



MC MACHINERY SYSTEMS, INC.
a subsidiary of Mitsubishi Corporation

XL Series Press Brakes

Elite XL ● Smart XL



MC MACHINERY SYSTEMS, INC.

a subsidiary of Mitsubishi Corporation

MC MACHINERY SYSTEMS, INC.

THE FOCUS OF OUR BUSINESS IS THE FUTURE OF YOURS

MC Machinery Systems, Inc. a subsidiary of MITSUBISHI corporation, and Dener, a Turkish press brake manufacturer, have formed a sales and service partnership to deliver quality press brakes from 40 to 4000 tons throughout North America.

DENER was established in 1974 in Kayseri Turkey manufacturing a variety of sheet metal working machinery. With 195,000 square feet of production space and ISO 9001 certification, DENER is capable of producing hundreds of quality machines for export the world over. DENER's philosophy is to be first in their league with the best quality and standard features possible.

MC Machinery Systems, Inc. partnered with DENER in 2008 to offer our customers more products at an economical price while providing an extensive network of service and support. MC Machinery Systems, Inc. is headquartered in Wood Dale, Illinois, with offices in California, New Jersey, and Ontario Canada with a parts inventory in excess of \$1,000,000. MC machinery is well equipped to support all customer needs that may arise.



INDEX

- 4** ELITE XL
- 6** EQUIPMENT
- 8** SPECIFICATIONS
- 10** SMART XL
- 12** EQUIPMENT
- 14** SPECIFICATIONS
- 16** CUSTOM BUILT BIG BREAKS
- 18** RADBEND



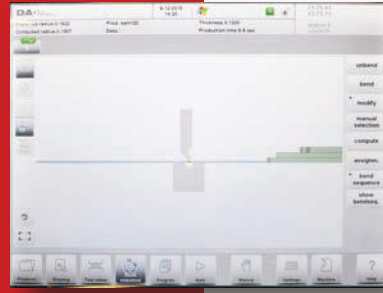
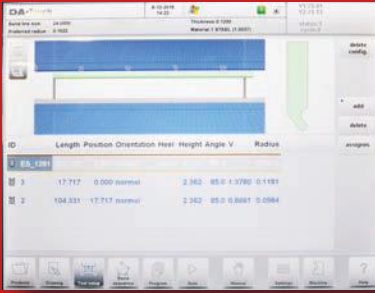
ELITE XL

ELITE XL models are designed to be flexible and reliable offering more standard features than other brands in their price class. Extra value is achieved by adding extra open height, back gauge depth, ram speed, and C-frame gap. Additionally each DENER machine comes with a standard oil cooler, angle corrections database, and a Windows controller. Manufacturing technologies and quality control enables DENER to produce quality machines that will last for years of productive and economical service.

ELITE XL are hydraulic brakes with synchronized control of the pistons provided by Hoerbiger Hydraulic Valves and closed loop monitoring technology.

With a variety of back gauge configurations available and tooling options for American, European and hydraulic clamping, ELITE XL brakes are suitable for any application. Siemens electrical components further add reliability and readily available parts in the event service may be needed.





EACH CNC UNIT OFFERS:

- Large color touch screens
- Windows operating system
- 2D graphical touch screen programming
- Manual, Semi-Automatic, and Automatic operation modes
- Inch and millimeter displays
- USB and LAN peripheral interfacing
- Air and coining programming
- Easy angle and flange corrections
- Programmable bending speed
- Tool library with tool images
- Large program storage capacity

Numeric data input creates multi step programs with ease by entering basic information such as angle, flange length, sheet width, material types and tool data.

Graphic mode creates programs from a part cross section sketched on the screen. Automatic bend sequences, developed blank size, and graphic 2D simulations get production up and running quickly.

Optional off-line programming delivers verified programs with 3D images and simulations with clear operator instruction for fast set-up.



Optional off-line programming delivers verified programs with 3D images with clear operator instruction for fast set-up.

DA 66T



ESA 560



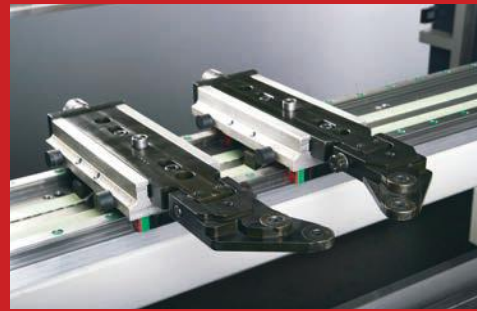
Graphic Mode creates programs from a part cross section sketched on the screen. Automatic bend sequences, developed blank size, and graphic 2D simulations get production up and running quickly.

ELITE XL STANDARD EQUIPMENT

- Y1 / Y2 synchronized hydraulic system
- Closed Loop valve and linear scale monitoring
- CNC control with Microsoft Windows
- Angle corrections database
- CNC X, R back gauge axes
- 41.3" X-axis max gauge distance
- Linear guided front sheet supports with in/mm metal scales, front gauge stops and ball transfers
- Interlocked rear access gate intrusion barrier
- Interlocked side intrusion barriers
- LED front lighting over the back gauge and front work area
- Euro/American upper punch holders
- Euro upper punch and lower 4-way V-die
- Siemens safety foot switch
- Manual Crowning
- Oil cooler
- Mitsubishi back gauge servo amps



