

1950
• SINCE •

EMIL
MACCHINE
UTENSILI



iBend
HYDRAULIC PRESS BRAKE



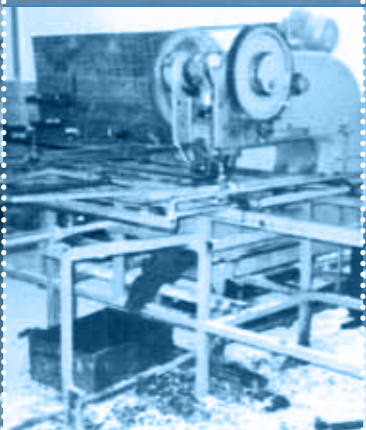
1950

MVD produced its first machine .



1971

The first sheet metal working machine “perforation press” was presented to the market.



1974

The production of “Heavy-duty Press Brakes and Guillotine Shears” started and MVD had the distinction of being the first Turkish manufacturer for heavy press brakes and shears.



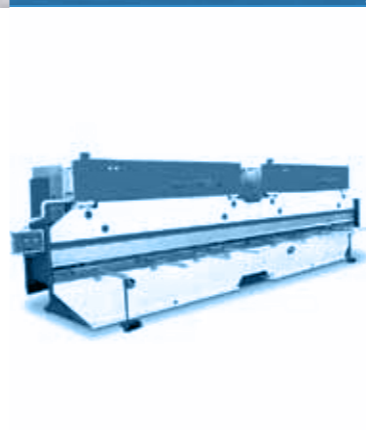
1981

Moved to second factory and added the production of 4 roll bending machines and Expanded Metal presses in the next years. Thus, a great variety of machines were presented in sheet metal working industry.



1994

MVD produced the first tandem press brake in Turkey.



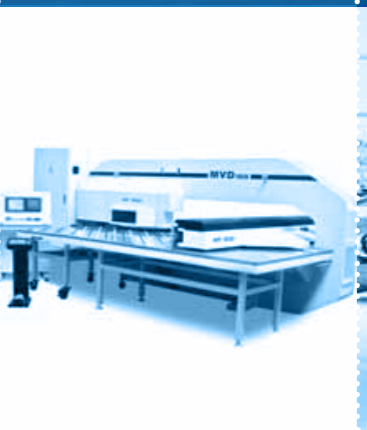
2001

Finalised the CE conformity procedures and had its machines CE marked.



2003

CNC Hydraulic Turret Punch machine was presented to the market.



2011

Plasma cutting machine and Fiber Laser Cutting machines were presented to the market.





Quality High Technology

Quality and service support is accepted as principle. Designing and manufacturing are based on reliability, durability and precision.

Machines are easy to use and are built to be ready for user errors. Machines are designed and analyzed with 3-D supported computer aided programs, precisely machined in moving column CNC machining centres, equipped with world-known equipments and presented to the customers' use after quality control.



iBend A Series

CNC HYDRAULIC PRESS BRAKE



Y1, Y2, X+R (MANUEL)
AXIS POSSIBILITIES
AFFORDABLE, PRODUCTIVE

General Features

- ▶ A series press brake can configure 3 axes (Y1,Y2,X) and maximum 4 axes (Y1,Y2,X,R)
- ▶ A series CNC controller is standard numerically M25 or Cybelec DNC60 or DA-52 optionally .2D Graphical based controller M30, Cybelec DNC880 or Delem DA56 preferable optionally also .
- ▶ Body and upper beam made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precision CNC machining center is a single operation.
- ▶ Cylinders, processed as precision from solid full material and made honed.
- ▶ Pistons, processed from forged steel, hardened, grinding is done, and chrome-coated.
- ▶ Maximum machine performance and high bending accuracy provided by synchronized Hydraulic Cylinders, CNC-controlled, assembly in ideal conditions made the original Germany hydraulic block, Proportional Valves, high quality linear scales
- ▶ Each time the machine automatically goes to the reference.
- ▶ Automatically pressing force adjustment according material and tools criteria
- ▶ Automatic position settings and retract functions each step in bending programing
- ▶ Automatically stroke adjustment
- ▶ Programmable and automatically maximum force limitations for protections tools damage.
- ▶ Bending programs can save memory and recall again, search according material, tools
- ▶ Programmable working speed
- ▶ Manual, Semiautomatic, Full automatically working mode
- ▶ Conical bending features
- ▶ C type Linear Scale holders for body stretch compensations, protect diagonal working
- ▶ Close Loop Synchronized Cylinders controlling on bend processing .
- ▶ Maximum hydraulic pressure protect by safety valve
- ▶ Electronic overload protect system
- ▶ Automatically calculations unfolded length, automatically and programmable bend order features, according to the material thickness, material type, tools features
- ▶ Optionally original wila brand manual or motorized crowning systems

▶ Controller



▶ M25
7" TFT Numerical
Offline Software
Standard



▶ M30
7" Colored
Graphical
Offline Software
Optional



▶ Cybelec DNC 60
6" TFT Numerical
Offline Software
Optional



▶ Cybelec
DNC 600
9" TFT Numerical
Offline Software
Optional



▶ Cybelec DNC 880s
Windows 10"
Colored Graphical
Offline Software
Optional



▶ Delem DA-52
6.4" TFT Numerical
Offline Software
Optional



▶ Delem DA-56
Windows 10"
Colored Graphical
Offline Software
Optional

Standard Equipments

- ▶ Y1,Y2, X axis
- ▶ High Stroke 260 mm
- ▶ Big Throat 400 mm
- ▶ CNC numerical controller M25
- ▶ Original Hoerbiger or Rexroth Hydraulic Systems with CE norms compatible
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ Multi -Functions stand type Control panel and foot pedal with CE norms compatible
- ▶ High Quality accurate linear scale
- ▶ Up to 120 mm/second upper beam approach speed
- ▶ Up to 120mm /second upper beam return speed
- ▶ User friendly ergonomically movable control panel
- ▶ Rigid heavy duty, cnc controlled back gauge guided with ball shaft and slide
- ▶ Movable sliding front support arm system
- ▶ +- 0,05mm precision AC motorized, back gauge system with driver
- ▶ Back gauge X axis range (stroke) 500mm
- ▶ Back gauge speed 100mm /second
- ▶ Manual movable back gauge fingers along of bending length
- ▶ Side protect covers
- ▶ Promecam type top tool clamping system
- ▶ Top tools hardened, grinded standard 835mm lengths, 66,6mm (1260)-105mm (1281) (400 ton and over) high
- ▶ Bottom tools hardened, grinded standard 835 mm lengths, 60x60mm, 4 channels 16/22/35/50 mm (2067)
- ▶ Narrow table or T slot wide table
- ▶ CE conformity light barriers rear of press
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

