

A new generation of CNC press-brakes. High precision, European design, efficient and reliable. Probably the best price / quality ratio in the world.

# ULTIMA TECHNICA MINI BEND



## DERATECH

Company  
Introduction

PROBABLY THE BEST PRICE/QUALITY  
RATIO IN THE WORLD!



## DERATECH GROUP

Deratech is specialized in designing and manufacturing sheet metal working machines. The Deratech headquarters for research, design and assembly are based in Belgium. Subsidiaries all over the world (Australia, China, Germany, Netherlands, Thailand, India,...) and carefully selected partners provide a world class advice, sales installation and service.

Shanghai Deratech CNC Machine Tool Co. Ltd, is the new production & technology center of Deratech - Belgium in China. The advanced European design, quality and technology of our R&D center in Belgium together the experienced engineering team of Shanghai Deratech will result in high quality production of sheet metal working machinery. All processing is designed in 3D by our technical department to obtain a high precision on all the manufactured machine parts.

**Deratech is your partner in sheet metal working machinery.**

## NEXT GENERATION ULTIMA HYBRID CNC PRESS BRAKE

The Ultima hybrid is a new generation of press brake, powered by AC servo motors and variable speed pumps. The Ultima Hybrid is a fast, precise, energy saving and environmentally friendly state of the art press brake.

The Ultima Hybrid can save up to 60% energy in contrast to a standard Ultima in same execution, this without losing any speed or production capacity. There will be only a little energy consumption when the machine is idle, only from the operator pushes the foot pedal till the upper beam is back in the up position the motors will be powered on and will use energy. So no flows of oil to the tank when the machine is idle, resulting in not heating the oil. The flow rate of the hydraulic pump operates proportionally to the drive speed of the electric motor. The CNC controller transfers the pressure/volume flow target values to the control during the running operation, system pressure is measured by a pressure transducer and is also sent to the servo controller. Based on the control deviation, the built-in PID controller calculates the required motor speed and adapts it accordingly to the existing system requirements of flow rate and pressure.

Deratech Ultima Hybrid in std. execution: Y1-Y2, X, R, V with Touch Screen controller.

As option the Hybrid can be equipped with Z1-Z2, X3, X1-X2/R1-R2/Z1-Z2, CNC bending aid, automatic sheet thickness measuring, angle measuring...

Invest in the future now. Due to increasing energy costs, variable speed pump machines solutions are on the rise... with energy savings between 30% and 60%... Reliability of powerful hydraulics, as well as energy efficiency and dynamics of compact electronics play hand in hand with the variable speed pumps.



Energy saving



Green Technology

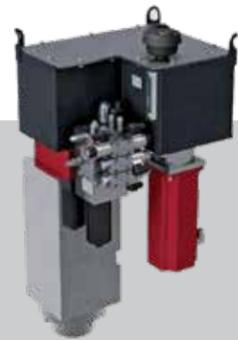


High efficiency



Low noise

# PRODUCT FEATURES



## 1 HOERBIGER ePrAX®

ePrAX® Germany HOERBIGER ePrAX® control new electrical servo drive system-PrAX is intelligent, no oil tube, fully closed electrical servo drive system High efficiency and energy saving, oil tank capacity reduced by 70% Fast-performance and duty cycle reduction 10% Compared with the traditional system, energy efficiency 50% up. The positioning accuracy of precision-up to 5µm Integrated servo pump, lower-noise at work Integrated pressure filters ensures high stability and long service life.



## 2 CNC CONTROLLER

### CNC S650W

**Versatile Pc, gorgeous 15" 4:3 High-resolution touch screen**  
No limit in both performances and flexibility. The powerful built-in Pc allows having on the machine a real 3D cad cam (metallix, radan, esa.) Finger-tip work piece design. Direct import of tools shapes (.dxf files) and management of tool library. Tool and die holders management. Angle measurement and correction with all existing devices is available.



### CNC S660W

**The widest touch screen available on press brake CNC 19" multi touch**  
A totally renewed interface, specifically designed for multi touch screen, is available as an alternative to the well-known Esa interface used on S650W Make the best of any 3D cad cam you would like to install in the CNC. Finger-tip work piece design. Finger-tip work piece design. Direct import of tools shapes (.dxf files) and management of tool library. Tool and die holders, management. Angle measurement and correction with all existing devices is available.



## 3 High precision upper clamps with vertical toolchange

A Precision quick-clamping device: set-up fast and convenient, reduce labor intensity and improve production efficiency.



## 4 High precision and stable backgauge systems

Unique dual linear guide rail structure, ensuring excellent positioning accuracy. Design of multistage gear, increase the positioning range, excellent value.



## 5 Patented throat distortion compensation device

Precise measured amount of distortion and feedback, ensure that the bending precision. And can effectively prevent the non-standard collision linear scale of the workpiece.



## 6 High precision mechanical crowning device

High-precision wedge compensation device by CNC control, got the precise compensation, ensuring high quality bending accuracy.