Full bed of upper and lower tools



Manual X, R back gauge. Fingers on linear guides



Manual Crowning



Two linear guided front sheet supports

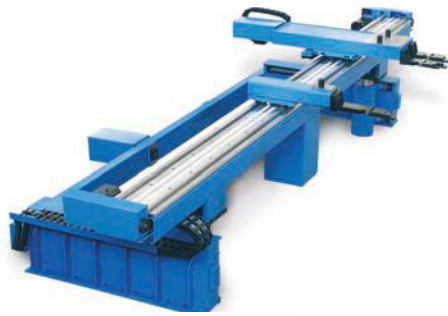


Euro / American upper punch holders

OPTIONAL EQUIPMENT



CNC Z1 and Z2 Axes



X, R, Z1, Z2, X prime back gauge



ATF 6-axis back gauge



Hydraulic Clamping



Wilson Express Clamp



AKAS Laser Guard



CNC Crowning



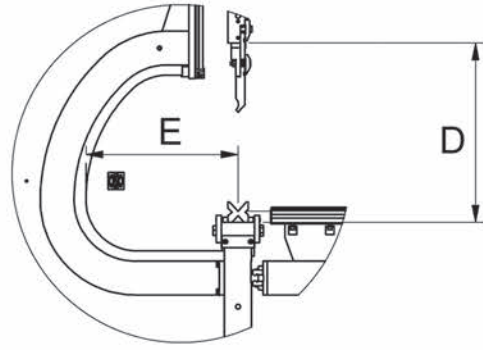
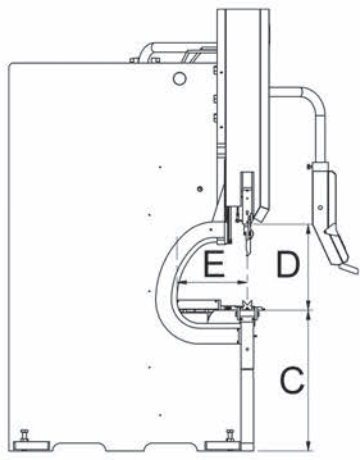
Dynamic Hydraulic Crowning



Heavy duty sheet support
(Standard on 175 tons and up)

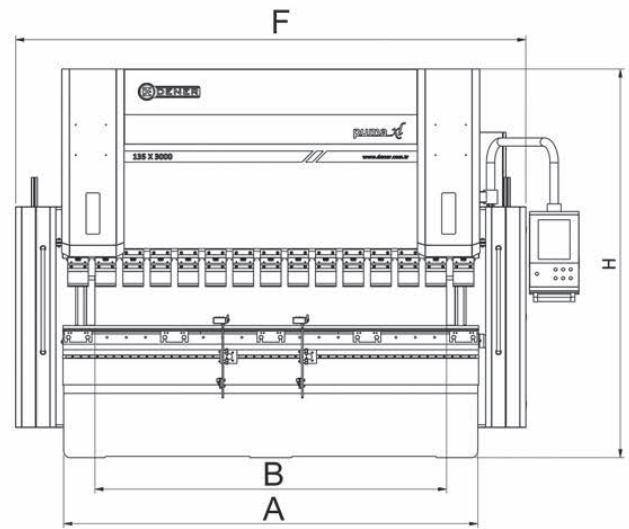
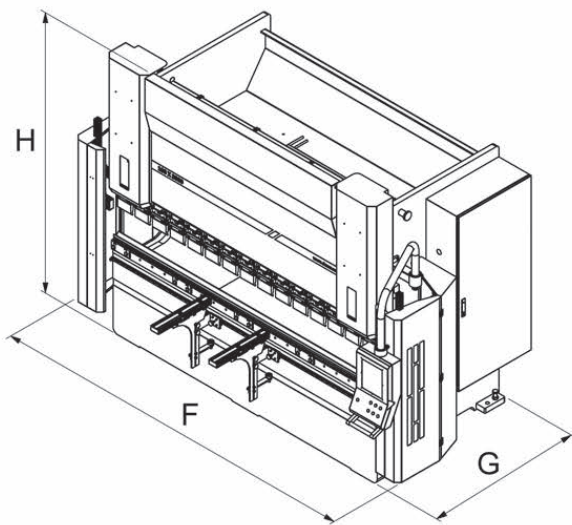


CNC sheet followers



ELITE XL MACHINE SPECIFICATIONS

DRAWING REF.	Bending Length: in (mm)	Bending Capacity: US tons (metric tons)	Stroke: in (mm)	Max Approach Speed: in/s (mm/s)	Max Bend Speed: in/s (mm/s)	Max Return Speed: in/s (mm/s)	Back Gauge Stroke: in (mm)	Max Back Gauge Stop Distance: in (mm)	Throat Depth: in (mm)	Open Height: in (mm)
	A								E	D
DEXL 40-15	61.0 (1550)	44 (40)	8.7 (220)	7.1 (180)	0.4 (10)	6.3 (160)	25.6 (500)	39.4 (800)	15.7 (400)	16.1 (410)
DEXL 60-20	80.7 (2050)	66 (60)	8.7 (220)	7.1 (180)	0.4 (10)	6.3 (160)	25.6 (500)	39.4 (800)	15.7 (400)	16.1 (410)
DEXL 100-26	102.4 (2600)	110 (100)	11.8 (300)	6.3 (160)	0.4 (10)	5.9 (150)	25.6 (750)	39.4 (1050)	17.7 (450)	20.9 (530)
DEXL 100-30	118.9 (3020)	110 (100)	11.8 (300)	6.3 (160)	0.4 (10)	5.9 (150)	25.6 (750)	39.4 (1050)	17.7 (450)	20.9 (530)
DEXL 135-26	102.4 (2600)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	21.7 (550)
DEXL135-26	102.4 (2600)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.5 (140)	25.6 (750)	39.4 (1050)	17.7 (450)	21.7 (550)
DEXL 135-30	118.9 (3020)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	21.7 (550)
DEXL 135-36	141.7 (3600)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	21.7 (550)
DEXL 135-40	159.4 (4050)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	21.7 (550)
DEXL 175-30	118.9 (3020)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 175-36	141.7 (3600)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 175-40	159.4 (4050)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 220-30	118.9 (3020)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 220-36	141.7 (3600)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 220-40	159.4 (4050)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 220-60	238.2 (6050)	242 (220)	13.8 (350)	3.9 (100)	0.4 (10)	3.9 (100)	25.6 (750)	39.4 (1050)	17.7 (450)	23.6 (600)
DEXL 320-30	118.9 (3020)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (750)	39.4 (1050)	17.7 (450)	25.6 (650)
DEXL 320-36	141.7 (3600)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (750)	39.4 (1050)	17.7 (450)	25.6 (650)
DEXL 320-40	159.4 (4050)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (750)	39.4 (1050)	17.7 (450)	25.6 (650)
DEXL 320-60	238.2 (6050)	352 (320)	15.7 (400)	3.1 (80)	0.4 (10)	3.1 (80)	25.6 (750)	39.4 (1050)	17.7 (450)	25.6 (650)
DEXL 400-40	159.4 (4050)	440 (400)	15.7 (400)	3.1 (80)	0.4 (10)	3.1 (80)	25.6 (750)	39.4 (1050)	21.7 (550)	25.6 (650)
DEXL 400-60	238.2 (6050)	440 (400)	15.7 (400)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (750)	39.4 (1050)	23.6 (600)	25.6 (650)
DEXL 500-60	238.2 (6050)	550 (500)	15.7 (400)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (750)	39.4 (1050)	23.6 (600)	25.6 (650)
DEXL 600-60	238.2 (6050)	660 (600)	16.9 (430)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (750)	39.4 (1050)	23.6 (600)	26.8 (680)