▶ Back Gauge



▶ Single Axis X (R Manual)
Standard

▶ 2 Axis X + R Back Gauge
Optional

▶ Crowning (Anti-Deflections) System



▶ Original WILA 'Opposing wave' Manual Crowning System
Optional

▶ Original WILA 'Opposing wave' Motorized Crowning System
Optional

▶ Rear Side Safety



▶ Rear side protection cover

▶ Rear Light Barrier
Standard

Optional Equipments

- ▶ Cybelec DNC 60 numerical CNC control unit
- ▶ Delem DA-52 numerical CNC control unit
- ▶ Cybelec DNC 600, numerical, shown of parts on L alpha page CNC control unit
- ▶ M30, 2D graphical colored CNC control unit (automatic search bend order, optimizations collision check), 7 inch, LCD, graphical colored
- ▶ Cybelec DNC 880s 2D graphical colored CNC control unit (automatic search bend order, optimizations, collision check)
- ▶ Delem DA-56, 2D graphical colored CNC control unit (automatic search bend order optimizations collision check)
- ▶ Original WILA 'Opposing wave' Manual Crowning (Anti-deflections) System
- ▶ Original WILA 'Opposing wave' Motorized Crowning (Anti-deflections) System
- ▶ X,R 2 axis back gauge
- ▶ 750mm or 1000mm X axis range (stroke)
- ▶ CE Conformity with AKAS Laser finger protections manual and safety PLC
- ▶ CE Conformity with AKAS Laser finger protections motorized and safety PLC
- ▶ CE Conformity with LASERSAFE Laser finger protections and safety PLC
- ▶ DFS Laser Beams finger protections in front
- ▶ Light Barriers in front (for Tandem applications)
- ▶ Quick Clamping promecam type top tool system
- ▶ Extra back gauge fingers
- ▶ Extra front support arms
- ▶ WILA hydraulic or mechanic top tool clamping system
- ▶ WILA hydraulic or mechanic bottom tool clamping system
- ▶ Hydraulic Promecam type top tool clamping system
- ▶ American type compatible top tool clamping system
- ▶ 500mm throat and 300mm stroke
- ▶ Special stroke, Special throat
- ▶ Extra Control panel foot pedal
- ▶ T slot on Table
- ▶ Heat Exchanger (Oil Cooler)
- ▶ Special Color
- ▶ ROL1 or ROL2- ROL4 top tool clamping systems
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)

▶ Safety



▶ DFS Laser
Optional

▶ Manual Akas Laser
Optional

▶ Motorized Akas Laser
Optional

▶ LaserSafe
Optional

▶ Light Barrier (Tandem)
Optional

▶ Other Equipments



▶ Bottom and Top Tools
Standard

▶ WILA Tool Clamping System
Optional

▶ Sliding Front Support Arms
Standard

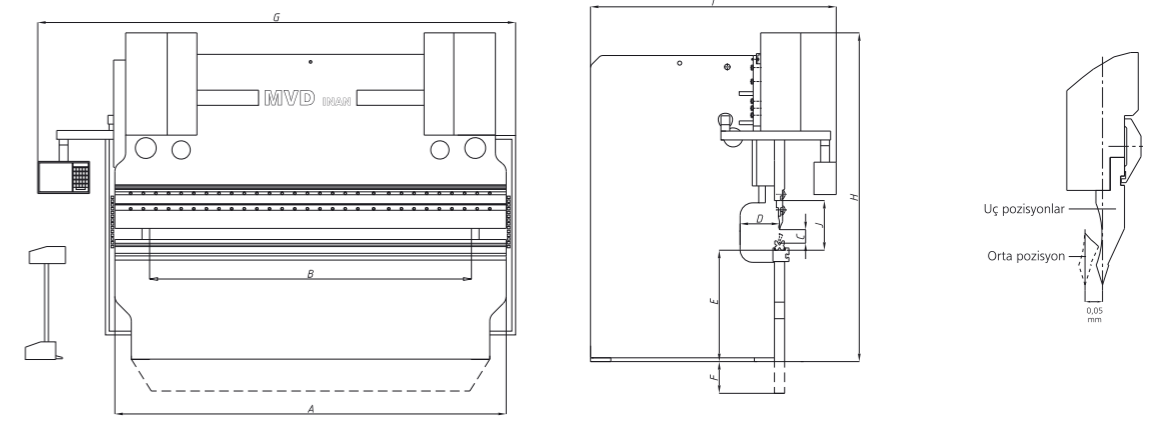
▶ Laser Angle Management System
Optional

▶ ROL 2-ROL 4 Hydraulic Clamping
Optional

▶ Special Throat
Optional

iBend A Series

Technical Features



Technical Table

iBend A Series	Bending Power Force	Bending length	Distance Between Columns	Stroke	Daylight	Throat	Table Height	Table Height Below Ground	Backgauge Speed			Backgauge Stroke	Length	Height	Width	Crowning		Rapid Approach Speed	Pressing Speed	Return Speed	Hydraulic tank	Main motor	Weight
	ton.	A	B	C	J	D	E	F	X Axis	X-R Axis		X Axis	G	H	L	Manual	Motorized	mm/sec	mm/sec	mm/sec	Lt	Kw.	kg
		mm.	mm.	mm.	mm.	mm.	mm.	mm.	X Axis Speed	X Axis Speed	R Axis Speed	mm.	mm.	mm.	mm.								
									(mm/s)	(mm/s)	(mm/s)												
A40-1250	40	1250	1100	260	465	400	870	xx	100	500	300	500	2750	2400	1950	-	-	120	9	100	95	4	3050
A60-2100	60	2100	1600	260	465	400	880	xx	100	500	300	500	3600	2400	2100	-	-	120	10	120	110	4	4850
A60-2600	60	2600	2150	260	465	400	880	xx	100	500	300	500	4150	2400	2150	Optional	Optional	120	10	120	110	5,5	5300
A100-2600	100	2600	2150	260	465	400	880	xx	100	500	300	500	4150	2430	2150	Optional	Optional	120	10	120	110	7,5	5800
A100-3100	100	3100	2600	260	465	400	900	xx	100	500	300	500	4750	2450	2200	Optional	Optional	120	10	120	180	7,5	6450
A135-3100	135	3100	2600	260	465	400	920	xx	100	500	300	500	4750	2500	2500	Optional	Optional	120	10	120	180	11	7600
A175-3100	175	3100	2600	260	465	400	920	xx	100	500	300	500	4750	2600	2675	Optional	Optional	120	10	120	180	15	8800
A220-3100	220	3100	2600	260	465	400	930	xx	100	500	300	500	4800	2730	2700	Optional	Optional	110	10	120	290	18,5	10800
A270-3100	270	3100	2600	260	465	400	950	xx	100	500	300	500	4850	2850	2800	Optional	Optional	100	10	120	290	22	13100
A320-3100	320	3100	2600	260	465	400	970	xx	100	500	300	500	4850	2900	2850	Optional	Optional	100	9	120	290	22	14200
A135-3700	135	3700	3200	260	465	400	930	xx	100	500	300	500	5450	2600	2500	Optional	Optional	120	10	120	180	11	8600
A175-3700	175	3700	3200	260	465	400	940	xx	100	500	300	500	5450	2800	2675	Optional	Optional	120	10	120	180	15	9900
A220-3700	220	3700	3200	260	465	400	940	xx	100	500	300	500	5450	2900	2700	Optional	Optional	110	10	120	290	18,5	12000
A320-3700	320	3700	3200	260	465	400	970	xx	100	500	300	500	5450	3000	2900	Optional	Optional	100	9	120	290	22	15100
A135-4100	135	4100	3200	260	465	400	930	xx	100	500	300	500	5850	2600	2500	Optional	Optional	120	10	120	180	11	9600
A175-4100	175	4100	3200	260	465	400	940	xx	100	500	300	500	5850	2800	2675	Optional	Optional	120	10	120	180	15	11000
A220-4100	220	4100	3200	260	465	400	940	xx	100	500	300	500	5850	2900	2700	Optional	Optional	110	10	120	290	18,5	12900
A270-4100	270	4100	3200	260	465	400	950	xx	100	500	300	500	5850	3000	2800	Optional	Optional	100	10	120	290	22	14700
A320-4100	320	4100	3200	260	465	400	970	xx	100	500	300	500	5850	3050	2850	Optional	Optional	100	9	120	290	22	16300
A400-4100	400	4100	3200	310	550	500	1250	xx	100	500	300	500	5850	3100	3050	-	Optional	90	8,5	90	370	30	20800
A500-4100	500	4100	3200	310	550	500	850	685	100	500	300	500	5850	3150	3050	-	Optional	80	10	80	550	45	26100
A220-4300	220	4300	3700	260	465	400	950	XX	100	500	300	500	6000	3000	2750	Optional	Optional	110	10	120	290	18,5	14100
A270-4300	270	4300	3700	260	465	400	950	XX	100	500	300	500	6000	3050	2850	Optional	Optional	100	10	120	290	22	15600
A320-4300	320	4300	3700	260	465	400	970	XX	100	500	300	500	6000	3150	2900	Optional	Optional	100	9	120	290	22	17200
A220-5100	220	5100	4200	260	465	400	970	XX	100	500	300	500	6900	3100	2800	Optional	Optional	110	10	120	290	18,5	17900
A270-5100	270	5100	4200	260	465	400	970	XX	100	500	300	500	6900	3150	2900	Optional	Optional	110	10	120	290	22	20400
A320-5100	320	5100	4200	260	465	400	1000	XX	100	500	300	500	6900	3200	2950	Optional	Optional	100	9	120	290	22	22800
A400-5100	400	5100	4200	310	550	500	1050	XX	100	500	300	500	6900	3300	3050	-	Optional	90	8,5	90	410	30	26000
A220-6100	220	6100	5100	260	465	400	1050	xx	100	500	300	500	8000	3000	3050	Optional	Optional	110	10	120	400	18,5	24000
A320-6100	320	6100	5100	260	465	400	1100	xx	100	500	300	500	8000	3050	2950	-	Optional	100	9	120	400	22	29000
A400-6100	400	6100	5100	310	550	500	1150	xx	100	500	300	500	8050	3650	3050	-	Optional	90	8,5	90	400	30	34500
A500-6100	500	6100	5100	310	550	500	900	1450	100	500	300	500	8100	3950	3150	-	Optional	80	10	80	550	37	40000
A600-6100	600	6100	5100	360	600	600	900	1500	100	500	300	500	8150	4300	3300	-	Optional	75	9,5	90	550	45	46000
A800-6100	800	6100	5100	410	650	600	900	1550	100	500	300	500	8200	4500	3500	-	Optional	70	8,7	90	640	55	58000
A1000-6100	1000	6100	5100	510	750	600	900	1700	100	500	300	500	8250	4750	3800	-	Optional	65	7,2	90	1000	55	72000

