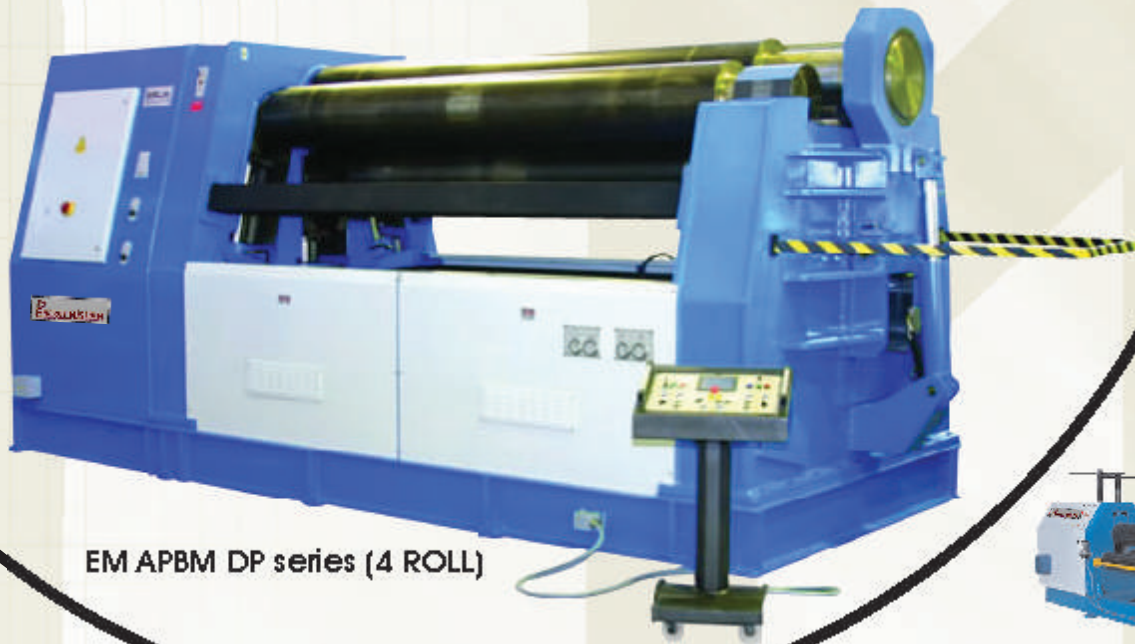
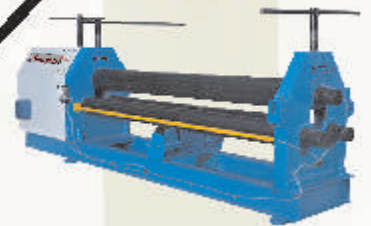


PLATE BENDING MACHINE

Add
ENERGY
to drive your
MISSION



EM APBM DP series (4 ROLL)



EM PBM series



EM APBM SP series



EM PBM DP series



EM PBM SP series

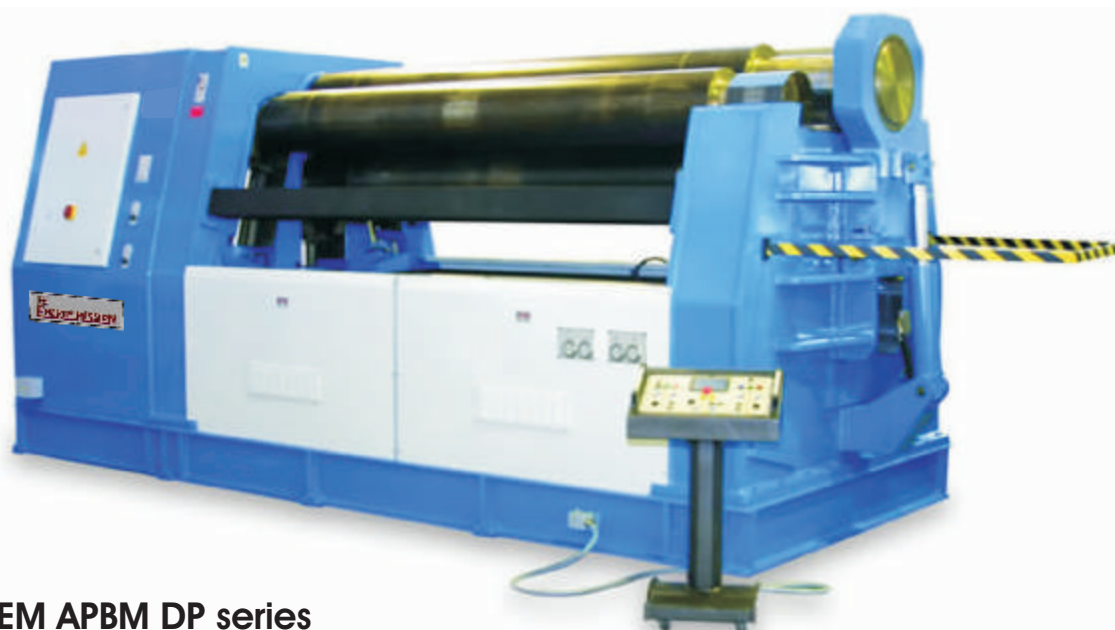
***Widest Range of Machines
installed with
proven performance***



