

DURMA

AD-S SERIES

CNC Synchro Press Brakes



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The S is available in up to eleven axis configurations. It is a machine truly designed to decrease setup time. The powerful yet simple control will automatically calculate the bend sequence, bend angle, back gauge retraction, bend allowance, and features collision protection. The ram positioning system allows real time monitoring and complete control of all ram speeds, positions, and dwell times. Imagine when handling large sheets, the operator can actually program the pressing speed down to a point where whip up and part dishing are virtually eliminated. Once the bend target has been reached, a short and slow speed return point can be programmed; giving the operator a better way of handling it after the bend is made. Programmable ram tilts, which are useful in conical or fadeout work, are also a feature of this machine. The automatic calibration and $\pm 0,01$ mm positioning accuracy make S a great partner for the production of precision components, both large and small.





Control Units

CYBELEC

ModEva is a range of numerical controls adapted to the actual market demand. Therefore the complete ModEva serie runs now under Windows

ModEva can provide a calculating capacity and performance adapted to simple machinery with a 2D graphic display, it can also be transformed into a real workstation with a very high-power CPU and maximum graphic capabilities thus making Cybelec® adapted numerical control available to the most sophisticated machinery.

All ModEva™ consoles are equipped with the new Quick Cursor™ device. One of its main features is the possibility of completely programming a part on a single page. When producing more complex parts, the graphic sequences generated by a CAD/CAM system can easily be viewed on the user console.

All ModEva come with PC 1200 off line bending software. PC 1200 program allows you to prepare your programs, calculate offers, check feasibility of the parts in your office on a PC. No time wasted on the machine.

ModEva 10S

- 2D / 10,4" color screen
- TFT type screen
- 128 Mb Ram
- 128 DM Main Memory
- Easy Cursor
- Automatic Bend Sequences
- PC Off line 2D Software



ModEva 12S

- 3D / 12" color screen
- TFT type screen
- 128 Mb 256/512 Ram
- 20 GB Main Memory
- Easy Cursor
- Automatic Bend Sequences
- PC Off line 3D Software

ModEva 15S

- 3D / 15" color screen
- TFT type screen
- 128 Mb 256/512 Ram
- 20 GB Main Memory
- Easy Cursor
- Automatic Bend Sequences
- PC Off line 3D Software



DELEM

The DA66W Series Control operates in "Real Time Windows" environment, which allows easy adaptation to rest of your production. File sharing over your local area network, email transmissions, and Internet access through via a WEB interface are now possible. With the 2D part programming and bend simulation including automatic collision detection the DA-66W allows fast user-friendly part programming. Programming the Delem DA-66W with its clear LCD display is simply drawing your product on the screen. Bar code readers touch pad or mouse pointing systems, and flash discs for massive memory are available as options.

Programming the Delem DA-69W with its clear LCD display is simply drawing your product on the screen. And once you have drawn the product, you can rotate it in 2D or 3D, enlarge or reduce it and look at it from every angle to see if it's just what you want. It doesn't stop with product drawing either. The design software enables you to draw to real scale, tool and machine shapes on the screen.

Delem DA-66W

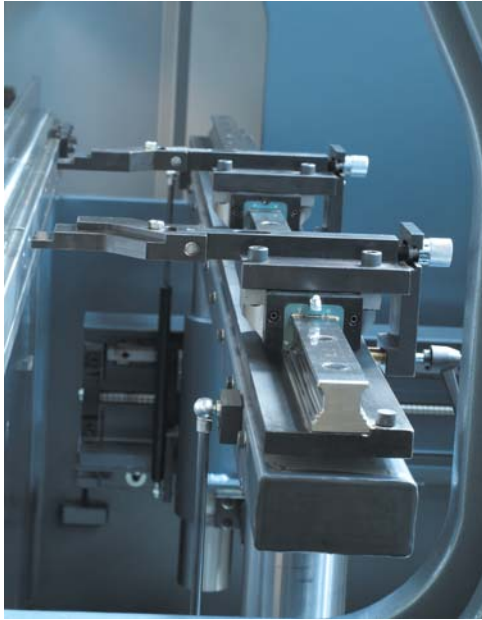
- 2D Graphical CNC system
- Automatic bend sequence
- 2,500 program steps
- 3.5" HD floppy disk unit
- PLC functions
- Operator warning system