## 7 Moveable front support system

to help you to bend, make a comfortable and efficient working

TOP VIEW HYBRID CNC PRESS BRAKE



ULTIMA-M HEAVY DUTY UBB-D

Model	Force (kN)	Max. bending length (mm)	Distance between uprights (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height (mm)	Main power (kw)	Oil volume (L)	Speed (mm/s)			Dimensions (mm)			Weight (kg)
									Approaching speed	Working speed	Returning speed	Length	Width	Height	
UBB-400/3200D	4000	3200	2600	450	300	600	2×15	2×120	110	8	110	3460	2350	3600	25700
UBB-400/4000D	4000	4000	3200	450	300	600	2×15	2×120	110	8	110	4260	2350	3600	28500
UBB-400/5000D	4000	5000	4000	450	300	600	2×15	2×120	100	8	100	5260	2350	4700	34700
UBB-400/6000D	4000	6000	5000	450	300	600	2×15	2×120	100	8	100	6260	2350	5000	40000
UBB-400/7000D	4000	7000	6000	450	300	600	2×15	2×120	100	8	100	7260	2350	5500	46000
UBB-400/8000D	4000	8000	7000	450	300	600	2×15	2×120	100	8	100	8260	2350	5900	54000
UBB-500/3200D	5000	3200	2600	450	300	600	2×15	2×120	90	7	90	3480	2580	4600	33000
UBB-500/4000D	5000	4000	3200	450	300	600	2×15	2×120	90	7	90	4260	2580	4700	37000
UBB-500/5000D	5000	5000	4000	450	300	600	2×15	2×120	90	7	90	5260	2580	4900	42000
UBB-500/6000D	5000	6000	5000	450	300	600	2×15	2×120	90	7	90	6260	2580	5200	47000
UBB-500/7000D	5000	7000	6000	450	300	600	2×15	2×120	90	7	90	7260	2580	5500	55000
UBB-500/8000D	5000	8000	7000	450	300	600	2×15	2×120	90	7	90	8260	2580	5900	62000
UBB-600/4000D	6000	4000	3200	500	300	600	2×22.7	2×180	90	7	90	4260	3530	4950	46000
UBB-600/5000D	6000	5000	4000	600	300	700	2×22.7	2×180	90	7	90	5260	3530	5050	52000
UBB-600/6000D	6000	6000	5000	600	300	700	2×22.7	2×180	90	7	90	6260	3530	5200	59000
UBB-600/7000D	6000	7000	6000	600	300	700	2×22.7	2×180	90	7	90	7260	3530	5600	68000
UBB-600/8000D	6000	8000	7000	600	350	700	2×22.7	2×180	90	7	90	8260	3530	6000	76000
UBB-700/4000D	7000	4000	3200	600	350	700	2×22.7	2×180	90	7	90	4260	3600	5300	52000
UBB-700/5000D	7000	5000	4000	600	350	700	2×22.7	2×180	90	7	90	5260	3600	5500	58000
UBB-700/6000D	7000	6000	5000	600	350	700	2×22.7	2×180	90	7	90	6260	3600	5700	65000
UBB-700/7000D	7000	7000	6000	600	350	700	2×22.7	2×180	90	7	90	7260	3600	5900	73000
UBB-700/8000D	7000	8000	7000	600	350	700	2×22.7	2×180	90	7	90	8260	3600	6200	81000
UBB-800/4000D	8000	4000	3200	600	350	800	2×26	2×220	90	7	90	4260	3650	5700	67000
UBB-800/5000D	8000	5000	4000	600	350	800	2×26	2×220	90	7	90	5260	3650	5900	71000
UBB-800/6000D	8000	6000	5000	600	350	800	2×26	2×220	90	7	90	6260	3650	6000	79000
UBB-800/7000D	8000	7000	6000	600	350	800	2×26	2×220	90	7	90	7260	3650	6200	87000
UBB-800/8000D	8000	8000	7000	600	350	800	2×26	2×220	90	7	90	8260	3650	6600	97000
UBB-1000/5000D	10000	5000	4000	700	400	800	2×34	2×420	70	7	70	5280	3900	6500	99000
UBB-1000/6000D	10000	6000	5000	700	400	800	2×34	2×420	70	7	70	6280	3900	6600	108000
UBB-1000/7000D	10000	7000	6000	700	400	800	2×34	2×420	70	7	70	7280	3900	6800	119000
UBB-1000/8000D	10000	8000	7000	700	400	800	2×34	2×420	70	7	70	8280	3900	7000	130000
UBB-1000/10000D	10000	10000	9000	700	400	800	2×34	2×420	70	7	70	10280	3900	7600	157000
UBB-1000/12000D	10000	12000	10000	700	400	800	2×34	2×420	70	7	70	12280	3900	8500	184000
UBB-1200/5000D	12000	5000	4000	700	400	800	2×34	2×420	60	6	60	5280	4100	6700	114000
UBB-1200/6000D	12000	6000	5000	700	400	800	2×34	2×420	60	6	60	6280	4100	6900	124000
UBB-1200/7000D	12000	7000	6000	700	400	800	2×34	2×420	60	6	60	7280	4100	7100	135000
UBB-1200/8000D	12000	8000	7000	700	400	800	2×34	2×420	60	6	60	8280	4100	7300	148000
UBB-1200/10000D	12000	10000	9000	700	400	800	2×34	2×420	60	6	60	10280	4100	7900	178000
UBB-1200/12000D	12000	12000	10000	700	400	800	2×34	2×420	60	6	60	12280	4100	8800	210000