ENERGY MISSION
ENGINEERS

**AN ISO 9001:2008
CERTIFIED COMPANY**

4 ROLL ASYMMETRICAL HYDRO-MECHANICAL PLATE BENDING:



EM APBM DP series

Range : 6mm to 100 mm
Length : 1500 mm to 4000 mm

Double Pinch

The **EM APBM DP series 4 ROLL ASYMMETRICAL HYDRO-MECHANICAL PLATE BENDING** are designed with **double side pre-pinching** arrangement. The unique design permits the smaller bending diameter of shell. This feature makes the machine more productive and suitable for handling heavy jobs with lower diameter requirements. The bottom roller UP & DOWN adjustment and pre-pinching by front & back rolls are thru hydraulic cylinders. In some models, The Rolls are driven by hydromotors.

The job is fed from one end to carry out pre-pinching & entire shell is rolled to desired bend radius. Other end pre-pinching is carried out by second bottom roll to complete the shell. The complete shell is prepared in single operation.



Aligned the plate against the raised rear side roll. Raise the lower roll to pinch the plate. Return the plate to prebending position.



2. Raise the front side roll. Prebend and roll.



3. Lower the front side roll and raise the rear side roll until it reaches the pre-bend edge



4. Continue to roll the plate.



5. The cylinder is finished.

EM APBM DP SERIES

- › 4 roll ASYMMETRICAL type design machine with double pre-pinching arrangement.
- › The robust welded structure is made of UT tested IS: 2062 M.S. plates.
- › Bottom roll UP & DOWN adjustment is done by hydraulic cylinders.
- › Back and front roll double pre-pinching adjustment is done by hydraulic cylinders.
- › Bending rolls are made of alloy steel.
- › All three rolls are power driven rolls.
- › Motorized end dropper arrangement.
- › Main drive motor.
- › Manual Centralized lubrication system.
- › Reverse / Forward roll drive with overload protection.

EM APBM SP SERIES

- › 3 roll ASYMMETRICAL type design machine with single pre-pinching arrangement.
- › The robust welded structure is made of UT tested IS: 2062 M.S. plates.
- › Bottom roll UP & DOWN adjustment is done by hydraulic cylinders.
- › Back roll single pre-pinching adjustment is done by hydraulic cylinders.
- › Bending rolls are made of alloy steel.
- › All three rolls are power driven rolls.
- › Manual end dropper arrangement.
- › Main drive motor.
- › Manual Centralized lubrication system.
- › Reverse / Forward roll drive with overload protection.