Delem DA-69W

- 3D Graphical CNC system
- Automatic bend sequence
- 2,500 program steps
- 3.5" HD floppy disk unit
- PLC functions
- Operator warning system





Back Gauging

The S comes standard with an X/R back gauge. In this system the finger depth and height positions are automatically calculated and set by the control. When the die height changes or it becomes necessary to gauge against an existing flange that may be at different height position than the last bend, the back gauge height position is set automatically. Finger retraction is also performed automatically when the part requires. The finger width is easily adjustable along the linear guide way and ball bearing system. (standard)



Special design, with three steps finger blocks.



Quick Set Sheet Support

Option

Quickset support arms are mounted on a linear guide way and ball bearing system that allows "finger tip" lateral adjustment of the front support arms. Vertically adjustment is also easily achieved.



Shimless Bending

With our table-crowning device, the need for shimming is eliminated. The S Series comes standard with a manual crowning device with hand crank and readout positioned on the control side of the bed. Optionally the machine can be equipped with a CNC controlled system. In this case upon entry of the normal part programming data, the proper setting is automatically calculated. Even though it is auto calculated, the operator has the ability for adjustment, in case the first calculation is not perfect. Different than manual table crowning, this adjusts automatically per each step of the program when a part requires different settings to properly complete a straight part.



Large Throat & Stroke

Standard large overhand and space-saving machine concept create a large area of free space right from the start.

And Design products with large metallic surface can be include in production without any problem.



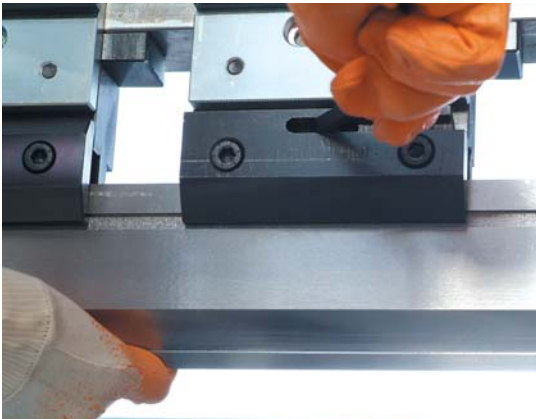
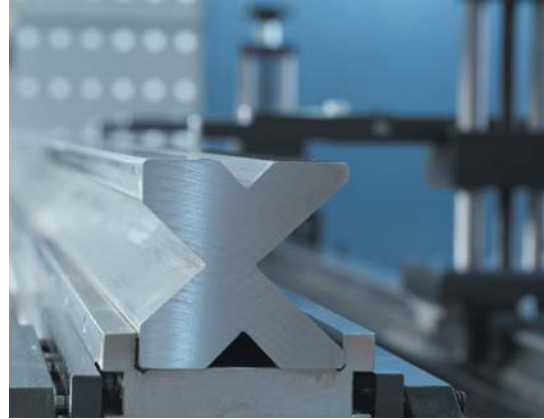
Safety

The Press brakes-security described herein is in accordance with the highest safety regulations. All by S series of Press Brakes has a front Laser safety or light curtains. More rapidly and easy conversion to other tools.

(Option)

Tool Package

A very flexible and affordable precision ground tooling package is available. Special and tailored packages are also available in European and American standard precision ground. Wila style tooling is also available.