ULTIMA-UBB UBB-D

Model	Force (kN)	Max. bending length (mm)	Distance between uprights (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height (mm)	Main power (kw)	Oil volume (L)	Speed (mm/s)			Dimensions (mm)			Weight (kg)
									Approaching speed	Working speed	Returning speed	Length	Width	Height	
UBB-110/2500D	1100	2500	2000	400	225	500	2×5.6	2×70	300 (220)	15 (10)	220	3010	1670	2720	7900
UBB-110/3200D	1100	3200	2700	400	225	500	2×5.6	2×70	300 (220)	15 (10)	220	3710	1670	2720	9000
UBB-110/4100D	1100	4100	3600	500	225	500	2×5.6	2×70	300 (220)	15 (10)	220	4610	1770	2720	10900
UBB-130/2500D	1300	2500	2000	400	225	500	2×5.6	2×70	300 (220)	15 (10)	220	3010	1670	2720	7900
UBB-130/3200D	1300	3200	2700	400	225	500	2×5.6	2×70	300 (220)	15 (10)	220	3710	1670	2720	9000
UBB-130/4100D	1300	4100	3600	500	225	500	2×5.6	2×70	300 (220)	15 (10)	220	4610	1770	2720	11300
UBB-130/5100D	1300	5100	4600	400	225	500	2×5.6	2×70	300 (220)	15 (10)	160	5610	1820	2960	15200
UBB-130/6100D	1300	6100	5600	400	225	500	2×5.6	2×70	300 (220)	15 (10)	160	6610	1820	3110	17700
UBB-170/2500D	1700	2500	2000	400	225	500	2×5.6	2×70	300 (220)	15 (10)	200	3030	1680	2720	8800
UBB-170/3200D	1700	3200	2700	400	225	500	2×5.6	2×70	300 (220)	15 (10)	200	3730	1680	2720	10100
UBB-170/4100D	1700	4100	3600	500	225	500	2×5.6	2×70	300 (220)	15 (10)	200	4630	1790	2720	12100
UBB-170/5100D	1700	5100	4600	400	225	500	2×8.6	2×120	180	15 (10)	130	5630	1800	2960	17000
UBB-170/6100D	1700	6100	5600	400	225	500	2×8.6	2×120	180	15 (10)	130	6630	1800	3160	20000
UBB-210/3200D	2100	3200	2700	400	225	500	2×5.6	2×70	200	15 (10)	180	3730	1680	2720	10500
UBB-210/4100D	2100	4100	3600	500	225	500	2×5.6	2×70	200	15 (10)	180	4630	1790	2720	12700
UBB-250/2500D	2500	2500	2000	400	250	550	2×8.6	2×120	150	15 (10)	150	3050	1920	2975	12100
UBB-250/3200D	2500	3200	2700	400	250	550	2×8.6	2×120	150	15 (10)	150	3750	1920	2975	14000
UBB-250/4100D	2500	4100	3600	400	250	550	2×8.6	2×120	150	15 (10)	150	4650	1920	2975	16000
UBB-250/5100D	2500	5100	4600	400	250	550	2×8.6	2×120	130	15 (10)	130	5650	1920	3125	21200
UBB-250/6100D	2500	6100	5600	400	250	550	2×8.6	2×120	130	15 (10)	130	6650	1920	3325	24600
UBB-320/3200D	3200	3200	2700	400	250	550	2×8.6	2×120	120	12 (10)	130	3930	2110	3205	17700
UBB-320/4100D	3200	4100	3600	400	250	550	2×8.6	2×120	120	12 (10)	130	4830	2110	3205	20300
UBB-320/5100D	3200	5100	4600	400	250	550	2×8.6	2×120	100	12 (10)	110	5830	2150	3690	26100
UBB-320/6100D	3200	6100	5600	400	250	550	2×8.6	2×120	100	12 (10)	110	6830	2150	3855	30400

REMARK: Working speed in CE-regulated countries is limited to 10mm/s. Approching Speed in CE-regulated countries is limited to 220mm/s

A NEW GENERATION OF CNC  
PRESS-BRAKES. HIGH PRECISION,  
EUROPEAN DESIGN,  
EFFICIENT AND RELIABLE.



Energy  
saving



Green  
Technology



Ultima is a precision CNC-controlled press brake with hydraulic crowning in a basic but very complete configuration.

The Ultima is equipped with 5 CNC-controlled axes (Y1-Y2, X, R, V).

Ultima offers the user a heavily built, reliable, precision CNC press brake at an economical price.

Optional up to 11 CNC-controlled axis.

The high precision digital encoders at both sides of the machine continuously measure the movement and position of the upper beam (axes Y1-Y2).

The data is processed and monitored by the CNC controller which controls the hydraulic valves.

An extremely high level of accuracy is obtained during the movement and final positioning of the upper beam due to the continuous monitoring and feedback of the encoder measuring data. Using this technology, a repeatability of approximately 100% (+/- 0.01 mm) can be guaranteed.

The synchro system permits two or more machines to be connected together in tandem to provide working lengths of 20 meters or longer.

In this tandem configuration, the individual machines can still be used separately.

# PRODUCT FEATURES

The ESA 650 is a 2D/3D graphical Windows-based controller with a 17 or optional 19-inch Touch Screen. Programming the machine is made fast and easy, within seconds the operator is able to bend a high quality part. Make the best of any 3D cad cam you would like to install in the CNC. Direct import of tools shapes (.dxf files) and management of tool library.