Distance Between Frames: in (mm)	Table width: in (mm)	Table height: in (mm)	Total width: in (mm)	Total depth: in (mm)	Total Height: in (mm)	Electrical Cabinet Swing depth: in (mm)	Control Arm Swing Area: in (mm)	Oil Tank: gal (litr)	Machine Weight: lb (kg)	Full Load Amps @ 480V (X,R,Z1,Z2,AC)	KVA (X,R,Z1,Z2,AC)
B	C	F	G	H							
49.2 (1250)	3.7 (95)	35.4 (900)	86.6 (2200)	84.8 (2155)	77.6 (1970)	32 (812)	36 (915)	26 (100)	9,480 (4,300)	26	22
65 (1650)	3.7 (95)	35.4 (900)	84.8 (2155)	84.8 (2155)	77.6 (1970)	32 (812)	36 (915)	26 (100)	11,244 (5,100)	26	22
84.6 (2150)	3.7 (95)	35.4 (900)	126 (3200)	82.7 (2100)	90.6 (2300)	32 (812)	36 (915)	50 (190)	15,873 (7,200)	32	27
100.6 (2555)	3.7 (95)	35.4 (900)	147.2 (3740)	96.7 (2455)	90.6 (2300)	32 (812)	36 (915)	50 (190)	18,078 (8,200)	32	27
84.6 (2150)	3.7 (95)	35.4 (900)	126 (3200)	94.5 (2400)	118.1 (3000)	32 (812)	36 (915)	53 (200)	19,180 (8,700)	25	21
84.6 (2150)	3.7 (95)	35.4 (900)	126 (3200)	94.5 (2400)	116.1 (2950)	32 (812)	36 (915)	50 (190)	19,952 (9,050)	38	31
100.6 (2555)	3.7 (95)	35.4 (900)	149.6 (3800)	94.5 (2400)	118.1 (3000)	32 (812)	36 (915)	50 (190)	23,149 (10,500)	38	31
122 (3100)	3.7 (95)	35.4 (900)	169.3 (4300)	94.5 (2400)	118.1 (3000)	32 (812)	36 (915)	50 (190)	23,149 (10,500)	38	31
139.8 (3550)	3.7 (95)	35.4 (900)	189 (4800)	94.5 (2400)	118.1 (3000)	32 (812)	36 (915)	50 (190)	27,007 (12,250)	38	31
100.6 (2555)	3.7 (95)	36.2 (920)	149.6 (3800)	101.8 (2585)	118.1 (3000)	32 (812)	36 (915)	79 (300)	24,802 (11,250)	48	40
122 (3100)	3.7 (95)	36.2 (920)	171.3 (4350)	101.8 (2585)	118.1 (3000)	32 (812)	36 (915)	79 (300)	28,109 (12,750)	48	40
139.8 (3550)	3.7 (95)	36.2 (920)	189 (4800)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	79 (300)	30,093 (13,650)	48	40
100.6 (2555)	3.7 (95)	36.2 (920)	149.6 (3800)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	79 (300)	26,566 (12,050)	48	40
122 (3100)	3.7 (95)	36.2 (920)	171.3 (4350)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	79 (300)	30,314 (13,750)	48	40
139.8 (3550)	3.7 (95)	36.2 (920)	189 (4800)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	79 (300)	31,967 (14,500)	48	40
200.8 (5100)	3.7 (95)	36.2 (920)	269.7 (6850)	120.1 (3050)	118.1 (3000)	32 (812)	36 (915)	79 (300)	47,399 (21,500)	48	40
100.6 (2555)	3.7 (95)	36.2 (920)	149.6 (3800)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	106 (400)	32,518 (14,750)	60	50
122 (3100)	3.7 (95)	36.2 (920)	171.3 (4350)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	106 (400)	35,274 (16,000)	60	50
139.8 (3550)	3.7 (95)	36.2 (920)	190 (4825)	102 (2590)	118.1 (3000)	32 (812)	36 (915)	106 (400)	37,479 (17,000)	60	50
200.8 (5100)	3.7 (95)	36.2 (920)	269.7 (6850)	122 (3100)	118.1 (3000)	32 (812)	36 (915)	106 (400)	62,170 (28,200)	60	50
139.8 (3550)	3.7 (95)	43.1 (1095)	187 (4750)	124 (3150)	149.6 (3800)	32 (812)	36 (915)	106 (400)	57,320 (26,000)	83	69
200.8 (5100)	3.7 (95)	43.1 (1095)	269.7 (6850)	124 (3150)	149.6 (3800)	32 (812)	36 (915)	106 (400)	81,571 (37,000)	83	69
200.8 (5100)	3.7 (95)	42.7 (1085)	275.6 (7000)	129.9 (3300)	157.5 (4000)	32 (812)	36 (915)	106 (400)	123,459 (56,000)	83	69
200.8 (5100)	3.7 (95)	39.4 (1000)	275.6 (7000)	129.9 (3300)	157.5 (4000)	32 (812)	36 (915)	159 (600)	130,073 (59,000)	83	69