OPTIONAL ACCESSORIES :

- › Hardened Rolls.
- › Grounded Rolls.
- › Automatic lubrication system.
- › Motorized Drive on end dropper.
- › Extended shaft with profile bending rolls.
- › Conical bending arrangement.
- › Material feed table.
- › Digital Readouts
- › NC controls

3 ROLL ASYMMETRICAL TYPE HYDRO-MECHANICAL PLATE BENDING:



Single Pinch

Range : 4mm to 50 mm
Length : 1500 mm to 4000 mm

EM APBM SP series

The EM APBM SP series 3 ROLL ASYMMETRICAL TYPE HYDRO - MECHANICAL PLATE BENDING are designed with single side pre-pinching arrangement. The unique design permits the smaller bending diameter of shell. This feature makes the machine more productive and suitable for handling heavy jobs with lower diameter requirements. The bottom roll UP & DOWN adjustment and back roll pre-pinching are thru hydraulic cylinders.

The job is fed to carry out pre-pinching on one end. After pre-pinching, it is taken out and again fed from other end to carry out pre-pinching on second end. Then an entire shell is rolled to desired bend radius & matches both ends.

Model	Pre-bending Capacity	Bending Capacity	Bending Length	Top Roll Diameter	Side Roll Diameter	Min ϕ in Pre-Bending	Min ϕ in Bending	Length	Width	Height	Weight	Motor Power
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	Kw
EM PBM 815	6	8	1500	200	180	300	600	3100	1600	1350	4600	5.5
EM PBM 1015	8	10	1500	210	190	315	630	3200	1600	1400	4800	7.5
EM PBM 1315	10	13	1500	225	205	338	675	3350	1700	1450	5000	7.5
EM PBM 820	6	8	2000	210	190	315	630	3700	1600	1400	5900	7.5
EM PBM 1020	8	10	2000	225	205	338	675	3850	1700	1450	6100	7.5
EM PBM 1320	10	13	2000	240	220	360	750	3850	1700	1450	7000	11
EM PBM 1520	12	15	2000	270	250	405	810	3900	1750	1450	7700	15
EM PBM 1820	15	18	2000	290	270	435	870	4200	2100	1600	9100	15
EM PBM 2220	18	22	2000	320	290	480	960	4200	2100	1750	9500	18.5
EM PBM 2520	20	25	2000	350	300	525	1050	4200	2250	1850	12400	18.5
EM PBM 3020	25	30	2000	380	310	570	1140	4200	2250	1850	14900	22
EM PBM 3520	30	35	2000	420	330	630	1260	4600	2250	2100	17000	30
EM PBM 4020	35	40	2000	440	350	660	1320	5000	2300	2530	22000	37
EM PBM 5020	40	50	2000	460	370	690	1380	5150	2300	2530	26000	45
EM PBM 825	6	8	2500	225	205	338	675	4350	1700	1450	7200	7.5
EM PBM 1025	8	10	2500	240	220	360	720	4350	1700	1450	8100	11
EM PBM 1325	10	13	2500	270	250	405	810	4400	1750	1450	8800	15
EM PBM 1525	12	15	2500	290	270	435	870	4700	2100	1600	10300	15
EM PBM 1825	15	18	2500	320	290	480	960	4700	2100	1750	11100	18.5
EM PBM 2225	18	22	2500	350	300	525	1050	4700	2250	1850	14200	18.5
EM PBM 2525	20	25	2500	380	310	570	1140	4700	2250	1580	16700	22
EM PBM 3025	25	30	2500	420	330	630	1260	5100	2250	2100	19500	30
EM PBM 3525	30	35	2500	440	350	660	1320	5500	2300	2530	23000	37
EM PBM 4025	35	40	2500	460	370	690	1380	5650	2300	2530	26000	45
EM PBM 5025	40	50	2500	490	390	980	1960	5750	2350	2600	31000	37+11
EM PBM 6025	50	60	2500	525	500	1000	2050	6300	2200	2100	36000	45+11
EM PBM 7025	60	70	2500	575	550	1150	2200	6400	2300	2200	42000	56+15
EM PBM 8025	70	80	2500	650	625	1300	2350	6500	2450	2300	49000	75+18.5
EM PBM 630	4	6	3000	225	205	338	675	4850	1700	1450	8300	7.5
EM PBM 830	6	8	3000	240	220	360	720	4850	1700	1450	9200	11
EM PBM 1030	8	10	3000	270	250	405	810	4900	1750	1450	9900	15
EM PBM 1330	10	13	3000	290	270	435	870	5200	2100	1600	11500	15
EM PBM 1530	12	15	3000	320	290	480	960	5200	2100	1750	12700	18.5
EM PBM 1830	15	18	3000	350	300	525	1050	5200	2250	1850	16000	18.5
EM PBM 2230	18	22	3000	380	310	570	1140	5200	2250	1850	18500	22
EM PBM 2530	20	25	3000	420	330	630	1260	5600	2250	2100	22000	30
EM PBM 3030	25	30	3000	440	350	660	1320	6050	2300	2530	25500	37
EM PBM 3530	30	35	3000	460	370	690	1380	6150	2300	2530	29000	45
EM PBM 4030	35	40	3000	490	390	980	1960	6250	2350	2600	32500	37+11
EM PBM 5030	40	50	3000	520	410	1040	2080	6400	2350	2650	37000	37+18.5
EM PBM 6030	50	60	3000	535	510	1050	2100	7000	2250	2250	42000	45+11
EM PBM 7030	60	70	3000	600	575	1250	2300	7100	2450	2400	47000	56+15
EM PBM 8030	70	80	3000	675	650	1400	2450	7200	2550	2500	53000	75+18.5
EM PBM 840	6	8	4000	290	270	435	870	6200	2100	1600	11000	15
EM PBM 1040	8	10	4000	320	290	480	960	6200	2100	1750	13000	15
EM PBM 1340	10	13	4000	350	300	525	1050	6200	2250	1850	15000	18.5
EM PBM 1540	12	15	4000	380	310	570	1140	6200	2250	1850	17500	22
EM PBM 1840	15	18	4000	420	330	630	1260	6600	2250	2100	21500	30
EM PBM 2240	18	22	4000	440	350	660	1320	7050	2300	2530	25500	37
EM PBM 2540	20	25	4000	460	370	690	1380	7150	2300	2530	31000	45