The powerful built-in Pc allows having on the machine a real 3D cad cam (metallix, radan, esa) Finger-tip work piece design.



2

A heavily built, rigid, precision backgauge on ball screws with linear guiding insures fast and precise positioning. Adjustment in width is on a precision linear guide way.



3

Front support arms on a linear guide ensure optimum product support during bending.



4

Precision digital encoders at both ends of the machine ensure highly accurate positioning of the upper beam.

The independently mounted encoder mounting frames automatically compensate for the minimal deflection of the press brake side frames, ensuring perfect bending results. The ram accuracy is guaranteed to +/-0.01mm.

Bending is a physical process subject to significant elastic deflection (springback) and can be influenced by many factors. Due to the elastic deformation from both the upper and lower beams of the press brake during the bending process, the bending angle is not constant over the entire bending(plate)length. The CNC-controlled hydraulic crowning device compensates for is deformation so an equal bending angle is obtained over the full bending length.

Tool and die holders' management.

Material Data Base or predictive compensation is available as an option.

Dynamic crowning is available to grant the perfect bend linearity.

Angle measurement and Sheet thickness measuring.



5

Ergonomic rotating arm for CNC controller Reasonable radius of rotation, more flexible easier operation.

# PRODUCT FEATURES



6

High quality German hydraulic system with high frequency positioning valves. Smooth running of the machine is achieved with high speed machine operation.

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7

Hydraulic tank made of special oil corrosion resistant materials, insuring a perfect clean hydraulic system.

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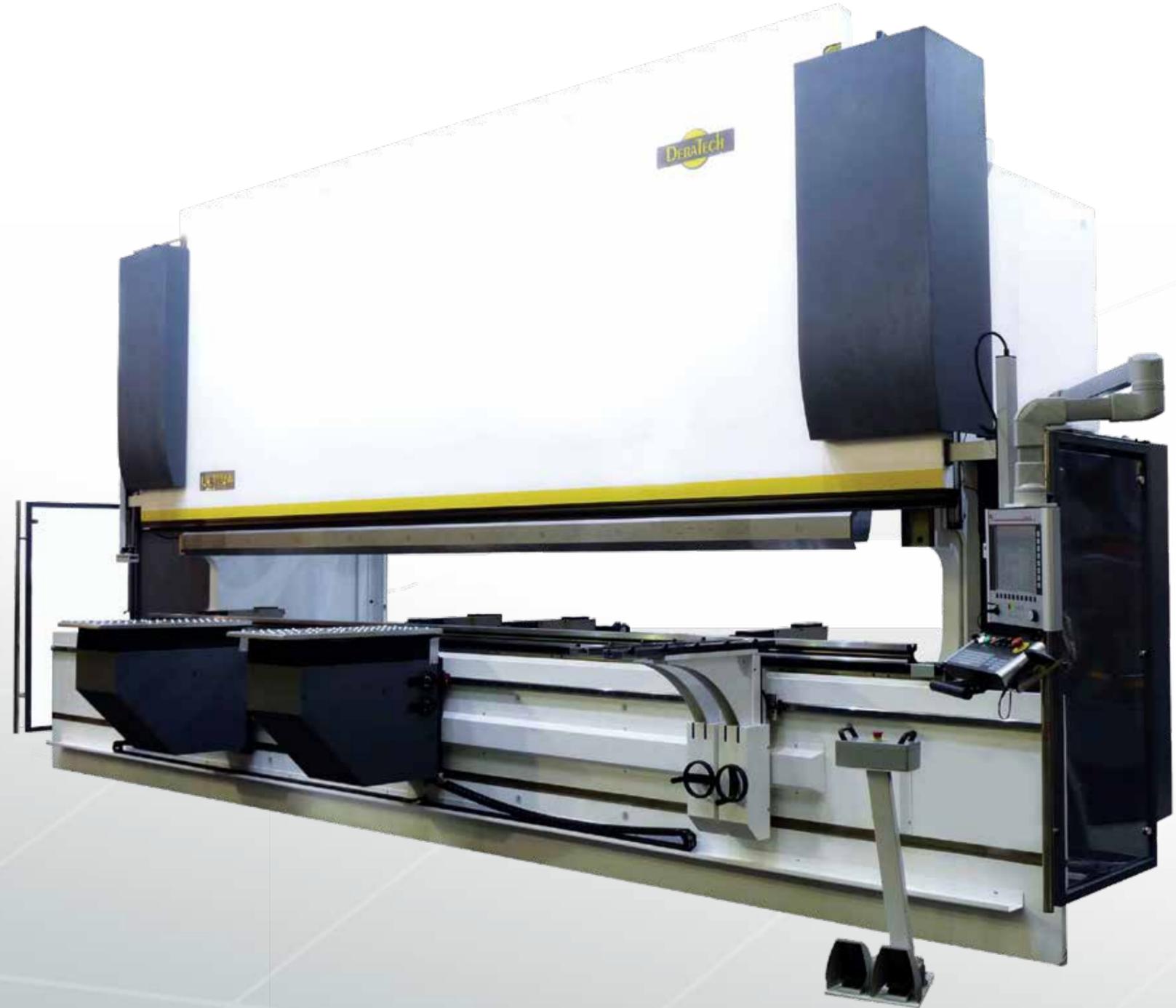
### **DERATECH patented clean hydraulic system**

According to our experience in after sales service, 85% of the problems with the hydraulic system are caused by contamination of hydraulic circuit. Deratech has committed to reduce such failures and resolve this from the source by implementation of our patented clean hydraulic system.