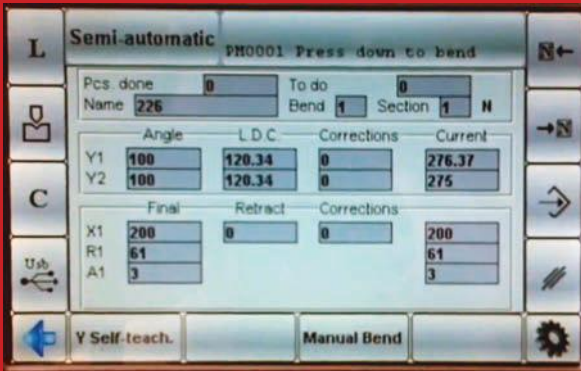
SMART XL

Smart XL CNC press brakes are designed to be sturdy, efficient and affordable. Sharing the same frames and hydraulics as the ELITE XL models, the SMART XL Series has more stroke, open height, back gauge gauge distance, ram speed, and C-frame depth than most other machines in its class. Economically equipped with a standard 3-axis ESA 530 control, the SMART models offer computer control of the Y1, Y2, and X-axes for simple but effective programming. Optional powered R axis and motorized crowning can also be added.

The standard SMART XL back gauge comes with a powered X-axis plus two manual adjustable Z-fingers riding on twin linear guides. Each finger has a manual R axis adjustable in height for up or down flange gauging. Additional fingers can be added.

For solid performance at a reasonable price, SMART XL machines are the ideal choice!



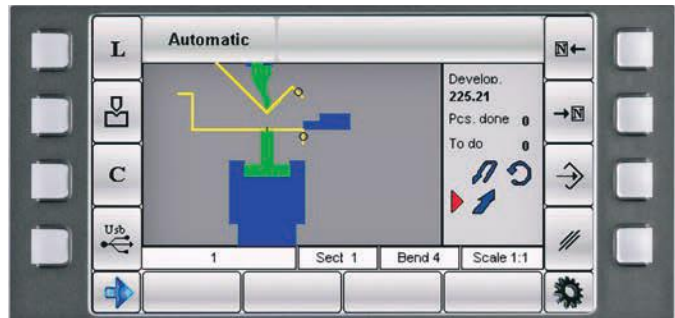


SMART XL CNC SERIES

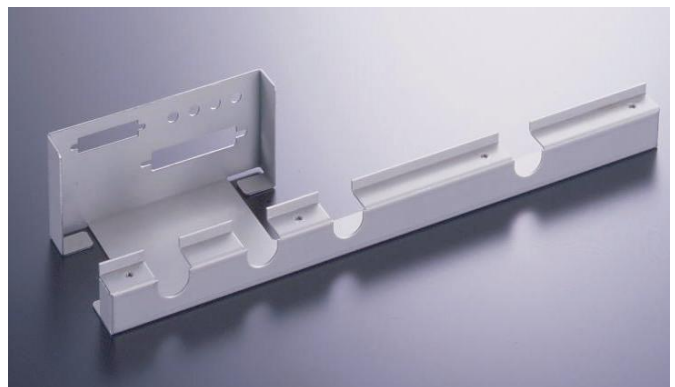
- Color 7-inch LCD display
- Alpha/numeric programming screen
- Program list screen
- SSD drive with large program capacity
- Upper and lower tool library
- Corrections screen for flanges and angles
- USB port
- Independent Y1 / Y2 stroke and corrections
- Inside and outside flange length entry
- Inside radius calculation
- Crowning calculation (optional axis)

ESA 530 Control

The 3-axis ESA 530 control automatically computes the Y1, Y2, and X-axis positions with the option for two more axes such as back gauge R-axis and CNC crowning. Programming is concise and effective in creating simple to complex parts.



2D automatic bend sequencing and collision detection as pictured above is an option. A color image of the gauge position and subsequent bending enhances the operator understanding of the processes at hand.



SMART XL STANDARD EQUIPMENT

- Y1 / Y2 synchronized hydraulic system
- ESA 530 control
- Closed loop monitoring of ram and spool valve position
- X and R-axes with 25.6 inches of X-axis gauging distance
- No crowning
- Linear guided front sheet supports with in/mm metal scales, front gauge stops and ball transfers
- Interlocked rear access gate intrusion barrier
- Interlocked side intrusion barriers
- LED front lighting over the back gauge and front work area
- Euro/American punch holders to accept either European or American style upper tools
- Euro upper tool and lower 4-sided V-die
- Siemens safety foot switch
- Oil cooler