Technical specifications are subject to change without notice.
Special capacity machines can be manufactured upon request.

iBend B Series

CNC HYDRAULIC PRESS BRAKE



2D GRAPHICAL SCREEN
FLEXIBLE FEATURES, HIGH ACCURACY

General Features

- ▶ B series press brake can configure 3 axes (Y1,Y2,X) and up to maximum 6 axes (Y1,Y2,X+R,) or (Y1,Y2,X+R,Z1+Z2)
- ▶ B series CNC controller is standard graphical and numerically, Standard M30 2D Graphical, Cybelec DNC60 or Delem DA-52 . Cybelec DNC880, or DA-56 preferable optionally .also
- ▶ Body and upper beam made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precise CNC machining center is a single operation.
- ▶ Cylinders processed as precision from solid full material and made honed.
- ▶ Pistons, processed from forged steel, hardened, grinding is done, and chrome-coated.
- ▶ Maximum machine performance and high bending accuracy provided by synchronized Hydraulic Cylinders, CNC-controlled, assembly in ideal conditions made the original Germany hydraulic block, Proportional Valves,high quality Givi or Heidenhain optic linear scales
- ▶ Each time the machine automatically goes to the reference.
- ▶ Automatic pressing force adjustment according material and tools criteria
- ▶ Automatic positions settings and retract functions each step in bending programming
- ▶ Automatic stroke adjustment
- ▶ Programmable and automatic maximum force limitations for protections tools damage.
- ▶ Bending programs can save memory and recall again, search according material, tools
- ▶ Programmable working speed
- ▶ Manual, Semiautomatical, Fullautomatical working mode
- ▶ Conical bending features
- ▶ C type Linear Scale holders for body stretch compensations, protect diagonal working
- ▶ Close Loop Synchronized Cylinders controlling on bend processing .
- ▶ Maximum hydraulic pressure protect by safety valve
- ▶ Electronically overload protect system
- ▶ Automatically calculations unfolded length, Automatically and programmable bend order features, according to the material thickness, material type, tools features Standard .2D graphical color controller provided optimizations of automatically search bend order with collisions check for bending parts
- ▶ Optionally original wila brand manual or motorized crowning systems

▶ Controller



▶ M30
7" TFT Colored 2D
Graphical Offline
Software
Standard



▶ Cybelec DNC 60
6" TFT Numerical
Offline Software
Standard



▶ Delem DA-52
7" TFT Numerical
Standard



▶ Cybelec DNC 600
9" TFT Numerical
Offline Software
Optional



▶ Delem DA-56
Windows 10"
Colored 2D Graphical
Optional



▶ Cybelec DNC 880s
Windows 10" Colores
2D Graphical
Offline Software
Optional

Standard Equipments

- ▶ Y1,Y2, X axis
- ▶ High Stroke 260 mm
- ▶ Big Throat 400 mm
- ▶ CNC 2D Graphical colored control unit M30 (Automatic Search bend order optimizations with collision check), 7 inch, LCD,
- ▶ Cybelec DNC60 or Delem DA-52
- ▶ Offline Software for Cybelec and M30
- ▶ Original Hoerbiger or Rexroth Hydraulic Systems with CE norms compatible
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ Multi -Functions stand type Control panel and foot pedal with CE norms compatible
- ▶ High Quality, high accuracy, +- 0,005 mm Heidenhein or Givi optic linear scale
- ▶ Up to 120 mm/second upper beam approach speed
- ▶ Up to 120mm /second upper beam return speed
- ▶ User friendly ergonomically movable control panel
- ▶ Unimec original brand, Rigid heavy duty, cnc controlled back gauge
- ▶ Movable sliding front support arm system
- ▶ +- 0,03mm precision servo motorized, back gauge system with driver
- ▶ Back gauge X axis range (stroke) 750 mm
- ▶ Back gauge speed 500mm /second
- ▶ Manual movable back gauge fingers along of bending length
- ▶ Side protect covers
- ▶ Quick clamping system for promecam type top tool
- ▶ Top tools hardened, grinded standard 835mm lengths, 66,6mm (1260)-105mm (1281) (400 ton and over) high
- ▶ Bottom tools hardened, grinded standard 835 mm lengths, 60x60mm, 4 channels 16/22/35/50 mm (2067)
- ▶ Narrow table or T slot wide table
- ▶ CE conformity light barriers rear of pres
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

▶ Back Gauge



▶ Original Unimec Single Axes X (R Manual) Standard

▶ Original Unimec 2 Axes X + R Back Gauge Optional

▶ Original Unimec 4 Axes X+R+Z1+Z2 Back Gauge Optional

▶ Crowning (Anti-Deflections) System



▶ Original WILA 'Opposing wave' Manual Crowning System Optional

▶ Original WILA 'Opposing wave' Motorized Crowning System Optional

▶ Rear Side Safety



▶ Rear side protection cover

▶ Rear Light Barrier Standard

Optional Equipments

- ▶ Cybelec DNC 600, numerical, shown of parts on L alpha page CNC control unit
- ▶ Cybelec DNC 880s 2D graphical colored CNC control unit (automatic search bend order, optimizations, collision check)
- ▶ Delem DA-56, 2D graphical colored CNC control unit (automatic search bend order optimizations collision check)
- ▶ Delem Profile W Software
- ▶ Original WILA 'Opposing wave' Manual Crowning (Anti-deflections) System
- ▶ Original WILA 'Opposing wave' Motorized Crowning (Anti-deflections) System
- ▶ X,R 2 axis back gauge
- ▶ 1000mm X axis range (stroke)
- ▶ CE Conformity with AKAS Laser finger protections manual and safety PLC
- ▶ CE Conformity with AKAS Laser finger protections Motorized and safety PLC
- ▶ CE Conformity with LASERSAFE Laser finger protections and safety PLC
- ▶ DFS Laser Beams finger protections in front
- ▶ Light Barriers in front (for Tandem applications)
- ▶ Extra back gauge fingers
- ▶ Extra front support arms
- ▶ WILA hydraulic or mechanic top tool clamping system
- ▶ WILA hydraulic or mechanic bottom tool clamping system
- ▶ Hydraulic Promecam type top tool clamping system
- ▶ American type compatible top tool clamping system
- ▶ 500mm throat and 300mm stroke
- ▶ Special stroke, Special throat
- ▶ Extra Control panel foot pedal
- ▶ T slot on Table
- ▶ Heat Exchanger (Oil Cooler)
- ▶ Special Color
- ▶ ROL1 or ROL2- ROL4 top tool clamping systems
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)

