

หมวดหมู่ / เครื่องจักรระบบไฮดรอลิค

เครื่องม้วนไฮดรอลิค 4 ลูกกลิ้ง รุ่น W12



Bending Lengths: 1000mm-3000mm

Bending Thicknesses: 6mm-60mm

Four roll plate rolls are more precise, productive, versatile, faster, safer and easier to operate than three roll machines. They are less dependent on operator competence. They are ideal for bending plates up to 60mm thick.

The fastest and most accurate bends are made by four roll machines. The plate is held securely in place between the top and bottom rolls while the side rolls move vertically to create the bend.

Advantages

1. Flat zone of the part is minimized
2. Pre-bending, conical bending and ellipse bending can be done easily
3. Double pre-bends (both bends) in one pass
4. Hydraulic and electrical systems have been safeguarded from overloading and require minimum maintenance. Hydraulic and electrical components are modular and designed according to world standards.
5. The sheet reference is maintained by tightening of top and bottom rolls
6. Most desirable bending operation for PLC applications
7. More efficient for cycle times
8. User friendly operation with less dependence on operator competence



Specification

Type	Max. Rolling Thickness	Max. Rolling Width	Yield Limit	Rolling Speed	Min. Diameter full- loaded	Up Roll Diameter	Down Roller Diameter	Max. Diameter of Side Roller	Max. Stroke of Side Roller	Adjustment Speed of Side Roller	Main Motor Power
	mm	Mm	mm	m/min	mm	Mm	mm	mm	Mm	Kw	Kw
W12-4x2000	4	2000	245	4	350	210	190	180	160	80	5.5
W12-4x2500	4	2500	245	4.5	350	210	190	180	160	80	5.5
W12-4x3000	4	3000	245	4	300	210	190	180	170	80	4
W12-8x1500	8	1500	245	4	250	210	180	160	170	80	5.5
W12-8x2000	8	2000	245	4	250	210	180	160	170	80	5.5
W12-8x2500	8	2500	245	4	500	240	210	190	170	80	5.5
W12-8x3000	8	3000	245	4	600	280	250	220	170	80	7.5
W12-10x2000	10	2000	245	4.5	400	260	240	180	170	80	7.5
W12-10x2500	10	2500	245	4.5	400	260	240	200	200	80	7.5
W12-10x3000	10	3000	245	4	600	280	260	230	200	80	11
W12-12x2000	12	2000	245	4.5	400	260	240	200	200	80	7.5
W12-12x2500	12	2500	245	4.5	400	260	240	220	200	80	7.5
W12-12x3000	12	3000	245	4.5	500	460	420	350	240	80	30
W12-16x2000	16	2000	245	4	500	310	290	250	200	80	7.5
W12-16x3000	16	3000	245	3.5	900	380	250	300	240	80	11
W12-20x2000	20	2000	245	4	1000	350	320	280	240	80	15
W12-20x2500	20	2500	245	4	1000	350	320	280	240	80	15
W12-20x3000	20	3000	245	4	1000	400	380	320	240	80	22
W12-25x2000	25	2000	245	4	800	350	320	280	240	80	22
W12-20x2500	20	2500	245	4	640	350	320	280	240	80	30
W12-30x2000	30	2000	245	4	1000	400	360	300	240	80	37
W12-25x2500	25	2500	245	4	800	400	360	300	240	80	37



Type	Max. Rolling Thickness	Max. Rolling Width	Yield Limit	Rolling Speed	Min. Diameter full- loaded	Up Roll Diameter	Down Roller Diameter	Max. Diameter of Side Roller	Max. Stroke of Side Roller	Adjustment Speed of Side Roller	Main Motor Power
	mm	Mm	mm	m/min	mm	Mm	mm	mm	Mm	Kw	Kw
W12- 35x2000	35	2000	245	4	1200	420	380	330	210	80	37
W12- 30x2500	30	2500	245	4	1000	400	360	320	230	80	37
W12- 40x2000	40	2000	245	4	1400	480	400	340	420	80	45
W12- 45x2000	45	2000	245	4	1600	500	450	400	380	80	45
W12- 35x2500	35	2500	245	4	1200	480	400	340	420	80	45
W12- 40x2500	40	2500	245	4	1400	500	450	400	380	80	45
W12- 45x2500	45	2500	245	4	1600	530	480	420	450	80	63
W12- 16x3000	16	3000	245	4	2800	500	450	400	450	80	45
W12- 35x3000	35	3000	245	4	1200	500	450	400	380	80	45
W12- 45x3000	45	3000	245	4	1600	560	500	450	450	80	63
W12- 55x2500	55	2500	245	4	2000	600	550	480	500	78	75
W12- 55x3000	55	3000	245	4	2000	620	560	490	500	78	75
W12- 65x3000	65	3000	245	4	2400	670	600	530	550	78	110

Features

1. The bottom roll moves up to hold the plate edge securely against the top roll while the side roll is raised to form an accurate pre-bend, minimizing the flat zone on the plate edge. Pre-bending on a three roll machine requires that plates be tilted down as they are being fed. In contrast, plates are loaded horizontally at the feed level for pre-bending on a four roll machine, which allows the use of horizontal motorized roller tables to help feed the plate.

2. Plate feeding can take place on either side of a four roll machine. If fed from only one side, they can even be placed up against a wall to save floor space.

3. The side rolls are positioned to the right and left of the bottom roll and are on their own axes. The independent axis of each roll helps make a perfect bend. The "back" side roll (at the far side of the feeding point) also functions as a back gauge to square the plate for proper alignment (see Figure 1 in diagram). This eliminates the need for someone to assist the operator.

4. The plate is kept square without slipping during both pre-bending and rolling because of the constant secure clamping of the top and bottom rolls.

5. Four roll machines do not require the operator to remove, flip, and then try to square and reposition the plate a second time after pre-bending, as is the case with three roll IP machines. Keeping the material in the machine makes four rolls 50% more efficient than three roll IP machines, and allows a cylinder to be rolled to the required diameter immediately following prebending.

6. Bending the back edge takes place after the cylinder is rolled, for a one direction, single pass operation.

7. Cone rolling is easier on a four roll machine. The side rolls can be tilted to establish the cone angle and the bottom roll can also be tilted to clamp and drive the plate. (Standard feature on JMT rolls.)

8. Four roll machines are the only type of plate rolls that can effectively make use of NC and CNC controls because of the constant clamping and driving of the material during all steps of rolling. Bending difficult shapes like polycentric or elliptic work pieces can be easily done with SIECC four roll machines.