## BENDING AID

The CNC-controlled bending aid from Deratech is preventing angle deviations during the bending of thin sheets with large dimensions. The HEAVY-DUTY version is capable to handle heavy sheet weights. Handling large plates is often not an easy job for one operator, especially with the return movement of the upper beam. In the return movement, the plate is completely loose and the operator has to handle the full weight of the sheet, it's resulting that sometimes two people are working on one machine. The Deratech bending aid is a much more efficient and both ergonomic solutions.



**CONTROLLER**



The ESA650 is graphical controllers, available both in 2D or 3D. The 17 or 19 inch touch screen control guides you through clear, easy to understand, programming phases. A bending program is drawn within seconds with simulations of the bending process in 2 and/ or 3D. The operator only needs to put the right tools to be ready to bend. Experience tells us, average time from program to production takes less than 1 minute! The controller is fitted with an ETHERNET UTP network connection as standard.



CYBTOUCH-12 CNC system is the update version of famous system DNC880S, powerful and easy-to-use 15 inches touch screen. According to the software, CYBTOUCH-12 can control CNC hydraulic press brake and torsion bar press brake. Modern and ergonomic design, user friendly HMI with a powerful performance.



Delem 66T CNC controllers, available in 2D and 3D. A bending program is drawn within seconds with simulations of the bending process in 2 and/ or 3D. The operator only needs to put the right tools to be ready to bend. Experience tells us, average time from program to production takes less than 1 minute! The controller is fitted with an ETHERNET UTP network connection as standard.



D-Remote Assistance is a feature of the ESA650, that allows a Deratech technician to temporarily log-on to the controller of the machine over a network or internet. This to provide help or resolve issues without directly touching the machine. This feature is simple to set-up, secure and only taking a few moments for our engineer to connect and begin the support session, resulting in time and cost saving solution for the end-user.

**REMOTE ASSISTANCE**

**BACKGAUGE**



- 1
- 2
- 3

**Backgauges**

- 1. 5-axis backgauge X-R-Z1-Z2-X'
- 2. 6- axis backgauge X1-X2-R1-R2-Z1-Z2
- 3. Backgauge with pneumatic brush support for thin sheet



**Front Support**

- 1. Front support ram on linear guide with parking places and fast height-adjustment.
- 2. Heavy duty front arms on linear rail.
- 3. Custom made front support arms with CNC height control

- 1
- 2
- 3



**FRONT SUPPORT**



## SHEET THICKNESS MEASURING DEVICE

Automatic Sheet Measuring The "D-STM" sheet thickness measuring system is integrated in the backgauge finger. The D-STM measures the sheet thickness to an accuracy of  $\pm 0,0\text{mm}$ , applicable up to 20mm of material thickness. The measuring cycle takes only tenths of a second, the measured data will be sent in real time to the CNC and the bending program will be adjusted.



## D-Alpha

D-Alpha angle measurement system a fully automatic, laser-assisted bend angle measurement system. irrespective of the properties such as spring back or lamination direction from the material as well as tolerances from the thickness of the material, the D-Alpha enables an exact determination of the bend angle with an accuracy of better than  $0,1^\circ$ . The position of the sensors along the bending line need to be adjusted manually.



1



2



3



4

## TOOLING

1. Manual fast clamping with eccentric handle
2. Pneumatic fast clamping
3. Hydraulic fast clamping
4. Manual or pneumatic quick release clamps with vertical tool change

## POSSIBILITIES

- Bigger daylight-opening
- Bigger stroke
- Bigger throat depth

## TOOLING



## CUSTOM MADE MACHINE

Our experienced engineers can design customized features and functions according to customer's product and requirements, the maximum to meet customer's requirements, to help customers improve efficiency and productivity.