Quick release clamping

(Option)



Laser hardening DURMA Tools

(Option)



Hydraulic Clamping

Hydraulic clamping fastens, straightens and centralizes tools automatically. It is an excellent solution also for robotized press brake systems to reduce setup times. These clamps are equipped with Wila tools

(Option)



X, R, Z1, Z2
4-Axis

(Option)



X1, X2, R1, R2, Z1, Z2
6 Axis heavy duty back gauge

(Option)



Laser Based Measuring Device for Bending Angle

Manufacturing sheet metal parts with properly bending angles that are kept constant all times often meets a problem during the actual production process: different parameters in material thickness and stresses. The best solution is laser based bending angle measuring device.

- Any bending angle can be measured.
- Very compact, everything in the appliance.
- Light influence, light or dark material surfaces play practically no part at all.
- Non contact free of wear.

(Option)



Sheet Followers

Reduces operator involvement and "dishing" of large sheets or panels. Followers support large sheets as they are being bent. The return speed of the followers is programmable depending on sheet size, etc. Extended rails on each end of the bed are included with the machine in the case the operator chooses to position sheet followers out of the way on jobs for which they are not required. The following units adjust easily in height and width.

(Option)

Standard Equipment

- CE-Norm form EU
- Numerical Control Cybelec ModEva 10S Windows with Software or Delem DA-66W
- Y1, Y2, X, R (4-Axis)
- European Clamping system
- Motorized Back gauge
- Sheet Support Arms with T-Canal and Tilting stop
- Sliding arms (compl. 2 Arms and full length guide)
- CNC controlled motorized Crowning

Optional Equipment

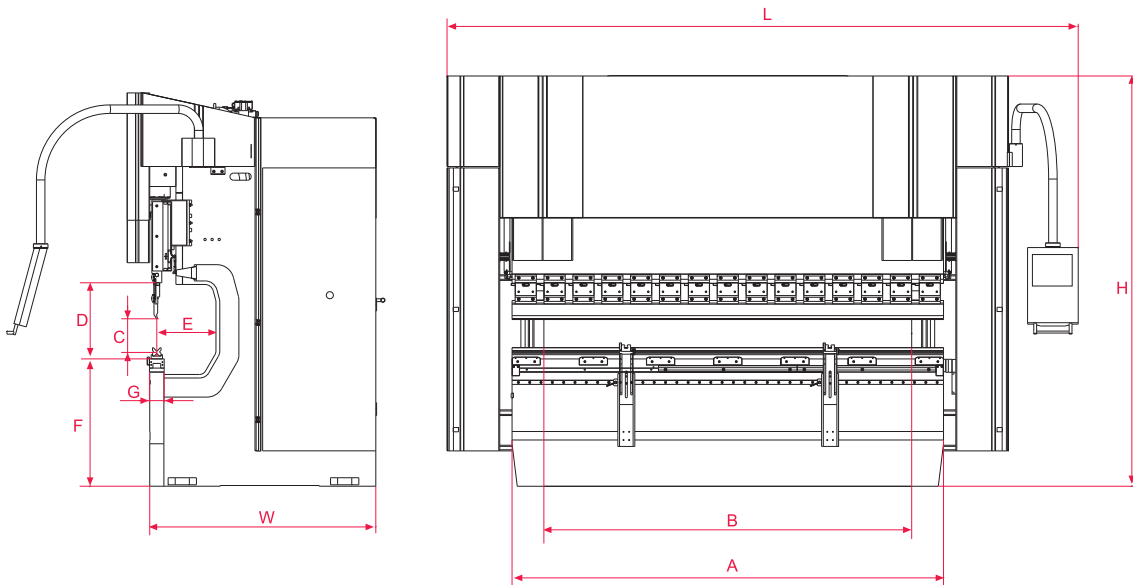
- DURMA Multi-V (on request)
- Top & Bottom Tool European Style
- Z1, Z2 Axis
- X1, X2 Axis
- R1, R2 Axis
- Heavy duty 6 axis Back gauge (Z1, Z2, X1, X2, R1, R2)
- AP3-AP4 Sheet follower with sliding guide
- Parking Area for support arms (1 meter)
- DURMA hyd. Top Clamping, for WILA tools (without tool)
- DURMA hyd. Bottom Clamping, for WILA tools with motorized crowning (without tool)
- Hyd. WILA Clamping NSCL-II (top) without tool
- Hyd. WILA Clamping NSCR-II (bottom) without tool & motorized crowning
- Mech. WILA Clamping NSCL Basic without tool
- Mech. WILA Clamping NSCR Basic without tool & motorized crowning
- European hyd. Top Clamping
- Special Throat Depth
- Light barrier or Laser guard for safety
- Add. Finger Blocks
- Extra Support Arms
- Quick Release Clamping
- Laser hardening DURMA Tools
- CYBELEC ModEva 12S 3D (windows)
- CYBELEC ModEva 15S 3D (windows)
- DELEM DA-66W Touch Screen
- DELEM DA-69W
- Laser Based Measuring Device for Bending Angle
- Oil Coolant
- Tandem preparation
- Central lubrication