▶ Safety



▶ DFS Laser Optional

▶ Manual Akas Laser Optional

▶ Motorized Akas Laser Optional

▶ LaserSafe Optional

▶ Light Barrier (Tandem) Optional

▶ Other Equipments



▶ Bottom and Top Tools Standard

▶ WILA Tool Clamping System Optional

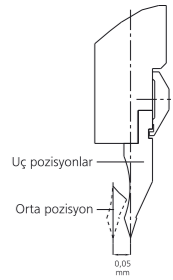
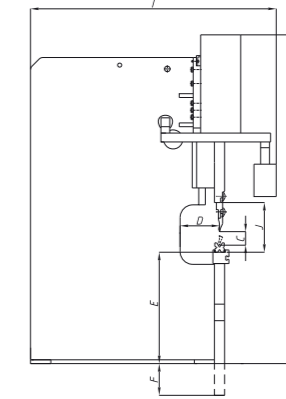
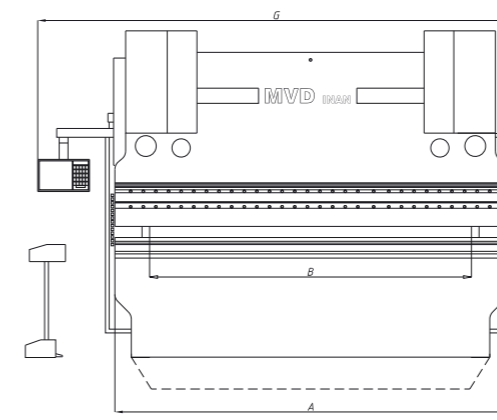
▶ Sliding Front Support Arms Standard

▶ Laser Angle Management System Optional

▶ ROL 2-ROL 4 Hydraulic Clamping Optional

▶ Special Throat Optional

Technical Features



Technical Table

iBend B-Series	Bending Power Force ton.	Bending length		Stroke C	Daylight J	Throat D	Table Height E	Table Height Below Ground F	Backgauge Speed			Backgauge Stroke mm.	Length G	Height H	Width L	Crowning		Rapid Approach Speed mm/sec	Pressing Speed mm/sn.	Return Speed mm/sec	Hydraulic tank Lt	Main motor Kw.	Weight kg
		A	B						X Axis Speed (mm/s)	X-R Axis						Manual	Motorized						
		mm.	mm.							X Axis Speed (mm/s)	X Axis Speed (mm/s)												
		mm.							mm.		mm.					mm.							
B40-1250	40	1250	1100	260	465	400	870	xx	500	500	300	750	2750	2400	1950	-	-	120	9	100	95	4	3050
B60-2100	60	2100	1600	260	465	400	880	xx	500	500	300	750	3600	2400	2100	-	-	120	10	120	110	4	4850
B60-2600	60	2600	2150	260	465	400	880	xx	500	500	300	750	4150	2400	2150	Optional	Optional	120	10	120	110	5,5	5300
B100-2600	100	2600	2150	260	465	400	880	xx	500	500	300	750	4150	2430	2150	Optional	Optional	120	10	120	110	7,5	5800
B100-3100	100	3100	2600	260	465	400	900	xx	500	500	300	750	4750	2450	2200	Optional	Optional	120	10	120	180	7,5	6450
B135-3100	135	3100	2600	260	465	400	920	xx	500	500	300	750	4750	2500	2500	Optional	Optional	120	10	120	180	11	7600
B175-3100	175	3100	2600	260	465	400	920	xx	500	500	300	750	4750	2600	2675	Optional	Optional	120	10	120	180	15	8800
B220-3100	220	3100	2600	260	465	400	930	xx	500	500	300	750	4800	2730	2700	Optional	Optional	110	10	120	290	18,5	10800
B270-3100	270	3100	2600	260	465	400	950	xx	500	500	300	750	4850	2850	2800	Optional	Optional	100	10	120	290	22	13100
B320-3100	320	3100	2600	260	465	400	970	xx	500	500	300	750	4850	2900	2850	Optional	Optional	100	9	120	290	22	14200
B135-3700	135	3700	3200	260	465	400	930	xx	500	500	300	750	5450	2600	2500	Optional	Optional	120	10	120	180	11	8600
B175-3700	175	3700	3200	260	465	400	940	xx	500	500	300	750	5450	2800	2675	Optional	Optional	120	10	120	180	15	9900
B220-3700	220	3700	3200	260	465	400	940	xx	500	500	300	750	5450	2900	2700	Optional	Optional	110	10	120	290	18,5	12000
B320-3700	320	3700	3200	260	465	400	970	xx	500	500	300	750	5450	3000	2900	Optional	Optional	100	9	120	290	22	15100
B135-4100	135	4100	3200	260	465	400	930	xx	500	500	300	750	5850	2600	2500	Optional	Optional	120	10	120	180	11	9600
B175-4100	175	4100	3200	260	465	400	940	xx	500	500	300	750	5850	2800	2675	Optional	Optional	120	10	120	180	15	11000
B220-4100	220	4100	3200	260	465	400	940	xx	500	500	300	750	5850	2900	2700	Optional	Optional	110	10	120	290	18,5	12900
B270-4100	270	4100	3200	260	465	400	950	xx	500	500	300	750	5850	3000	2800	Optional	Optional	100	10	120	290	22	14700
B320-4100	320	4100	3200	260	465	400	970	xx	500	500	300	750	5850	3050	2850	Optional	Optional	100	9	120	290	22	16300
B400-4100	400	4100	3200	310	550	500	1250	xx	500	500	300	750	5850	3100	3050	-	Optional	90	8,5	90	370	30	20800
B500-4100	500	4100	3200	310	550	500	850	685	500	500	300	750	5850	3150	3050	-	Optional	80	10	80	550	45	26100
B220-4300	220	4300	3700	260	465	400	950	XX	500	500	300	750	6000	3000	2750	Optional	Optional	110	10	120	290	18,5	14100
B270-4300	270	4300	3700	260	465	400	950	XX	500	500	300	750	6000	3050	2850	Optional	Optional	100	10	120	290	22	15600
B320-4300	320	4300	3700	260	465	400	970	XX	500	500	300	750	6000	3150	2900	Optional	Optional	100	9	120	290	22	17200
B220-5100	220	5100	4200	260	465	400	970	XX	500	500	300	750	6900	3100	2800	Optional	Optional	110	10	120	290	18,5	17900
B270-5100	270	5100	4200	260	465	400	970	XX	500	500	300	750	6900	3150	2900	Optional	Optional	110	10	120	290	22	20400
B320-5100	320	5100	4200	260	465	400	1000	XX	500	500	300	750	6900	3200	2950	Optional	Optional	100	9	120	290	22	22800
B400-5100	400	5100	4200	310	550	500	1050	XX	500	500	300	750	6900	3300	3050	-	Optional	90	8,5	90	410	30	26000
B220-6100	220	6100	5100	260	465	400	1050	xx	500	500	300	750	8000	3000	3050	Optional	Optional	110	10	120	400	18,5	24000
B320-6100	320	6100	5100	260	465	400	1100	xx	500	500	300	750	8000	3050	2950	-	Optional	100	9	120	400	22	29000
B400-6100	400	6100	5100	310	550	500	1150	xx	500	500	300	750	8050	3650	3050	-	Optional	90	8,5	90	400	30	34500
B500-6100	500	6100	5100	310	550	500	900	1450	500	500	300	750	8100	3950	3150	-	Optional	80	10	80	550	37	40000
B600-6100	600	6100	5100	360	600	600	900	1500	500	500	300	750	8150	4300	3300	-	Optional	75	9,5	90	550	45	46000
B800-6100	800	6100	5100	410	650	600	900	1550	500	500	300	750	8200	4500	3500	-	Optional	70	8,7	90	640	55	58000
B1000-6100	1000	6100	5100	510	750	600	900	1700	500	500	300	750	8250	4750	3800	-	Optional	65	7,2	90	1000	55	72000