3 ROLL PYRAMID TYPE HYDRO-MECHANICAL PLATE BENDING:



EM PBM DP series

Range : 6mm to 50 mm
Length : 1500 mm to 4000 mm

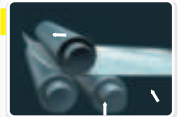
Double Pinch

The **EM PBM DP series 3 ROLL PYRAMID TYPE HYDRO-MECHANICAL PLATE BENDING** are designed with **double side pre-pinching** arrangement. The unique design permits the pre-pinching of job by both bottom rolls; hence the job is completed in single operation. This feature makes the machine more productive and suitable for handling heavy jobs. The top roller is fixed and pre-pinching by both bottom rolls are thru hydraulic cylinders.

The job is fed from one end to carry out pre-pinching & entire shell is rolled to desired bend radius. Other end pre-pinching is carried out by second bottom roll to complete the shell. The complete shell is prepared in single operation.



1. Align the plate using the alignment grooves in the lower rolls or against the rear roll. The prebending is accomplished by clamping the plate between the top roll and one of the lower rolls.



2. The plate is bent towards the top roll by the other roll; and the plate edge is prebent to minimum flat end possible. A length of the plate is rolled and radius is checked.



3. Roll the plate through the machine and bend to desired diameter.



4. Lower the clamping roll and raise the other roll until the plate is clamped again. Roll the plate into a closed cylinder and prebend the second plate edge.



5. Finished cylinder is released from the machine by lowering the drop end.

EM PBM DP SERIES

- › 3 roll PYRAMID type design machine with double pre-pinching arrangement.
- › The robust welded structure is made of UT tested IS: 2062 M.S. plates.
- › Both Bottom roll adjustments are done by hydraulic cylinders for double pre-pinching.
- › Bending rolls are made of alloy steel.
- › All three rolls are power driven rolls.
- › Motorized end dropper arrangement.
- › Main drive motor.
- › Manual centralized lubrication system.
- › Reverse / Forward roll drive with overload protection.

EM PBM SP SERIES

- › 3 roll PYRAMID type design machine with single pre-pinching arrangement.
- › The robust welded structure is made of UT tested IS: 2062 M.S. plates.
- › Top roll adjustment is done by hydraulic cylinders.
- › Bottom roll adjustment is done by hydraulic cylinders for single pre-pinching.
- › Bending rolls are made of alloy steel.
- › All three rolls are power driven rolls.
- › Manual end dropper arrangement.
- › Main drive motor.
- › Manual Centralized lubrication system.
- › Reverse / Forward roll drive with overload protection.