Full bed of upper and lower tools



Two front linear guided sheet supports



Two linear guided back gauge finger assemblies



Euro / American upper punch holders

OPTIONAL EQUIPMENT



Hydraulic Clamping



Wilson Express Clamp



AKAS Laser Guard



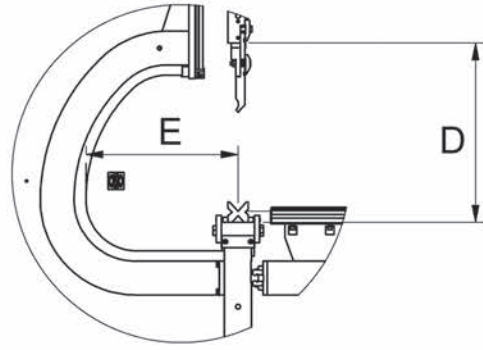
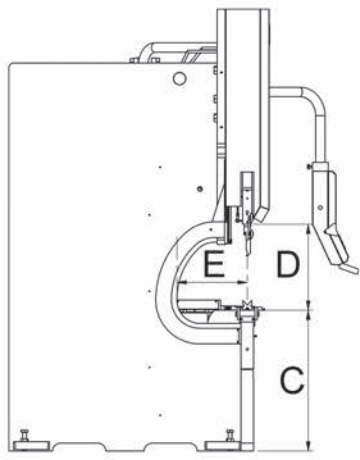
Manual Crowning



CNC Crowning



Heavy duty sheet support



SMART XL MACHINE SPECIFICATIONS

DRAWING REF.	A							E	D	B
	Bending Length: in (mm)	Bending Capacity : US tons (metric tons)	Stroke: in (mm)	Max Approach Speed: in/s (mm/s)	Max Bend Speed: in/s (mm/s)	Max Return Speed: in/s (mm/s)	Back Gauge Stroke: in (mm)	Throat Depth: in (mm)	Open Height: in (mm)	Distance Between Frames: in (mm)
DSXL 40-15	61.0 (1550)	44 (40)	8.7 (220)	7.1 (180)	0.4 (10)	6.3 (160)	25.6 (500)	15.7 (400)	16.1 (410)	49.2 (1250)
DSXL 60-20	80.7 (2050)	66 (60)	8.7 (220)	7.1 (180)	0.4 (10)	6.3 (160)	25.6 (500)	15.7 (400)	16.1 (410)	65.0 (1650)
DSXL 100-26	102.4 (2600)	110 (100)	11.8 (300)	6.3 (160)	0.4 (10)	5.9 (150)	25.6 (600)	17.7 (450)	20.9 (530)	84.6 (2150)
DSXL 100-30	118.9 (3020)	110 (100)	11.8 (300)	6.3 (160)	0.4 (10)	5.9 (150)	25.6 (600)	17.7 (450)	20.9 (530)	100.6 (2555)
DSXL 135-26	102.4 (2600)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.5 (140)	25.6 (600)	17.7 (450)	21.7 (550)	84.6 (2150)
DSXL 135-30	118.9 (3020)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.5 (140)	25.6 (600)	17.7 (450)	21.7 (550)	100.6 (2555)
DSXL 135-36	141.7 (3600)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	21.7 (550)	122 (3100)
DSXL 135-40	159.4 (4050)	149 (135)	12.6 (320)	6.3 (160)	0.4 (10)	5.5 (140)	25.6 (600)	17.7 (450)	21.7 (550)	139.8 (3550)
DSXL 175-30	118.9 (3020)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	100.6 (2555)
DSXL 175-36	141.7 (3600)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	122.0 (3100)
DSXL 175-40	159.4 (4050)	193 (175)	13.8 (350)	5.9 (150)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	139.8 (3550)
DSXL 220-30	118.9 (3020)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	100.6 (2555)
DSXL 220-36	141.7 (3600)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	122.0 (3100)
DSXL 220-40	159.4 (4050)	242 (220)	13.8 (350)	5.5 (140)	0.4 (10)	5.1 (130)	25.6 (600)	17.7 (450)	23.6 (600)	139.8 (3550)
DSXL 220-60	238.2 (6050)	242 (220)	13.8 (350)	3.9 (100)	0.4 (10)	3.9 (100)	25.6 (600)	17.7 (450)	23.6 (600)	200.8 (5100)
DSXL 320-30	118.9 (3020)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (600)	17.7 (450)	25.6 (650)	100.6 (2555)
DSXL 320-36	141.7 (3600)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (600)	17.7 (450)	25.6 (650)	122.0 (3100)
DSXL 320-40	159.4 (4050)	352 (320)	15.7 (400)	5.5 (140)	0.4 (10)	4.7 (120)	25.6 (600)	17.7 (450)	25.6 (650)	139.8 (3550)
DSXL 320-60	238.2 (6050)	352 (320)	15.7 (400)	3.1 (80)	0.4 (10)	3.1 (80)	25.6 (600)	17.7 (450)	25.6 (650)	200.8 (5100)
DSXL 400-40	159.4 (4050)	440 (400)	15.7 (400)	3.1 (80)	0.3 (8)	3.1 (80)	25.6 (600)	23.6 (600)	25.6 (650)	139.8 (3550)
DSXL 400-60	238.2 (6050)	440 (400)	15.7 (400)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (600)	23.6 (600)	25.6 (650)	200.8 (5100)
DSXL 500-60	238.2 (6050)	550 (500)	15.7 (400)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (600)	23.6 (600)	25.6 (650)	200.8 (5100)
DSXL 600-60	238.2 (6050)	660 (600)	16.9 (430)	2.4 (60)	0.3 (8)	2.4 (60)	25.6 (600)	23.6 (600)	26.8 (680)	200.8 (5100)

