator which estimates the cycle time, runs the program in your preferred time-scale and calculates valuable data. Unsure of how much control you'll need? We'll optimize the number of CNC-controlled axes for your bending requirements.



PERFECTLY MATCHED TO YOUR REQUIREMENTS

The SEVEN CNC 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 systems feature components from Beckhoff of Germany, whose quality and worldwide presence ensures a stable hardware platform for many years to come., 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 can be adapted to integrate your auxiliary equipment, such as robots, material handling equipment, etc.

Simulator



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.



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.



SWEBEN

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

The story of SweBend originates with Roundo[®], once considered the worlds best bending machine manufacturer, with clients such as Rolls-Royce, John Deere, Toyota, Volvo and over 16,000 machines delivered all over the world. When the founder passed away, Peter Nilsson, whom he had mentored for almost 30 years, was appointed as his successor. Following a change of ownership at the company and the ensuing bankruptcy and closing of the Roundo factory in Sweden, Peter decided to work on a new venture, and joined by Roundo's best, brightest and most experienced team members, they combined their bending machine expertise – and SweBend was born.

Now, our sophisticated yet user-friendly machines supply the world's leading bending companies such as Barnshaws, Danvals, Den Oudsten, Kersten Europe, Sjölund, Van Rijsoort, etc. with perfect bending results which are produced effortlessly yet efficiently. Through innovation, profound quality thinking and unmatched engineering expertise, we take great pride in building machines that have the market's highest return on investment, a reason why so many loyal clients keep coming back to us to solve their toughest bending problems.

By breaking down our clients' bending challenges and then explaining to our customers the fundamental theory behind it, we produce modern, powerful and specifically purposed bending machines. The sophisticated functionality of our machines is easily mastered by our clients as we assist them in becoming expert benders.

Located in Sweden, with renowned Swedish quality and a client-focused mindset, our passion for developing high-end bending machines has been recognized by clients all over the world. Through our vast knowledge of bending increasingly challenging materials, we continuously update our machines' technology with more sensors, better controls and improved software functionality. (Ask us about our renowned CNC system "SEVEN"; we can update old and even analog machines).

Our clients value long term quality investments and choose the path of innovation, unmatched expertise and a powerful worldwide support network consisting of an increasing list of trusted resellers.

We look forward to working with you. Ask us about our section-, plate- and tube bending rolls, CNC systems, flighting, augers and spiraling machines, special rolls and tooling, and more!

The Roundo name is now a registered trademark of Boldrini S.r.I.

LONG TERM RESELLERS

SweBend continously expand its network of resellers. Ask us for a reseller close to You!



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