OPTIONAL ACCESSORIES :

- › Hardened Rolls.
- › Grounded Rolls.
- › Automatic lubrication system.
- › Motorized Drive on end dropper.
- › Extended shaft with profile bending rolls.
- › Conical bending arrangement.
- › Material feed table.
- › Digital Readouts
- › NC controls

3 ROLL PYRAMID TYPE HYDRO-MECHANICAL PLATE BENDING:



Single Pinch

Range : 4mm to 50 mm
Length : 1500 mm to 4000 mm

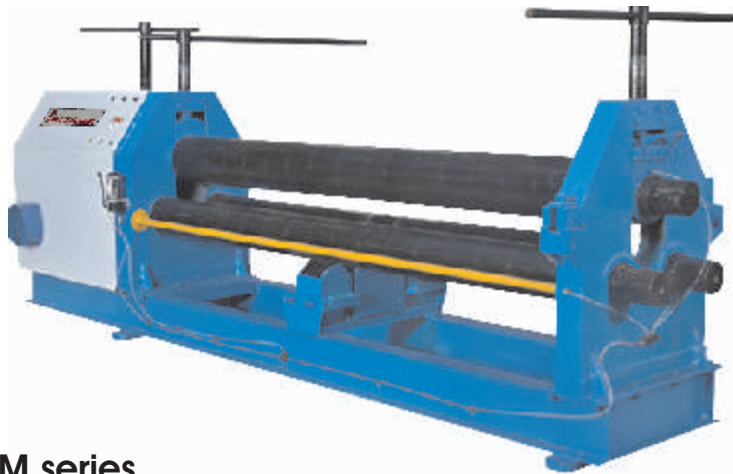
EM PBM SP series

The EM PBM SP series 3 ROLL PYRAMID TYPE HYDRO-MECHANICAL PLATE BENDING are designed with single side pre-pinching arrangement. This feature makes the machine more productive and suitable for handling heavy jobs. The top roller UP & DOWN adjustment and pre-pinching by bottom roll is thru hydraulic cylinders.

The job is fed from one end to carry out pre-pinching & entire shell is rolled to desired bend radius. Then the job is taken out & other end pre-pinching is carried out to complete the shell.