AD-S SERIES		2060	25100	30100	30135	30175	30220	30320	30400
Bending force	ton	60	100	100	135	175	220	320	400
Bending length (A)	mm.	2050	2550	3050	3050	3050	3050	3050	3050
Distance between columns (B)	mm.	1700	2200	2600	2600	2600	2600	2600	2400
Y rapid speed	mm./sec.	200	180	180	160	120	120	100	100
Y working speed	mm./sec.	10	10	10	10	10	10	10	8
Y return speed	mm./sec.	120	120	120	120	100	100	100	80
Crowning	-	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
Daylight (D)	mm.	530	530	530	530	530	530	630	630
Table width (G)	mm.	104	104	104	104	104	104	154	300
Table height (F)	mm.	900	900	900	900	900	900	900	1040
Stroke (C)	mm.	265	265	265	265	265	265	365	365
Throat depth (E)	mm.	410	410	410	410	410	410	410	510
Sliding arms	amount	2	2	2	2	2	2	2	2
Back gauge finger blocks	amount	2	2	2	2	2	2	2	2
Speed of travel in X-axis	mm./sec.	500	500	500	500	500	500	500	350
Travel in X-axis	mm.	650	650	650	650	650	650	650	750
Speed of travel in R-axis(max.)	mm./sec.	350	350	350	350	350	350	350	300
Travel in R-axis	mm.	250	250	250	250	250	250	250	250
Motor power	kw.	7.5	11	11	15	18.5	22	37	37
Oil tank capacity	lt.	100	100	100	150	250	250	250	500
Length (L)	mm.	3300	3800	4200	4200	4250	4250	4300	3750
Width (W)	mm.	1650	1670	1670	1680	1700	1770	1820	2020
Height (H)	mm.	2750	2750	2750	2750	2750	2900	3230	3550
Weight approx.	kg.	6100	8900	9500	10500	11500	12500	17500	23000