## DERATECH ULTIMA UAD

Model	Force (kN)	Max. bending length (mm)	Distance between uprights (mm)	Opening height (mm)	Throat depth (mm)	Cylinder stroke (mm)	Main power (kW)	Oil volume (L)	Speed (mm/s)			Dimensions(mm)			Weight (kg)
									Approaching speed	Working speed	Returning speed	Length	Width	Height	
UAD-80/2500	800	2500	2000	550	300	250	7,9	300	180	10	140	3080	1780	2550	6500
UAD-100/2500	1000	2500	2000	550	400	250	7,9	300	200	10	140	3470	1850	2650	7600
UAD-100/3200	1000	3200	2700	550	400	250	7,9	300	200	10	140	4170	1850	2650	8600
UAD-100/4100	1000	4100	3600	550	400	250	7,9	300	200	10	140	5070	1850	2650	10200
UAD-130/2500	1300	2500	2000	550	400	250	10,5	300	200	10	140	3480	1900	2670	7800
UAD-130/3200	1300	3200	2700	550	400	250	10,5	300	200	10	140	4180	1900	2670	8800
UAD-130/4100	1300	4100	3600	550	400	250	10,5	300	200	10	140	5080	1900	2670	10400
UAD-130/5100	1300	5100	4600	550	400	250	15,7	400	200	10	140	6080	1900	2770	14800
UAD-130/6100	1300	6100	5600	550	400	250	15,7	400	200	10	140	7080	1900	2770	17200
UAD-170/2500	1700	2500	2000	550	400	250	15,7	300	200	10	140	3500	1900	2680	9000
UAD-170/3200	1700	3200	2700	550	400	250	15,7	300	200	10	140	4200	1900	2680	10400
UAD-170/4100	1700	4100	3600	550	400	250	15,7	300	200	10	140	5100	1900	2680	12200
UAD-170/5100	1700	5100	4600	550	400	250	15,7	400	200	10	140	6100	1960	2790	16900
UAD-170/6100	1700	6100	5600	550	400	250	15,7	400	200	10	140	7100	1960	2790	20200
UAD-250/2500	2500	2500	2000	550	400	250	19,3	460	200	10	140	3520	2070	2860	12400
UAD-250/3200	2500	3200	2700	550	400	250	19,3	460	200	10	140	4220	2070	2860	14300
UAD-250/4100	2500	4100	3600	550	400	250	19,3	460	200	10	140	5120	2070	2860	16600
UAD-250/5100	2500	5100	4600	550	400	250	19,3	460	200	10	140	6120	2070	2900	20400
UAD-250/6100	2500	6100	5600	550	400	250	19,3	460	200	10	140	7120	2070	3050	24600
UAD-320/3200	3200	3200	2700	550	400	250	24,1	600	200	10	140	4240	2150	3150	18100
UAD-320/4100	3200	4100	3600	550	400	250	24,1	600	200	10	140	5140	2150	3150	21400
UAD-320/5100	3200	5100	4600	550	400	250	24,1	600	200	10	140	6140	2190	3450	26300
UAD-320/6100	3200	6100	5600	550	400	250	24,1	600	200	10	140	7140	2190	3550	31200

If you need more product specification please contact with us.

REMARK: Other capacities up to 1250 ton or other technical specifications are available upon request.

A NEW GENERATION OF CNC PRESS-BRAKES. HIGH PRECISION, EUROPEAN DESIGN, EFFICIENT AND RELIABLE.



Energy saving



Green Technology

Technica is a precision CNC-controlled press brake with crowning in a basic but very complete configuration, equipped with 4 CNC-controlled axes (Y1-Y2, X, V). Technica offers the user a heavily built, reliable, precision CNC press brake at an economical price. The high precision digital encoders at both sides of the machine continuously measure the movement and position of the upper beam (axes Y1-Y2). The data is processed and monitored by the CNC controller which controls the hydraulic valves.

An extremely high level of accuracy is obtained during the movement and final positioning of the upper beam due to the continuous monitoring and feedback of the encoder measuring data. Using this technology, a repeatability of approximately 100% ( $\pm 0.01$  mm) can be guaranteed.

The synchro system permits two or more machines to be connected together in tandem to provide working lengths of 20 meters or longer.



## PRODUCT FEATURES



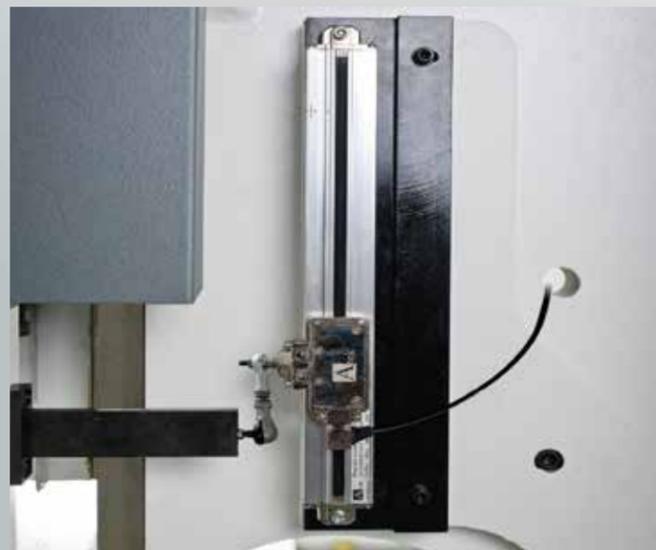
1

High precision and fast clamping system:  
Fast and easy to change the tooling, decreasing labour strength and enhance productivity.



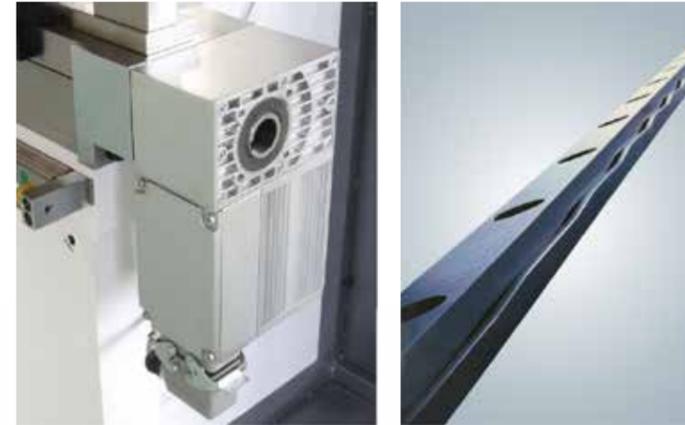
2

**High precision and stable backgauge system:**  
New and unique double linear guide construction, to ensure the excellent positioning accuracy.  
Design of multistage stops, to increase the Positioning Range.