Model	Pre-bending Capacity	Bending Capacity	Bending Length	Top Roll Diameter	Side Roll Diameter	Min ϕ in Pre-Bending	Min ϕ in Bending	Length	Width	Height	Weight	Motor Power
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	Kw
EM PBM 815	6	8	1500	185	165	278	555	3300	1500	1200	3000	5.5
EM PBM 1015	8	10	1500	205	185	308	615	3700	1500	1200	3500	7.5
EM PBM 1315	10	13	1500	220	200	330	660	3700	1500	1200	4000	7.5
EM PBM 820	6	8	2000	205	185	308	615	4200	1500	1200	4000	7.5
EM PBM 1020	8	10	2000	220	200	330	660	4200	1500	1200	4500	7.5
EM PBM 1320	10	13	2000	235	215	353	705	4250	1500	1250	5100	7.5
EM PBM 1520	12	15	2000	265	245	398	795	4400	1520	1280	6250	11
EM PBM 1820	15	18	2000	290	270	435	870	4650	1750	1460	8500	15
EM PBM 2220	18	22	2000	320	290	480	960	4650	1750	1510	9000	18.5
EM PBM 2520	20	25	2000	345	315	518	1035	4800	1850	1600	11250	18.5
EM PBM 3020	25	30	2000	370	340	555	1110	5100	1920	1750	12500	22
EM PBM 3520	30	35	2000	410	380	615	1230	5250	1950	1850	14000	30
EM PBM 4020	35	40	2000	450	420	675	1350	5500	2000	1900	15300	30 + 7.5
EM PBM 5020	40	50	2000	470	450	705	1410	5600	2050	1950	17000	37 + 7.5
EM PBM 625	4	6	2500	220	200	330	660	4650	1400	1250	4750	5.5
EM PBM 825	6	8	2500	230	205	345	690	4650	1500	1250	5250	7.5
EM PBM 1025	8	10	2500	235	215	353	705	4750	1500	1250	6000	7.5
EM PBM 1325	10	13	2500	265	245	398	795	4900	1520	1280	6750	11
EM PBM 1525	12	15	2500	290	270	435	870	5150	1750	1460	9000	15
EM PBM 1825	15	18	2500	320	290	480	960	5150	1750	1510	10000	18.5
EM PBM 2225	18	22	2500	345	315	518	1035	5300	1850	1600	11250	18.5
EM PBM 2525	20	25	2500	370	340	555	1110	5600	1920	1750	14500	22
EM PBM 3025	25	30	2500	410	380	615	1230	5750	1950	1850	16000	30
EM PBM 3525	30	35	2500	450	420	675	1350	6000	2000	1900	18700	30 + 7.5
EM PBM 4025	35	40	2500	470	450	705	1410	6100	2050	1950	21000	37 + 7.5
EM PBM 5025	40	50	2500	490	470	980	1960	6200	2100	2000	23500	37 + 11
EM PBM 6025	50	60	2500	525	500	1100	2100	6300	2200	2100	27500	45 + 11
EM PBM 7025	60	70	2500	575	550	1265	2400	6400	2400	2300	31500	45 + 15
EM PBM 8025	70	80	2500	650	625	1500	2900	6500	2600	2500	36500	55 + 15
EM PBM 630	4	6	3000	220	200	330	660	5250	1500	1200	6000	7.5
EM PBM 830	6	8	3000	235	215	353	705	5300	1500	1250	6750	7.5
EM PBM 1030	8	10	3000	265	245	398	795	5450	1520	1280	8000	11
EM PBM 1330	10	13	3000	290	270	435	870	5700	1750	1460	10000	15
EM PBM 1530	12	15	3000	320	290	480	960	5700	1750	1510	11250	18.5
EM PBM 1830	15	18	3000	345	315	518	1035	5800	1850	1600	14000	18.5
EM PBM 2230	18	22	3000	370	340	555	1110	6150	1920	1750	16000	22
EM PBM 2530	20	25	3000	410	380	615	1230	6300	1950	1850	20000	30
EM PBM 3030	25	30	3000	450	420	675	1350	6550	2000	1900	21500	30 + 7.5
EM PBM 3530	30	35	3000	470	450	705	1410	6650	2050	1950	30000	37 + 7.5
EM PBM 4030	35	40	3000	490	470	980	1960	6750	2100	2000	32500	37 + 11
EM PBM 5030	40	50	3000	500	490	1000	2000	6950	2150	2050	36000	37 + 18.5
EM PBM 6030	50	60	3000	535	510	1125	2150	7000	2250	2250	39500	45 + 18.5
EM PBM 7030	60	70	3000	600	575	1320	2520	7200	2450	2400	43000	55 + 22
EM PBM 8030	70	80	3000	675	650	1575	3030	7400	2650	2600	48000	75 + 30
EM PBM 840	6	8	4000	290	270	435	870	6200	2100	1600	11800	15
EM PBM 1040	8	10	4000	320	300	480	960	6200	2100	1750	12750	18.5
EM PBM 1340	10	13	4000	350	325	525	1050	6200	2250	1850	13250	18.5
EM PBM 1540	12	15	4000	380	350	570	1140	6200	2250	1850	14000	22
EM PBM 1840	15	18	4000	420	390	630	1260	6600	2250	2100	16750	30
EM PBM 2240	18	22	4000	440	410	660	1320	7050	2300	2530	18750	30 + 7.5
EM PBM 2540	20	25	4000	460	430	690	1380	7150	2300	2530	21700	37 + 7.5

3 ROLL PYRAMID TYPE MECHANICAL PLATE BENDING:



EM PBM series

Range : 3mm to 20 mm
Length : 1500 mm to 3000 mm

The **EM PBM series 3 ROLL PYRAMID TYPE MECHANICAL PLATE BENDING** are designed to cater the basic requirements of bending & forming of metal plates. In this machine, the bottom rolls are active rolls driven by electric motor & gear box. The upper roll is passive roll having manual up & down adjustment to achieve desired bending radius. This is a very simple & robust design machine suitable for light to medium jobs.

