

MCP
three roll (double pinch)
section roll **DIGITAL**

DAVI
EXCELLENCE IN FORMING

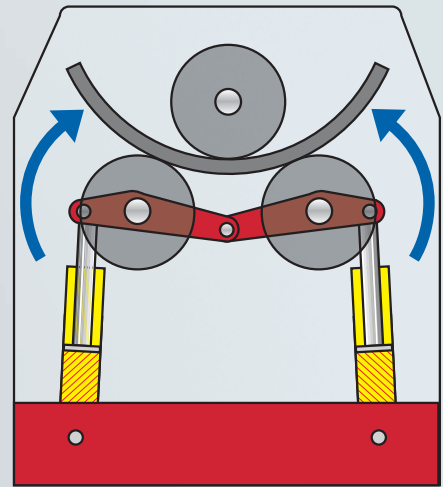
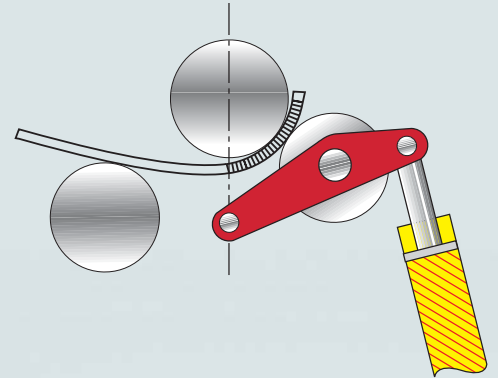
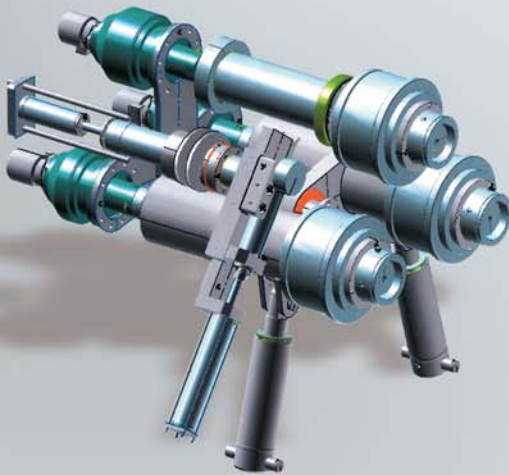
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PSG: PLANETARY SWING GUIDES

The forming side rolls swing into position by means of heavy duty rocker arms. Because of the radial movement, the forming rolls reach a higher position.

- Tighter diameters (1,1 x top roll diameter)
- Friction free smooth positioning
- High accuracy
- Shorter flats because of the high leverage factor
- Reduces material spring-back

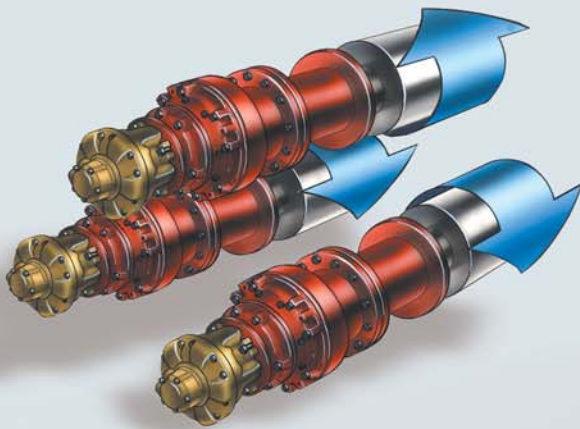


EST - ENERGY SAVING TECH

High efficiency components combined with state of the art engineering has reduced substantially load losses.

- Full force available for rolling power
- Friction Free planetary swing guides
- Spherical self-aligning double roller bearings
- Friction Free bushings





FULLY HYDRAULIC SYSTEM

- All machine movements are hydraulically activated:
- All three (3) rolls are powered, insuring an excellent and strong plate feeding on any thickness material, with the lowest surface damage.
- Three (3) independent hydraulic motors and three high torque planetary drives (one for each roll), on mid and heavy sizes directly connected on each roll axis, for a powerful torque transmission (one hydraulic motor and gears on light sizes)
- High rolling speed for quick rolling cycles.
- Hydraulic brake valves stop rotation instantaneously.
- Full overload protection.
- Continuous filtration system.
- Off the shelf, high quality hydraulic components.