3

Precision digital encoders at both ends of the machine ensure highly accurate positioning of the upper beam. The independently mounted encoder mounting frames automatically compensate for the minimal deflection of the press brake side frames, ensuring perfect bending results. The ram accuracy is guaranteed to  $\pm 0.01\text{mm}$ . Bending is a physical process subject to significant elastic deflection (springback) and can be influenced by many factors.



4

Due to the elastic deformation from both the upper and lower beams of the press brake during the bending process, the bending angle is not constant over the entire bending (plate) length. The CNC-controlled crowning device compensates for this deformation so an equal bending angle is obtained over the full bending length.



5

Front support arms on a linear guide ensure optimum product support during bending.

# PRODUCT FEATURES

6

High quality press brake tooling: Durable, fully hardened high precision CNC Press Brake Tooling.



## Unique technical characteristics



7

High quality German Hydraulic System: High frequency hydraulic system, low failure rate, fast stable and reliable.



8

High quality Stainless Steel Hydraulic Tank aids in the eliminating contamination

## TECHNICA TAM-S

Model	Force (kN)	Max. bending length (mm)	Distance between uprights (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height (mm)	Main power (kW)	Oil volume (L)	Max Speed (mm/s)			Dimensions (mm)			Weight (kg)
									Approaching speed	Working speed	Returning speed	Length	Width	Height	
TAM-110/2500S	1100	2500	2000	400	225	500	7,9	300	140	10	110	3010	1670	2720	7800
TAM-110/3200S	1100	3200	2700	400	225	500	7,9	330	140	10	110	3710	1670	2720	9000
TAM-110/4100S	1100	4100	3600	400	225	500	7,9	330	140	10	110	4610	1770	2720	10900
TAM-130/2500S	1300	2500	2000	400	225	500	10,5	300	140	10	110	3010	1670	2720	7800
TAM-130/3200S	1300	3200	2700	400	225	500	10,5	330	140	10	110	3710	1670	2720	9000
TAM-130/4100S	1300	4100	3600	400	225	500	10,5	330	140	10	110	4610	1770	2720	11300
TAM-130/5100S	1300	5100	4600	400	225	500	15,7	330	110	10	110	5610	1820	2960	15200
TAM-130/6100S	1300	6100	5600	400	225	500	15,7	330	110	10	110	6610	1820	3110	17700
TAM-170/2500S	1700	2500	2000	400	225	500	15,7	300	130	10	110	3030	1680	2720	8700
TAM-170/3200S	1700	3200	2700	400	225	500	15,7	330	130	10	110	3730	1680	2720	10100
TAM-170/4100S	1700	4100	3600	400	225	500	15,7	330	110	10	110	4630	1790	2720	12100
TAM-170/5100S	1700	5100	4600	400	225	500	15,7	330	100	10	90	5630	1800	2960	17000
TAM-170/6100S	1700	6100	5600	400	225	500	15,7	330	100	10	90	6630	1800	3160	20000
TAM-210/3200S	2100	3200	2700	400	225	500	15,7	330	130	10	110	3730	1680	2720	10500
TAM-210/4100S	2100	4100	3600	400	225	500	15,7	330	130	10	110	4630	1790	2720	12700
TAM-250/2500S	2500	2500	2000	400	250	525	19,3	460	130	10	110	3050	1920	2975	11700
TAM-250/3200S	2500	3200	2700	400	250	525	19,3	460	130	10	110	3750	1920	2975	14000
TAM-250/4100S	2500	4100	3600	400	250	525	19,3	460	130	10	110	4650	1920	2975	16000
TAM-250/5100S	2500	5100	4600	400	250	525	19,3	460	100	10	90	5650	1920	3125	21200
TAM-250/6100S	2500	6100	5600	400	250	525	19,3	460	100	10	90	6650	1920	3325	24600
TAM-320/3200S	3200	3200	2700	400	250	525	24,1	460	100	10	110	3930	2110	3205	17700
TAM-320/4100S	3200	4100	3600	400	250	525	24,1	460	100	10	110	4830	2110	3205	20300
TAM-320/5100S	3200	5100	4600	400	250	525	24,1	460	90	10	90	5830	2150	3690	26100
TAM-320/6100S	3200	6100	5600	400	250	525	24,1	460	90	10	90	6830	2150	3855	30400

## ESA 630

### ESA 630

- ▲ 2D graphic editing for punches and dies.
- ▲ 2D graphic preview for part pieces.
- ▲ Programming of the axes position in tabular mode with automatic calculation of the R and A position and of the bending and crowning tonnage.
- ▲ Touch Screen 10"
- ▲ Can manage up to 4 axis + I and tandem operation