Standard Features:

- › 3 roll PYRAMID type design machine.
- › The robust welded structure is made of UT tested IS: 2062 M.S. plates.
- › The top roll adjustment is manual by screw jack.
- › Bottom rolls are power driven.
- › Bending rolls are made of alloy steel.
- › Manual end dropper arrangement.
- › Main drive motor.
- › Manual Centralized lubrication system.
- › Reverse / Forward roll drive with overload protection.

Optional Accessories:

- › Hardened Rolls.
- › Grounded Rolls.
- › Automatic lubrication system.
- › Motorized Drive on end dropper.
- › Extended shaft with profile bending rolls.
- › Conical bending arrangement.
- › Material feed table.
- › Digital Readouts

Production Specification	Plate width max. (mm)	Plate Thickness max. (mm)	Min. rolling dia. (mm)	Uper roller dia.(mm)	Lower Roller dia. (mm)	Lower Roller central distance	Plate rolling speed (m/min)	Power of main motor (KW)
EM PBM 315	1500	3	300	150	130	200	5.7	2
EM PBM 320	2000	3	300	150	130	200	5.7	2
EM PBM 415	1500	4	400	175	155	250	5.5	3
EM PBM 420	2000	4	400	175	155	250	5.5	3
EM PBM 425	2500	4	400	175	155	250	5.5	3
EM PBM 620	2000	6	500	175	155	250	5.5	5
EM PBM 625	2500	6	500	175	155	250	5.5	5
EM PBM 630	3000	6	500	175	155	250	5.5	5
EM PBM 820	2000	8	500	190	170	250	5.5	5
EM PBM 825	2500	8	600	190	170	280	5	5
EM PBM 830	3000	8	600	200	180	280	5	5
EM PBM 1020	2000	10	600	200	180	280	5	5
EM PBM 1025	2500	10	600	225	200	280	5	7.5
EM PBM 1030	3000	10	600	225	200	280	5	7.5
EM PBM 1220	2000	12	600	250	225	280	5	7.5
EM PBM 1225	2500	12	650	250	225	280	5	7.5
EM PBM 1230	3000	12	750	250	225	320	5	10
EM PBM 1620	2000	16	650	280	250	360	5	10
EM PBM 1625	2500	16	750	280	250	320	5	15
EM PBM 1630	3000	16	850	325	280	360	5	15
EM PBM 2025	2500	20	850	325	280	440	5	15
EM PBM 2030	3000	20	850	350	300	440	5	15

ADVANCE AUTOMATIONS :

Electronic Digital Readouts:

Our plate bending machines can be provided with electronic digital read-outs. They are mounted in the portable control station and are basic positioning control with possibility to pre-set value for each axis. The positioning control automatically stops the movement of the bending roll when the pre-set value is reached. The system is designed to make repetitive bends. To further enhance productivity, especially for cone rolling, double digital readouts showing the positions of each end of each lower roll are available.



NC Controls:

The NC control is upgraded version for more precise control with operator ease. We offer the PLC based controller from Siemens / Allen Bradley / ABB. The operator can program the top & bottom positions of bending rolls as per job profile. These programs can be saved in memory & can be reloaded again as & when required. We provide 100 program memories with 6.4" monochrome LCD display & keyboard. Touch panel options with graphics are also available.





ACHIEVEMENT

Entrepreneur Of The Year 2009

PRODUCT RANGE

				
CNC Syncro Hyd. Press Brake	Hyd. Rear Cylinder Press Brake	Hyd. Front Cylinder Press Brake	Hyd. Shearing Machine	Plate Bending Machine
				
Iron Worker	Section Bending Machines	Bus Bar Bending, Cutting & Punching	C-Frame Press	Hyd. Deep Drawing Press

OUR ESTEEMED CUSTOMER



Technical Specification and range subject to change without prior notice



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