Technical specifications are subject to change without notice.
Special capacity machines can be manufactured upon request.

iBend C Series

CNC HYDRAULIC PRESS BRAKE



300 MM STROKE
500 MM THROAT
HIGH SPEED, HIGH PERFORMANCE

General Features

- ▶ C series press brake can configure 4 axes (Y1,Y2,X,R) and up to maximum 12 axes (Y1,Y2,X1,X2,R1,R2,Z1,Z2,AP3,AP4...)
- ▶ C Series CNC control unit standard 2D colored graphical ; Standard Cybelec ModEva10's, Delem 66T or M50'dir. 3D CNC'ls Cybelec ModEva 12 - 15, Delem 69 or M50 PCT preferable optionally .also.
- ▶ Offline software for Cybelec and M50
- ▶ Body and upper beam made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precision CNC machining center is a single operation.
- ▶ Cylinders, processed as precision from solid full material and made honed .
- ▶ Pistons, processed from forged steel, hardened, grinding is done, and chrome-coated.
- ▶ Maximum machine performance and high bending accuracy provided by synchronized Hydraulic Cylinders, CNC-controlled, assembly in ideal conditions made the original Germany hydraulic block, Proportional Valves, high quality Givi or Heidenhain optic linear scales
- ▶ Each time the machine automatically goes to the reference.
- ▶ Automatically pressing force adjustment according material and tools criteria
- ▶ Automatic positions settings and retract functions each step in bending programming
- ▶ Automatic stroke adjustment
- ▶ Programmable and automatically maximum force limitations for protections tools damage.
- ▶ Bending programs can save memory and recall again, search according material, tools
- ▶ Programmable working speed
- ▶ Manual, Semiautomatic, Full automatic working mode
- ▶ Conical bending features
- ▶ C type Linear Scale holders for body stretch compensations, protect diagonal working
- ▶ Close Loop Synchronized Cylinders controlling on bend processing .
- ▶ Maximum hydraulic pressure protect by safety valve
- ▶ Electronic overload protect system
- ▶ Automatically calculations unfolded length, Automatically and programmable bend order features, according to the material thickness, material type, tools features Standard .2D graphical color controller provided optimizations of automatical search bend order with collisions check for bending parts
- ▶ Standard original wila brand manual or motorized crowning systems

▶ Controller



▶ Delem 66 Touch
Windows 12" 3D
Standard



▶ Cybelec ModEva10's
Windows 12"
Graphical
Offline Software
Standard



▶ M50
Windows 15"
Graphical
Offline Software
Standard



▶ Cybelec
ModEva12's
Windows 12" 3D
Offline Software
Optional



▶ ModEva RA Touch
Windows 15" 3D
Offline Software
Optional



▶ Delem 69
Windows 12" 3D
Optional

Standard Equipments

- ▶ Y1, Y2, X, R Axis
- ▶ Exceptional High Stroke 300 mm
- ▶ Exceptional Big Throat 500 mm
- ▶ Cybelec ModEva 10's CNC 2D graphical colored control unit,
- ▶ Delem 66T CNC control unit
- ▶ (Touch Screen 3 D visualizations for machine, parts, tools, backgauge)
- ▶ M50 2D colored graphical CNC control unit (15 inch TFT Windows)
- ▶ Original WILA 'Opposing wave' Manual and Motorized Crowning (Anti-deflections) System
- ▶ Original Hoerbiger or Rexroth Hydraulic Systems with CE norms compatible
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ Multi -Functions stand type Control panel and foot pedal with CE norms compatible
- ▶ High Quality, high accuracy, +- 0,005 mm Heidenhein or Givi optic linear scale
- ▶ Up to 120 mm/second upper beam approach speed
- ▶ Up to 120mm /second upper beam return speed
- ▶ User friendly ergonomically movable control panel
- ▶ Unimec original brand, Rigid heavy duty, cnc controlled back gauge
- ▶ Movable sliding front support arm system
- ▶ +- 0,03mm precision servo motorized, back gauge system with driver
- ▶ Back gauge X axis range (stroke) 750 mm
- ▶ Back gauge speed 500mm /second
- ▶ Manual movable back gauge fingers along of bending length
- ▶ Side protect covers
- ▶ Quick clamping system for promecam type top tool
- ▶ Top tools hardened, grinded standard 835mm lengths, 66,6mm (1260)-105mm (1281) (400 ton and over) high
- ▶ Bottom tools hardened, grinded standard 835 mm lengths, 60x60mm, 4 channels 16/22/35/50 mm (2067)
- ▶ Narrow table or T slot wide table
- ▶ CE conformity light barriers rear of pres
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

▶ Back Gauge



▶ Original Unimec 2 Axis X + R Back Gauge Standard

▶ Original Unimec 4 Axis X+R+Z1+Z2 Back Gauge Optional

▶ Original Unimec 6 Axis X1+X2+R1+R2+Z1+Z2 Back Gauge Optional

▶ Crowning (Anti-Deflections) System



▶ Original WILA 'Opposing wave' Manual Crowning System Standard

▶ Original WILA 'Opposing wave' Motorized Crowning System Optional
*(Standard according size of machine)

▶ Rear Side Safety



▶ Rear side protection cover

▶ Rear Light Barrier Standard

Optional Equipments

- ▶ High Speed options, Approach speed, return speed up to 180 mm/second
- ▶ Cybelec ModEva 12's – 15's, 3 D colored graphical CNC control unit
- ▶ Delem 69, 3 D colored graphical CNC control unit
- ▶ M50 PCT, 3 D colored graphical CNC control unit
- ▶ Delem Profile W Software
- ▶ Original WILA 'Opposing wave' Motorized Crowning (Anti-deflections) System
- ▶ X,R, Z1+Z2 4 axis back gauge
- ▶ X1+X2, R, Z1+Z2 5 axis back gauge
- ▶ X1+X2,R1+R2, Z1+Z2 6 axis back gauge
- ▶ X5 axis
- ▶ 1000mm X axis range (stroke)
- ▶ CE Conformity with AKAS Laser finger protections manual and safety PLC
- ▶ CE Conformity with AKAS Laser finger protections Motorized and safety PLC
- ▶ CE Conformity with LASERSAFE Laser finger protections and safety PLC
- ▶ DFS Laser Beams finger protections in front
- ▶ Light Barriers in front (for Tandem applications)
- ▶ Extra back gauge fingers
- ▶ Extra front support arms
- ▶ WILA hydraulic or mechanic top tool clamping system
- ▶ WILA hydraulic or mechanic bottom tool clamping system
- ▶ Hydraulic Promecam type top tool clamping system
- ▶ American type compatible top tool clamping system
- ▶ Sheet Follower CNC controlled AP3+AP4 axis front support arms by servo Motorized
- ▶ Laser Angle Management System
- ▶ T slot on Table
- ▶ Heat Exchanger (Oil Cooler)
- ▶ Special Color
- ▶ Extra back gauge fingers
- ▶ Extra front support arms
- ▶ Extra Control panel foot pedal
- ▶ ROL1 or ROL2- ROL4 top tool clamping systems
- ▶ Special stroke, Special throat
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)