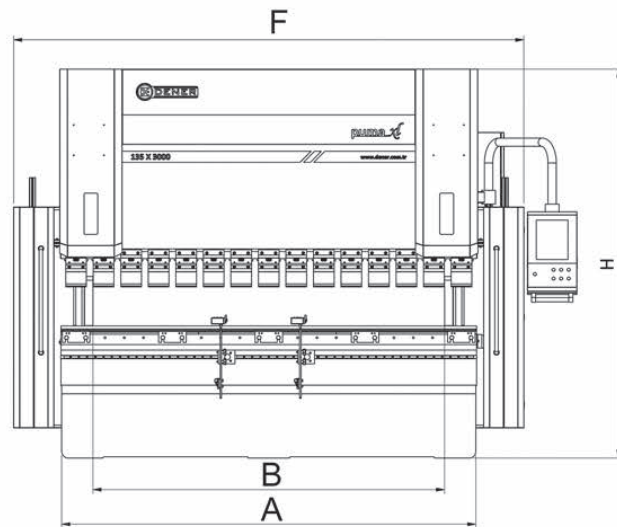
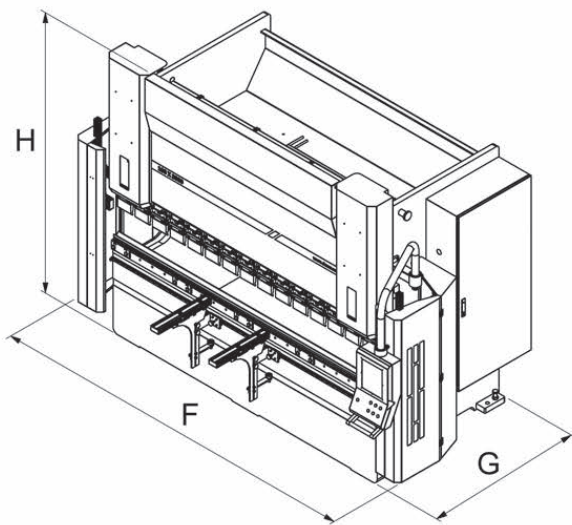


Table width: in (mm)	Table height: in (mm)	Total width: in (mm)	Total depth: in (mm)	Total Height: in (mm)	Electrical Cabinet Swing depth: in (mm)	Control Arm Swing Area: in (mm)	Oil Tank: gal (ltr)	Machine Weight: lb (kg)	Full Load Amps @ 480V (X,R,Z1,Z2,AC)	KVA (X,R,Z1,Z2,AC)
		C	F	G	H					
3.7 (95)	35.4 (900)	86.6 (2200)	84.8 (2155)	77.6 (1970)	32 (812)	36 (915)	26 (100)	9,259 (4,200)	17	14
3.7 (95)	35.4 (900)	102.2 (2595)	84.8 (2155)	77.6 (1970)	32 (812)	36 (915)	26 (100)	11,023 (5,000)	17	14
3.7 (95)	35.4 (900)	126.0 (3200)	82.7 (2100)	90.6 (2300)	32 (812)	36 (915)	50 (190)	15,432 (7,000)	22	18
3.7 (95)	35.4 (900)	147.2 (3740)	96.7 (2455)	90.6 (2300)	32 (812)	36 (915)	50 (190)	17,637 (8,000)	22	18
3.7 (95)	35.4 (900)	126.0 (3200)	94.5 (2400)	116.1 (2950)	32 (812)	36 (915)	50 (190)	19,401 (8,800)	28	23
3.7 (95)	35.4 (900)	149.6 (3800)	94.5 (2400)	116.1 (2950)	32 (812)	36 (915)	50 (190)	21,605 (9,800)	28	23
3.7 (95)	35.4 (900)	169.3 (4300)	94.5 (2400)	118.1 (3000)	32 (812)	36 (915)	50 (190)	23,149 (10,500)	28	23
3.7 (95)	35.4 (900)	189.0 (4800)	94.5 (2400)	116.1 (2950)	32 (812)	36 (915)	50 (190)	26,455 (12,000)	28	23
3.7 (95)	36.2 (920)	149.6 (3800)	101.8 (2585)	120.1 (3050)	32 (812)	36 (915)	79 (300)	24,251 (11,000)	38	32
3.7 (95)	36.2 (920)	171.3 (4350)	101.8 (2585)	120.1 (3050)	32 (812)	36 (915)	79 (300)	27,558 (12,500)	38	32
3.7 (95)	36.2 (920)	189.0 (4800)	102.0 (2590)	120.1 (3050)	32 (812)	36 (915)	79 (300)	29,542 (13,400)	38	32
3.7 (95)	36.2 (920)	149.6 (3800)	102.0 (2590)	120.1 (3050)	32 (812)	36 (915)	79 (300)	26,015 (11,800)	38	32
3.7 (95)	36.2 (920)	171.3 (4350)	102.0 (2590)	120.1 (3050)	32 (812)	36 (915)	79 (300)	29,762 (13,500)	38	32
3.7 (95)	36.2 (920)	189.0 (4800)	102.0 (2590)	120.1 (3050)	32 (812)	36 (915)	79 (300)	31,416 (14,250)	38	32
3.7 (95)	36.2 (920)	269.7 (6850)	120.1 (3050)	120.1 (3050)	32 (812)	36 (915)	79 (300)	46,297 (21,000)	38	32
3.7 (95)	36.2 (920)	149.6 (3800)	102.0 (2590)	121.3 (3080)	32 (812)	36 (915)	106 (400)	31,416 (14,250)	50	42
3.7 (95)	36.2 (920)	171.3 (4350)	102.0 (2590)	121.3 (3080)	32 (812)	36 (915)	106 (400)	34,172 (15,500)	50	42
3.7 (95)	36.2 (920)	190.0 (4825)	102.0 (2590)	121.3 (3080)	32 (812)	36 (915)	106 (400)	36,376 (16,500)	50	42
3.7 (95)	36.2 (920)	269.7 (6850)	122.0 (3100)	121.3 (3080)	32 (812)	36 (915)	106 (400)	60,627 (27,500)	50	42
3.7 (95)	43.1 (1095)	187.0 (4750)	124.0 (3150)	149.6 (3800)	32 (812)	36 (915)	106 (400)	55,116 (25,000)	73	61
3.7 (95)	43.1 (1095)	269.7 (6850)	124.0 (3150)	149.6 (3800)	32 (812)	36 (915)	106 (400)	79,366 (36,000)	73	61
3.7 (95)	42.7 (1085)	275.6 (7000)	129.9 (3300)	155.5 (3950)	32 (812)	36 (915)	106 (400)	121,254 (55,000)	73	61
3.7 (95)	39.4 (1000)	275.6 (7000)	129.9 (3300)	157.5 (4000)	32 (812)	36 (915)	159 (600)	127,868 (58,000)	73	61