AD-S SERIES		60600	70400	70600	70800	701000	701250	701500	80400	80600	80800	801000	801250	801500	802000
Bending force	ton	600	400	600	800	1000	1250	1500	400	600	800	1000	1250	1500	2000
Bending length (A)	mm.	6050	7050	7050	7050	7050	7050	7050	8050	8050	8050	8050	8050	8050	8100
Distance between columns (B)	mm.	5100	5100	5100	5100	5100	5100	5100	6400	6400	6400	6400	6400	6400	6400
Y rapid speed	mm./sec.	80	100	80	80	70	70	70	100	80	80	70	70	70	70
Y working speed	mm./sec.	7	8	7	7	5	7	6	8	7	7	5	7	6	6
Y return speed	mm./sec.	80	80	80	70	60	70	60	80	80	70	60	70	60	60
Crowning	-	Motorized	Motorized	Motorized	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Daylight (D)	mm.	700	630	700	700	800	800	1000	570	700	700	800	800	1000	1000
Table width (G)	mm.	300	300	300	400	400	400	600	300	300	400	400	500	600	700
Table height (F)	mm.	990	1220	990	800	800	825	900	1220	990	800	800	825	900	900
Depth of pit (F1)	mm.	1000	300	1300	1300	1500	1700	1800	500	1500	1300	1600	1800	1900	2100
Stroke (C)	mm.	365	365	365	400	500	600	600	365	365	400	500	500	600	600
Throat depth (E)	mm.	510	510	510	610	610	610	610	510	510	610	610	610	610	750
Sliding arms	amount	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Back gauge finger blocks	amount	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Speed of travel in X-axis	mm./sec.	350	350	350	350	300	300	300	300	300	300	300	300	300	300
Travel in X-axis	mm.	750	750	750	750	1000	1000	1000	750	750	750	1000	1000	1000	1250
Speed of travel in R-axis(max.)	mm./sec.	300	300	300	300	250	250	250	300	300	300	250	250	250	250
Travel in R-axis	mm.	250	250	250	250	250	250	250	250	250	250	250	250	250	250
Motor power	kw.	45	37	45	55	55	90	90	37	45	55	55	90	90	110
Oil tank capacity	lt.	500	500	500	750	1000	1250	1500	500	500	750	1000	1250	1500	2000
Length (L)	mm.	7600	8600	8600	8700	8800	8800	8800	9600	9600	9800	10000	10000	10000	10000
Width (W)	mm.	2650	2300	2650	2750	2900	3150	3500	2300	2650	3000	2900	3150	3500	4250
Height (H)	mm.	3850	3710	3850	4150	4400	5580	5700	3710	3850	4150	4400	5580	5700	5900
Weight approx.	kg.	54000	40000	60000	75000	91500	110000	125000	47500	66000	85000	105000	135000	145000	249000

AD-S SERIES		37175	37220	40175	40220	40320	40400	60220	60320	60400
Bending force	ton	175	220	175	220	320	400	220	320	400
Bending length (A)	mm.	3700	3700	4050	4050	4050	4050	6050	6050	6050
Distance between columns (B)	mm.	3100	3100	3600	3600	3600	3400	5100	5100	5100
Y rapid speed	mm./sec.	120	120	120	120	100	100	100	100	100
Y working speed	mm./sec.	10	10	10	10	10	8	10	10	8
Y return speed	mm./sec.	100	100	100	100	100	80	100	100	80
Crowning	-	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
Daylight (D)	mm.	530	530	530	530	630	630	530	630	630
Table width (G)	mm.	104	104	104	104	154	300	154	154	300
Table height (F)	mm.	900	900	900	900	900	1040	1100	1100	1220
Stroke (C)	mm.	265	265	265	265	365	365	265	365	365
Throat depth (E)	mm.	410	410	410	410	410	510	410	410	510
Sliding arms	amount	2	2	2	2	2	2	4	4	4
Back gauge finger blocks	amount	2	2	2	2	2	2	4	4	4
Speed of travel in X-axis	mm./sec.	500	500	500	500	500	350	350	350	350
Travel in X-axis	mm.	650	650	650	650	650	750	750	750	750
Speed of travel in R-axis(max.)	mm./sec.	350	350	350	350	350	300	300	300	300
Travel in R-axis	mm.	250	250	250	250	250	250	250	250	250
Motor power	kw.	18.5	22	18.5	22	37	37	22	37	37
Oil tank capacity	lt.	250	250	250	250	250	450	250	250	500
Length (L)	mm.	4950	4950	5250	5250	5300	5750	7500	7500	7500
Width (W)	mm.	1700	1770	1700	1770	1910	2110	1770	1910	2110
Height (H)	mm.	2900	2900	2750	2900	3230	3540	3250	3450	3710
Weight approx.	kg.	13000	14360	13100	15000	21000	27000	20840	28500	36000



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