▶ Safety



▶ DFS Laser Optional

▶ Manual Akas Laser Optional

▶ Motorized Akas Laser Optional

▶ LaserSafe Optional

▶ Light Barrier (Tandem) Optional

▶ Other Equipments



▶ Bottom and Top Tools Standard

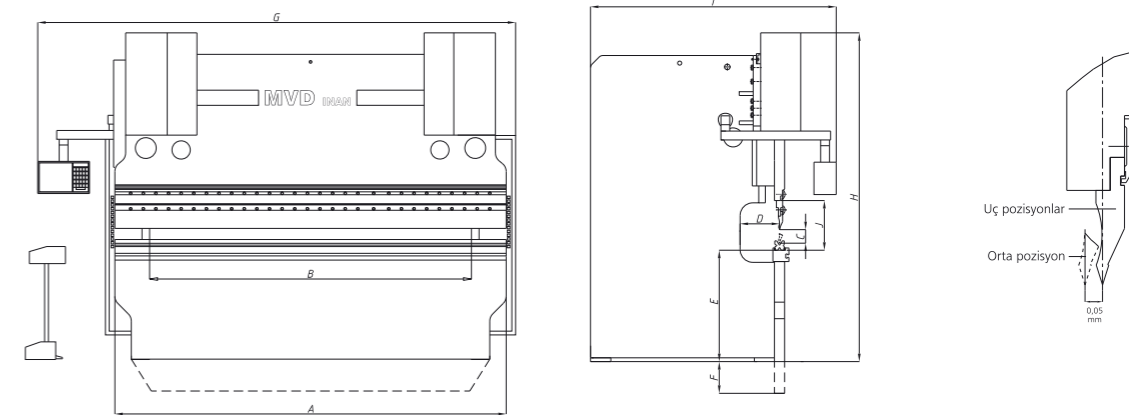
▶ WILA Tool Clamping System Optional

▶ Sliding Front Support Arms Standard

▶ Laser Angle Management System Optional

▶ ROL 2-ROL 4 Hydraulic Clamping Optional

▶ Special Throat Optional



► Technical Table

iBend C Series	Bending Power Force ton.	Bending length mm.	Distance Between Columns mm.	Stroke mm.	Daylight mm.	Throat mm.	Table Height mm.	Table Height Below Ground mm.	Backgauge Speed			Backgauge Stroke mm.	Length mm.	Height mm.	Widht mm.	Crowning		Rapid Approach Speed		Pressing Speed mm/sec	Return Speed		Hydraulic tank Lt	Main motor Kw.	Weight kg
									X Axis	X-R Axis						Manual	Motorized	Standart mm/sec	Optional mm/sec		Standart mm/sec	Optional mm/sec			
									X Axis Speed (mm/s)	X Axis Speed (mm/s)	R Axis Speed (mm/s)														
C40-1250	40	1250	1100	310	515	500	870	xx	500	500	300	750	2750	2500	2200	-	-	120	180	10	100	150	95	4	3450
C60-2100	60	2100	1600	310	515	500	880	xx	500	500	300	750	3600	2500	2300	-	-	120	180	11	120	180	110	4	5250
C60-2600	60	2600	2150	310	515	500	880	xx	500	500	300	750	4150	2500	2350	Standart	Optional	120	180	11	120	180	110	5,5	5700
C100-2600	100	2600	2150	310	515	500	880	xx	500	500	300	750	4150	2530	2350	Standart	Optional	120	180	11	120	180	110	7,5	6250
C100-3100	100	3100	2600	310	515	500	900	xx	500	500	300	750	4750	2550	2400	Standart	Optional	120	180	11	120	180	180	7,5	6800
C135-3100	135	3100	2600	310	515	500	920	xx	500	500	300	750	4750	2600	2700	Standart	Optional	120	180	11	120	180	180	11	8050
C175-3100	175	3100	2600	310	515	500	920	xx	500	500	300	750	4750	2700	2875	Standart	Optional	120	180	11	120	180	180	15	9150
C220-3100	220	3100	2600	310	515	500	930	xx	500	500	300	750	4800	2830	2900	Standart	Optional	110	160	11	120	180	290	18,5	11200
C270-3100	270	3100	2600	310	515	500	950	xx	500	500	300	750	4850	2950	3000	Standart	Optional	100	150	11	120	170	290	22	13450
C320-3100	320	3100	2600	310	515	500	970	xx	500	500	300	750	4850	3000	3050	Standart	Optional	100	140	11	120	170	290	22	14600
C135-3700	135	3700	3200	310	515	500	930	xx	500	500	300	750	5450	2700	2700	Standart	Optional	120	180	11	120	180	180	11	8950
C175-3700	175	3700	3200	310	515	500	940	xx	500	500	300	750	5450	2900	2875	Standart	Optional	120	180	11	120	180	180	15	10250
C220-3700	220	3700	3200	310	515	500	940	xx	500	500	300	750	5450	3000	2900	Standart	Optional	110	160	11	120	180	290	18,5	12400
C320-3700	320	3700	3200	310	515	500	970	xx	500	500	300	750	5450	3100	3100	Standart	Optional	100	140	11	120	170	290	22	15500
C135-4100	135	4100	3200	310	515	500	930	xx	500	500	300	750	5850	2700	2700	Standart	Optional	120	180	11	120	180	180	11	9950
C175-4100	175	4100	3200	310	515	500	940	xx	500	500	300	750	5850	2900	2875	Standart	Optional	120	180	11	120	180	180	15	11400
C220-4100	220	4100	3200	310	515	500	940	xx	500	500	300	750	5850	3000	2900	Standart	Optional	110	160	11	120	180	290	18,5	13350
C270-4100	270	4100	3200	310	515	500	950	xx	500	500	300	750	5850	3100	3000	Standart	Optional	100	150	11	120	170	290	22	15050
C320-4100	320	4100	3200	310	515	500	970	xx	500	500	300	750	5850	3150	3050	Standart	Optional	100	140	11	120	170	290	22	16700
C400-4100	400	4100	3200	310	550	500	1250	xx	500	500	300	750	5850	3200	3250	-	Standart	90	120	10	90	130	370	30	20800
C500-4100	500	4100	3200	310	550	500	850	685	500	500	300	750	5850	3250	3250	-	Standart	80	100	10	80	120	550	45	26100
C220-4300	220	4300	3700	310	515	500	950	XX	500	500	300	750	6000	3100	2950	Standart	Optional	110	160	11	120	180	290	18,5	14450
C270-4300	270	4300	3700	310	515	500	950	XX	500	500	300	750	6000	3150	3050	Standart	Optional	100	150	11	120	170	290	22	15950
C320-4300	320	4300	3700	310	515	500	970	XX	500	500	300	750	6000	3250	3100	Standart	Optional	100	140	11	120	170	290	22	17550
C220-5100	220	5100	4200	310	515	500	970	XX	500	500	300	750	6900	3200	3000	Standart	Optional	110	160	11	120	160	290	18,5	18300
C270-5100	270	5100	4200	310	515	500	970	XX	500	500	300	750	6900	3250	3100	Standart	Optional	110	150	11	120	150	290	22	20800
C320-5100	320	5100	4200	310	515	500	1000	XX	500	500	300	750	6900	3300	3100	Standart	Optional	100	140	11	120	150	290	22	23200
C400-5100	400	5100	4200	310	550	500	1050	XX	500	500	300	750	6900	3400	3150	-	Standart	90	120	10	90	110	410	30	26000
C220-6100	220	6100	5100	310	515	500	1050	xx	500	500	300	750	8000	3100	3000	Standart	Optional	110	160	11	120	150	400	18,5	24500
C320-6100	320	6100	5100	310	515	500	1100	xx	500	500	300	750	8000	3150	3100	-	Standart	100	140	11	120	140	400	22	29450
C400-6100	400	6100	5100	310	550	500	1150	xx	500	500	300	750	8050	3650	3200	-	Standart	90	120	10	90	110	400	30	34500
C500-6100	500	6100	5100	310	550	500	900	1450	500	500	300	750	8100	3950	3200	-	Standart	80	100	10	80	100	550	37	40000
C600-6100	600	6100	5100	360	600	600	900	1500	500	500	300	750	8150	4300	3300	-	Standart	75	-	10	90	-	550	45	46000
C800-6100	800	6100	5100	410	650	600	900	1550	500	500	300	750	8200	4500	3500	-	Standart	70	-	9	90	-	640	55	58000
C1000-6100	1000	6100	5100	510	750	600	900	1700	500	500	300	750	8250	4750	3700	-	Standart	65	-	8	90	-	1000	55	72000

Technical specifications are subject to change without notice.