CUSTOM BUILT BIG BRAKES

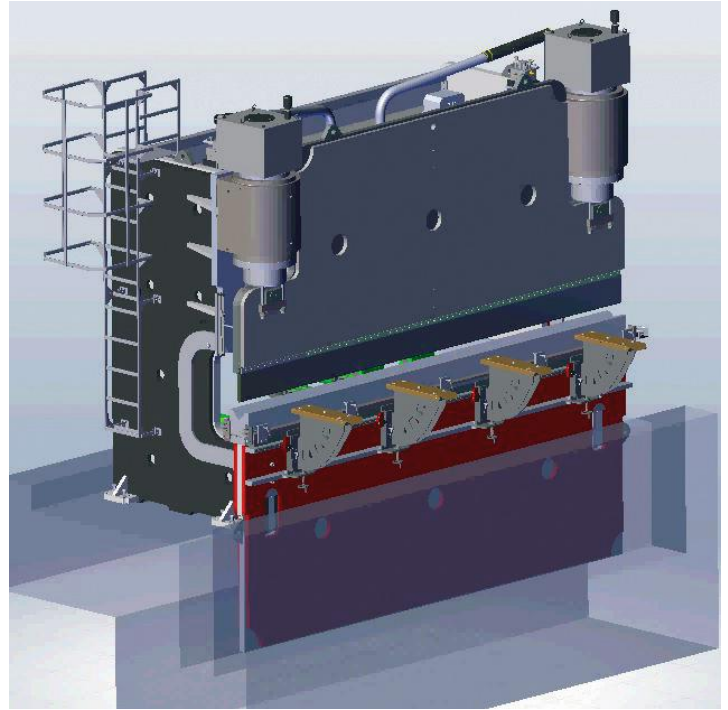
MC Machinery stocks brakes up to 400-40 (440 tons x 13 feet). Larger sizes are built to order. Stroke, open height, sheet feeding systems, sheet lifters, ram style (European, WILA UPB, American), back gauge styles:

- X, R
- X, R, Z1, Z2
- X, R, Z1, Z2, X'
- ATF

are all customized items of your choice.

MC Machinery BIG BRAKES are designed with 3D CAD software utilizing Finite Element Analysis to compute the loading forces and insure a capable and rigid design.

550 ton x 20 foot and larger brakes are delivered to your facility where our team of electrical and mechanical engineers assemble the machine quickly and professionally. Assembly and training is included.



Elite 800-60
(880 ton x 20 feet) with
6 axis ATF back gauge
& 40" ram stroke



Elite 1000-60 (1100 ton x 20 feet) with 6 axis back gauge



Tandem Elite 500-40 (550 ton x 13 feet) (1100 ton x 26 feet tandem)



Elite 1000-70 (1100 ton x 23 feet) with Adjustable v Die



Elite 700-60 (770 ton x 23 feet) with CNC sheet pushers



The Elite XL 600-60 (660 ton x 20 feet)



Special Open Height – Stroke – Throat

:RADBEND

OFFLINE PROGRAMMING AND SIMULATION FOR PRESS BRAKES

RADBEND FROM RADAN IS THE COMPREHENSIVE OFFLINE PROGRAMMING SOLUTION FOR PRESS BRAKES. COMPLETELY INTEGRATED WITH RADAN 3D, IT ALSO PROVIDES A FULL 3D SIMULATION OF THE BENDING PROCESS.

OFFLINE PROGRAMMING

Radbend enables full, accurate 3D-model simulation of the bending process, including advanced features such as automatic bend sequence calculation, automatic tool selection and automatic fingerstop placement, offering simple programming and high productivity.

The ability to program and verify bending operations offline frees up valuable machine time and improves first-off reliability, reducing manufacturing costs. Radbend also eliminates costly mistakes with automatic detection of collisions with both tooling and the machine tool itself.

Radbend is available to provide offline programming and simulation of a wide variety of press brake machinery. Radbend can create full shop floor documentation in print form or a file for viewing on a shop floor viewer and DNC system ensuring access to only controlled data from production office through to shop floor resulting in a 'right first time' manufacturing approach.

radan

HIGHLY AUTOMATED

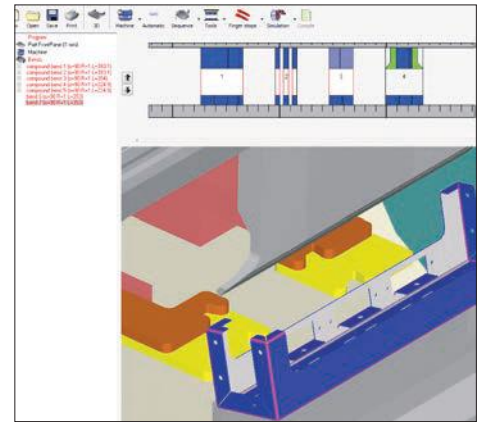
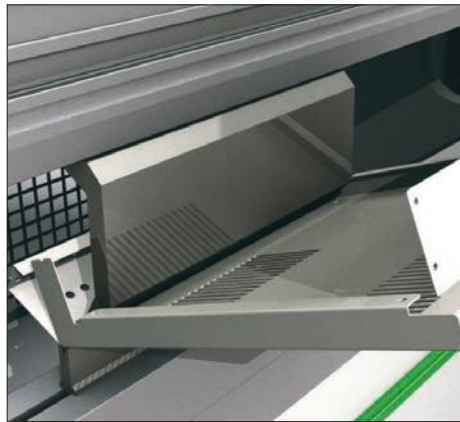
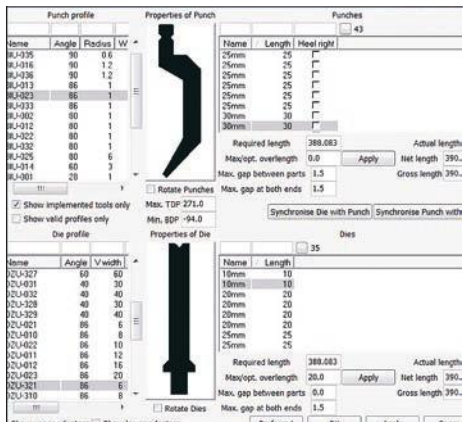
Radbend features high levels of automation. The system examines the part to be programmed and automatically determines a bending sequence taking into account part geometry and best machinery practice.