AUTOMATIC PERIPHERAL SPEED COMPENSATION

Since speeds inside and outside diameters are different, the top roll must turn slower than the side forming rolls, particularly on tall sections. The Hydraulic system is designed to permanent automatic compensate for the different peripheral speeds.

PLT: PERMANENT LUBRICATION TECHNOLOGY

Davi utilizes off the shelf, high quality components, lifetime lubrication-free

- No lubrication required
- Bearings are sealed to protect against mill-scale, dust and rust
- More production time available
- Premature wear due to lack of regular maintenance is eliminated



SAFETY EQUIPMENTS & FEATURES

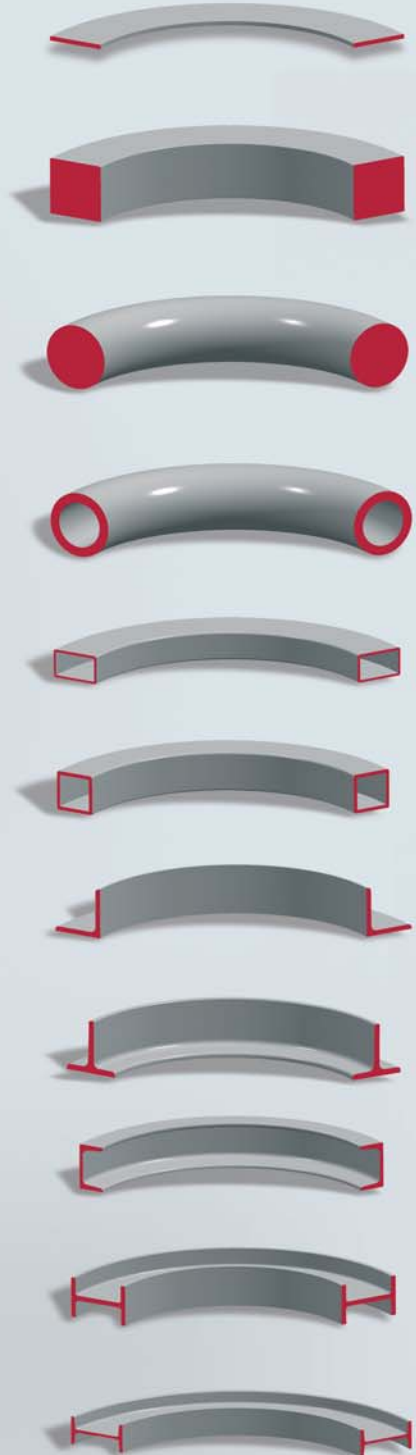
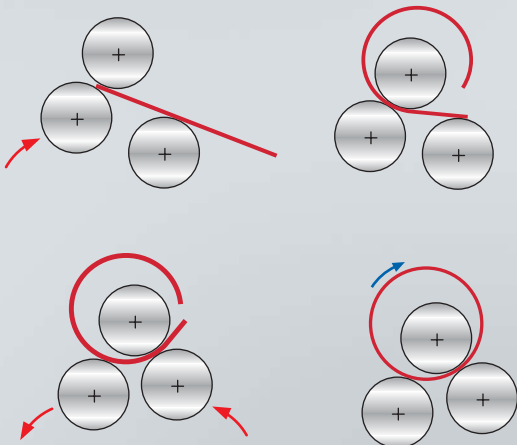
- Multi system safety devices stop all machine movements
- E-Stop button on the operator console
- Safety joy-sticks controls
- Perimetral safety cable
- Locked certified Rittal electrical cabinet

Three Roll (Double Pinch) Section Roll Configuration

- Double pinch pre-bending machine with independent hydraulic adjustment of both side forming rolls to reduce to the minimum the straight edge (Pre-bending of the leading and trailing edge).
- Tri-dimensional operated guiding rolls, on mid and heavy sizes, adjustable in three direction (up-down; in-out; toward-away) to compensate for angles leg-out and leg-in distortion (bidimensional on light sizes).
- Large, high strength steel shafts, rotating in high-dynamic dual self-aligning spherical roller bearings for optimum performance and efficiency
- Modular components universal tooling, in high-grade steel, hardened up to 60 HRC Rockwell and wear-resistant, adjustable to create the required grooves to fit the profiles to be formed.
- Machine operates in both vertical and horizontal positions, according with production needs.