Special capacity machines can be manufactured upon request.

iBend NC Series

CONVENTIONAL NC HYDRAULIC PRESS BRAKE

Standard Equipments

- ▶ Y, X Axes
- ▶ NC control unit
- ▶ Elgo P40
- ▶ Original Hoerbig or Rexroth Hydraulic Systems with CE norms compatible
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ Control panel and foot pedal with CE norms compatible
- ▶ User friendly ergonomically movable control panel
- ▶ Motorized programmable back gauge
- ▶ Front Support Arms
- ▶ Back gauge X axis range (stroke) 500mm
- ▶ Manual movable back gauge fingers along of bending length
- ▶ Side protect covers
- ▶ Promecam type top tool clamping system
- ▶ Top tools hardened, grinded standard 835mm lengths, 66,6mm (1260)-105mm (1281) (400 ton and over) high
- ▶ Bottom tools hardened, grinded standard 835 mm lengths, 60x60mm, 4 channels 16/22/35/50 mm (2067)
- ▶ Narrow Table or double sided T slot wide table
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz



Optional Equipments

- ▶ Cybelec Touch 6 control unit (Touch Screen colored)
- ▶ Original WILA 'Opposing wave' Manual Crowning (Anti-deflections) System
- ▶ 750mm or 1000mm X axis range (stroke)
- ▶ CE Conformity with AKAS Laser finger protections manual and safety PLC
- ▶ DFS Laser Beams finger protections in front
- ▶ Quick Clamping promecam type top tool system
- ▶ American type compatible top tool clamping system
- ▶ Movable Sliding Front support arms
- ▶ Extra backgauge fingers
- ▶ Extra front support arms
- ▶ Heat Exchanger (Oil Cooler)
- ▶ CE conformity light barriers rear of pres
- ▶ CE conformity Light Barriers in front (for Tandem applications)
- ▶ Extra backgauge fingers
- ▶ Extra front support arms
- ▶ Heat Exchanger (Oil Cooler)
- ▶ Special Color
- ▶ ROL1 or ROL2- ROL4 top tool clamping systems
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)

▶ Controller



▶ Elgo P40 Standard



▶ Cybelec Touch 6 Optional

▶ Technical Table

NC Series	Bending Power Force	Bending Length	Distance Between Columns	Stroke	Daylight	Throat	Table Height	Table Height Below Ground	Length	Height	Width	Rapid Approach Speed	*Pressing speed	Return Speed	Main motor	Weight
	ton.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm/s	mm/s	mm/s	kW	Kg
NC 25/090	90	2600	2150	140	345	300	880	xx	4350	2300	2200	80	9	80	5,5	5500
NC 30/090	90	3100	2550	140	345	300	900	xx	4750	2300	2200	80	9	80	5,5	6500
NC 30/120	120	3100	2550	155	360	300	920	xx	4750	2450	2500	80	9	80	11	7500
NC 30/160	160	3100	2550	180	385	300	920	xx	4750	2550	2675	80	9	80	15	8500
NC 30/200	200	3100	2550	200	405	300	920	xx	4800	2650	2700	100	10	100	18,5	10000
NC 30/225	225	3100	2550	200	405	300	930	xx	4800	2680	2700	100	10	100	18,5	11000
NC 30/260	260	3100	2550	250	455	400	930	xx	4850	2750	2800	80	8	80	18,5	13000
NC 30/300	300	3100	2550	250	455	400	940	xx	4850	2770	2850	80	8	80	18,5	13500
NC 30/400	400	3100	2550	300	505	500	900	350	4950	3000	3050	80	8	70	30	20000
NC 30/500	500	3100	2550	300	555	500	900	450	5000	3200	3150	80	7	70	30	23000
NC 30/600	600	3100	2550	350	600	500	900	550	5050	3400	3300	80	7	70	45	28000
NC 35/120	120	3600	3100	150	355	300	930	xx	5350	2500	2500	80	9	80	11	9000
NC 35/160	160	3600	3100	180	385	300	940	xx	5350	2750	2675	80	8	80	15	10000
NC 35/225	225	3600	3100	200	405	300	940	xx	5350	2850	2700	100	10	100	18,5	12500
NC 35/260	260	3600	3100	250	455	400	950	xx	5400	2870	2800	80	8	80	18,5	14000
NC 35/300	300	3600	3100	250	455	400	970	xx	5400	2900	2850	80	8	80	18,5	14500
NC 40/120	120	4100	3100	150	355	300	930	xx	5600	2470	2500	80	9	80	11	10000
NC 40/160	160	4100	3100	180	385	300	940	xx	5600	2750	2675	80	9	80	15	11500
NC 40/200	200	4100	3100	200	405	300	940	xx	5600	2820	2700	100	10	100	18,5	12500
NC 40/225	225	4100	3100	200	405	300	940	xx	5600	2850	2700	100	10	100	18,5	13500
NC 40/260	260	4100	3100	250	455	400	950	xx	5650	2870	2800	80	8	80	18,5	15000
NC 40/300	300	4100	3100	250	455	400	970	xx	5650	2900	2850	80	8	80	18,5	15500
NC 40/400	400	4100	3100	300	505	500	900	500	5850	3100	3050	70	8	80	30	24000
NC 40/500	500	4100	3100	300	555	500	900	650	5900	3250	3150	70	8	80	30	29000
NC 40/600	600	4100	3100	350	600	500	900	750	5900	3350	3300	70	7	80	45	33000
NC 60/200	200	6100	4100	200	405	500	1040	xx	7950	3050	2750	100	10	100	18,5	23000
NC 60/260	260	6100	4100	250	455	500	900	900	8000	3350	2950	80	8	80	18,5	28000
NC 60/300	300	6100	4100	250	455	500	900	950	8000	3400	3000	80	8	80	18,5	30000
NC 60/400	400	6100	4100	300	605	500	900	1150	8050	3650	3050	80	8	70	30	40000
NC 60/500	500	6100	5100	300	605	500	900	1450	8100	3950	3150	80	7,5	70	30	45000
NC 60/600	600	6100	5100	350	655	500	900	1500	8150	4300	3300	80	6	60	45	52000

Technical specifications are subject to change without notice. Special capacity machines can be manufactured upon request.