In addition, fingerstop positions are set automatically to provide reliable positioning.

Radbend's tooling library can incorporate a tooling manufacturer's complete inventory, enabling nonstandard tools to be tested and proven on new products before purchase.



Press brake independent, Radbend can help you to reduce bottlenecks and costs, while increasing efficiency and productivity by enabling you to program and verify your bending operations offline as well as detecting any collisions with the tooling, finger stops and the machine tool itself.



MACHINE INDEPENDENT

Radbend is totally press brake independent. Users are able to program all of their press brakes from one common interface. This offers great flexibility where users can quickly try out several press brakes to ensure the right machine for the job.

DATA IMPORT

Radbend can import data in a range of 2D and 3D formats as well as having specific plug-in interfaces for well known 3D CAD systems.

AUTODESK INVENTOR PLUG-IN

Autodesk Inventor can be fully integrated with Radbend using the plug-in. The Radbend plug-in offers a seamless, accurate and intelligent transfer of data between these two programs.

Taking your part from Autodesk Inventor into Radbend couldn't be more straightforward. Once you are satisfied with your design, simply click on the Radbend icon and your part and associated information gets transported into Radbend.

SOLIDWORKS PLUG-IN

Utilizing the Radbend Plug-in, taking your part from SolidWorks, Standard, Professional or Premium couldn't be more straightforward. Once you are happy with your design, simply click on the Radbend icon and your drawing and associated files are seamlessly transferred into Radbend.

INCREASE PRODUCTIVITY

Once your part has been transferred into Radbend, you will be able to:

- Select the most appropriate machine tool and the appropriate tools to bend the part correctly.
- Provide you with consequences of your tool set up - expected radius, press depth, etc.
- Automatically position fingerstops against every valid face requiring fingerstops.
- Run a full 3D simulation of the bending process detecting any collisions and potential problems.
- Automatically generate complete shopfloor documentation, including setup sheets.

BENEFITS INCLUDE :

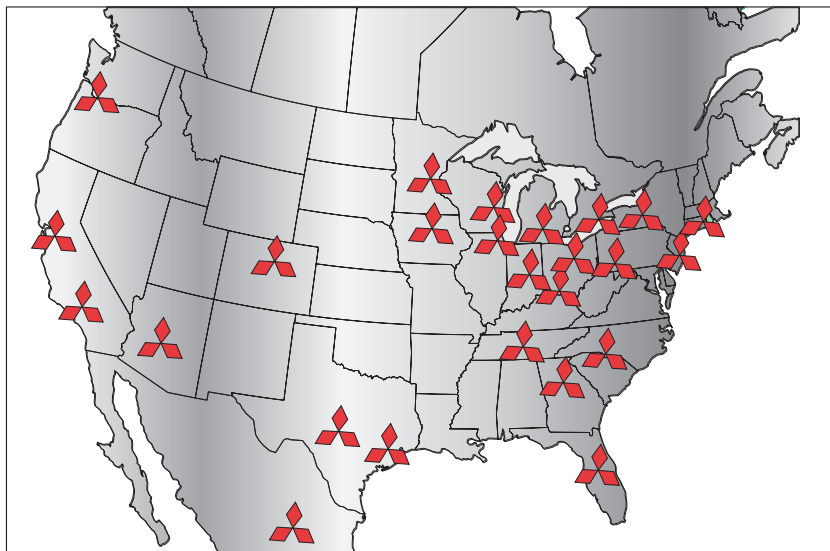
- Reduce downtime through fast and reliable offline programming
- Reduce lead times due to improved efficiency
- Reduce the setup times of machine tool from the availability of manufacturing information
- Fewer design errors, due to the 3D simulation contained within Radbend
- Avoid costly manufacturing errors by making use of the collision checking
- Machine Independent means that you can easily use Radbend on any of your press brake machine tools
- Open up the press brake to a wider audience of employees
- Accurate automatic unfolding, even with imported models
- Increased production flexibility

THE INDUSTRY'S MOST RESPONSIVE SERVICE AND SUPPORT

When you choose a Press Brake from MC Machinery Systems, Inc., you get industry-leading technology for peak performance - but that's just the beginning.

Long before your purchase, you'll know the difference the Mitsubishi Experience can make. Our field service managers and applications engineers have technical expertise and industry specific knowledge, combined with MC Machinery's wide array of machine tools and modular automation options. This potent combination gives the flexibility to deliver a custom system designed to make your business its most efficient and competitive.

From installation and on-site training to support and service to keep you running at peak performance throughout the life of your system, our national service network is just a phone call away. No other company has greater depth of experience and resources than Mitsubishi and MC Machinery Systems Inc.



MC MACHINERY SYSTEMS, INC.

a subsidiary of Mitsubishi Corporation

1500 Michael Drive, Wood Dale, IL 60191 | Tel: 630-616-5920 Fax: 630-616-4068 | www.mcmachinery.com

All machines in this brochure may be pictured with optional equipment.