Davi double pinch NEW design MCP series is the newest, most advanced and appropriate solution suitable for bending standard sections such as flat bars (on flat and on edge), square bars, tees, channels, angles leg-out and leg-in, square and rectangular tube sections, tube bars and pipes in mild and stainless steel, aluminium, brass, copper, as well as other alloy materials.



THE DAVI "HI-TECH" IN SECTION AND BEAM BENDING



HEAVY DUTY BEAM
BENDERS, AVAILABLE
FOR GIANT STEEL
CONSTRUCTION



OPTIONAL EQUIPMENTS





















- L.E.D. readouts of the two forming rolls (X and Y axis)
- L.E.D. readout displaying the amount of material fed through the rolls (S axis)
- L.E.D. readout of the two guiding rolls (four or six axis)
- Tooling for pipes and tubes
- Hydraulic traction tooling for beams
- Hydraulic Overhead support

TOOLING

Universal bending rolls with modular components, in high-grade steel, hardened up to 60 Hrc Rockwell and wear-resistant, adjustable to create the required grooves to fit the profiles to be formed



MCP SERIES: STANDARD EQUIPMENTS

Model	MCP							MCP beam bender
	3211	3214	3218	3220	3226	3232	3236	
	1	100x25 ø700	125x32 ø1000	150x40 ø1400	175x45 ø1600	200x50 ø1800	250x70 ø1800	300x100 ø2500
	2	200x35 ø600	220x50 ø1000	250x60 ø1400	320x65 ø1600	400x70 ø1800	500x80 ø1800	650x120 ø2000
	3	60 ø600	80 ø1200	100 ø1500	115 ø1500	130 ø1800	150 ø2200	240 ø2400
	4	75 ø900	90 ø1100	110 ø1200	130 ø1400	150 ø1500	180 ø2200	260 ø2000
	5	100x12 ø1000	120x15 ø1300	150x16 ø1400	180x18 ø1800	200x25 ø2500	250x25 ø3500	
	6	100x10 ø1000	120x13 ø1100	150x12 ø1500	180x15 ø2000	200x20 ø2000	200x25 ø2500	
	7	100x12 ø800	120x15 ø1000	150x16 ø1000	180x18 ø1400	200x25 ø2500	250x25 ø3000	
	8	100x10 ø800	120x13 ø1000	150x15 ø1200	180x15 ø1600	200x20 ø2000	225ø3000	
	9	100x12 ø1000	120x15 ø1000	150x16 ø1000	180x18 ø1400	200x25 ø2000	280ø4000	
	10	120x50x4	150x50x5	180x70x8	200x75x8	230x100x10	250x125x12	500x250x15
	11	80x6	100x8	120x10	150x10	180x12	225x12	400x16
	12	180x70 ø800	220x80 ø900	300x100 ø1100	360x150 ø1300	475x150 ø1500	550x150 ø2200	1000 ø4000
	13	180x70 ø1000	220x80 ø1100	300x100 ø1200	360x150 ø1600	475x150 ø2500	550x150 ø3000	1000 ø4000
	14	180x82 ø1000	220x98 ø1000	300x125 ø1100	360x145 ø1200	450x170 ø1500	600x215 ø2200	1000 ø5000
	15	A 120 ø1000	A 150 ø1100	A 180 ø1100	A 220 ø2500	A 280 ø3000	A 450 ø3500	A 1000 ø6000
	16	140x3 ø2800	180x4 ø4000	220x4 ø5000	275x5 ø8000	324x5 ø10000	375x6 ø14000	508 ø15000
	17	100x5,7 ø700	140x6 ø1400	170x7 ø2000	220x8 ø5000	273x10 ø8000	325x10 ø5000	406,4 ø12000
	18	120x55 ø3000	150x60 ø4000	180x70 ø5000	220x80 ø7000	260x90 ø10000	300x100 ø10000	400 ø40000
	19	120x58 ø3000	150x70 ø4000	180x82 ø5000	240x98 ø7000	300x125 ø4000	360x143 ø6000	550 ø20000
	20	A 100 ø3000	A 120 ø4000	A 160 ø5000	A 200 ø7000	A 240 ø9000	A 280 ø12000	A 550 ø40000
Section Modulus	W cm ³	40 - 70	80 - 150	120 - 220	240 - 450	350 - 600	600 - 1100	1500 - 4700
Shafts ø	mm	110	140/120	180/160	200/180	260/240	320/300	360/340
Rolls ø	mm	315	390	470	560	680	800	840
Electric power	HP	15	20	25	30	50	100	150

* All sizes in mm



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