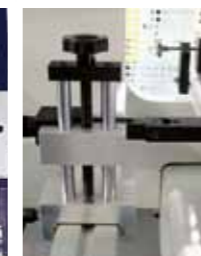
▶ Equipments



▶ DFS Laser Optional



▶ Manual Akas Laser Optional



▶ Gauge Fingers



▶ Front Support Arm



▶ Back Gauge



▶ Original Wila Brand Manual Crowning (Anti Deflections) Optional

Special Applications



▶ 6100-600 ton Tandem

▶ 4100-800 ton

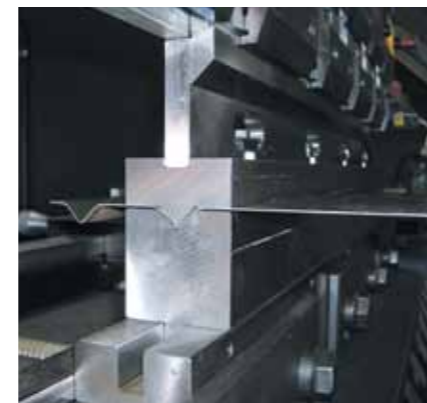
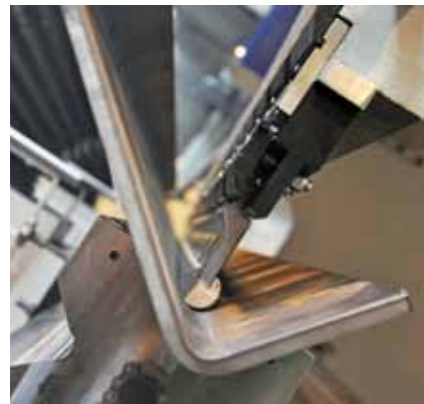
▶ 8100-800 ton Tandem



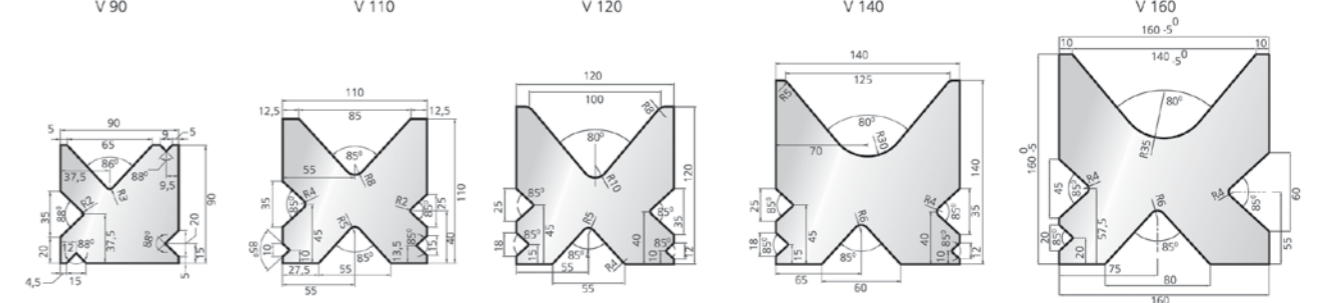
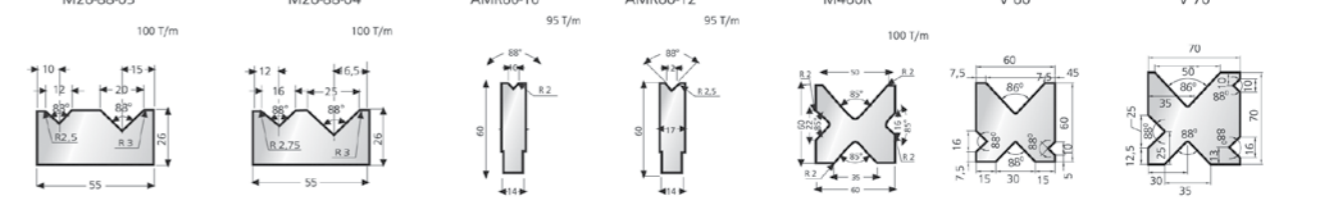
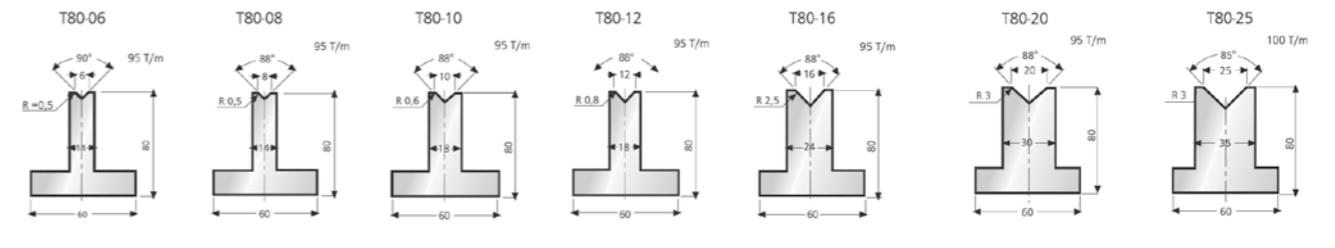
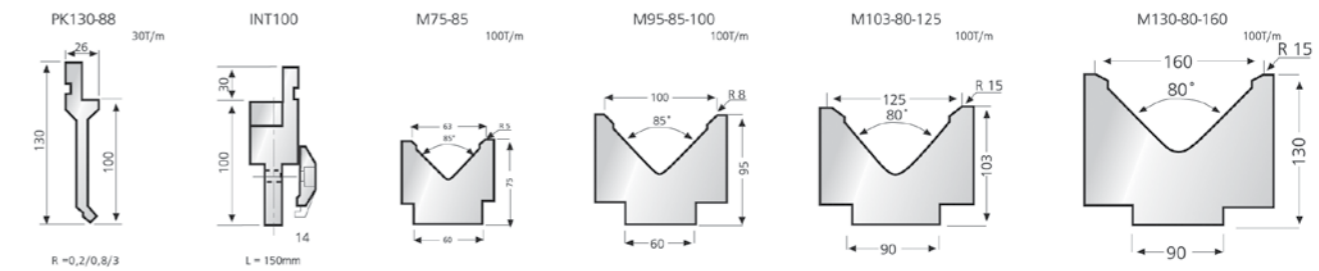
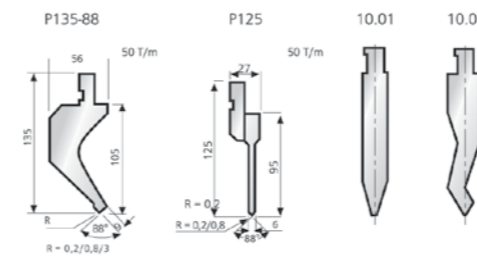
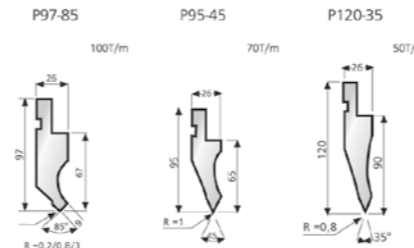
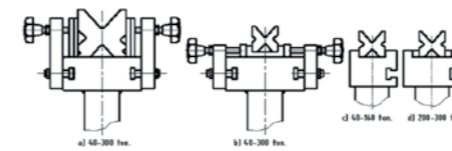
▶ Tandem Machine with 1250mm Throat



▶ 8100-500 ton



Tools



		Bending Chart																						
		450 N/mm ² (C=1) P (T/m)																						
VRB	A	B																						
		0.5	0.8	1	1.2	1.5	2	2.5	3	4	5	6	8	10	12	15	20	25	30					
4	0.7	26	4	10.5																				
6	0.9	3.9	2.6	6.9	10.6	15.3																		
8	1.5	5.2	2	5.5	8	11.5	18																	
10	1.7	6.5		4.1	6.5	9.5	14.5	26																
12	2	7.8			5.5	8	12	21.5	33.5															
18	2.7	10.4				6	9	16	25	36														
20	3.4	13					7.5	13	20	29	52													
24	3.9	15.6						10.6	17	24	43	67												
30	5	20							14	19	34	54	77											
35	6	23								17	30	46	66											
40	7	26								15	26	40	58	103										
50	8.5	32									21	32	46	82	120									
65	9	36										30	42	75	117									
90	10	39											27	39	69	107								
70	11.7	45												33	59	92	132							
80	13.5	52												29	52	80	116	180						
95	15	58													46	71	103	160						
103	17	65														41	64	93	144					
120	20	78															54	77	120					
140	24	91																66	103	183				
160	25	104																	90	160	250			
203	31	130																		72	128	200		
230	39	163																			102	160	230	
300	47	195																				85	133	192



EMIL Macchine Utensili

via Bulgaria, 24

41121 Modena

Tel.: +39 059 311 574

Fax: +39 059 454 338

Skype: EMIL MACCHINE UTENSILI SRL

email: info@emusrl.com