## ESA 640

### ESA 640

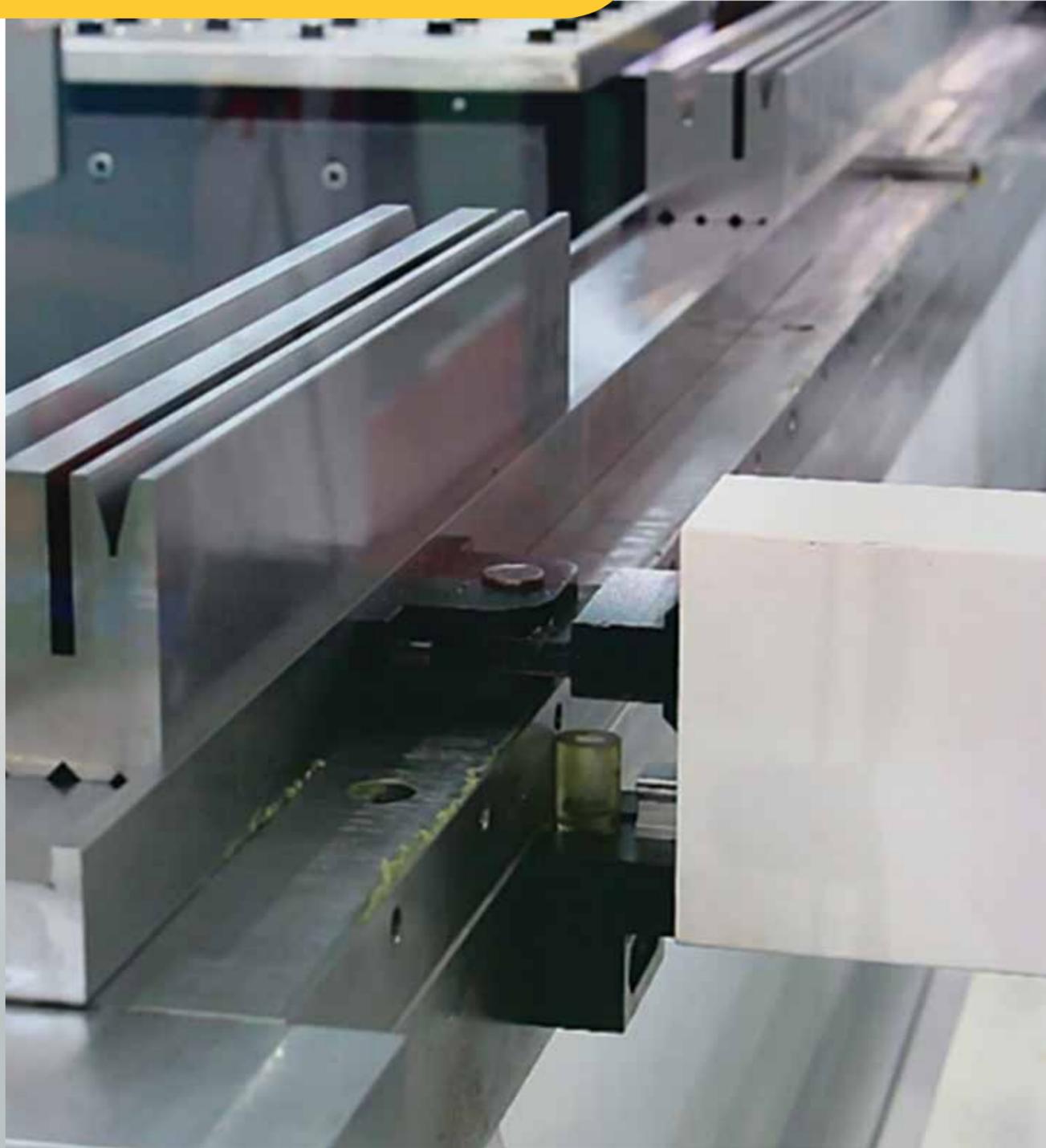
- ▲ 2D graphic editing for punches and dies.
- ▲ 2D graphic preview for part pieces.
- ▲ Programming of the axes position in tabular mode with automatic calculation of the R and A position and of the bending and crowning tonnage.
- ▲ Touch Screen 15"
- ▲ Can manage up to all possible axis + I tandem operation
- ▲ 3D Viewer functionality



HIGH TONNAGE AND LARGE  
BENDING LENGTH



## ADDITIONAL FEATURES



PIP2 Servo controlled table, to easy complete small bends,  
Using different V-openings in a die. Accurate positioning and reduced tool changes

## DERATECH ULTIMA UAM

Model	Force (kN)	Max. bending width (mm)	Distance between uprights (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height (mm)	Main power (kW)	Speed (mm/s)			Dimensions(mm)			Weight (kg)
								Approaching speed	Working speed	Returning speed	Length	Width	Height	
UAM-400/3200	4000	3200	2600	450	300	600	30	100	9	110	3460	2350	3570	23500
UAM-400/4000	4000	4000	3200	450	300	600	30	100	9	110	4260	2350	3570	27000
UAM-400/5000	4000	5000	4000	450	300	600	30	100	9	90	5260	2350	4830	33000
UAM-400/6000	4000	6000	5000	450	300	600	30	100	9	90	6260	2350	5070	38000
UAM-400/7000	4000	7000	6000	450	300	600	30	100	9	90	7260	2350	5410	44000
UAM-400/8000	4000	8000	7000	450	300	600	30	100	9	90	8260	2350	5810	51000
UAM-500/3200	5000	3200	2600	500	300	600	37	100	8	110	3480	2580	4540	31500
UAM-500/4000	5000	4000	3200	500	300	600	37	100	8	110	4260	2580	4610	35000
UAM-500/5000	5000	5000	4000	500	300	600	37	90	8	70	5260	2580	4810	39500
UAM-500/6000	5000	6000	5000	500	300	600	37	90	8	70	6260	2580	5130	45000
UAM-500/7000	5000	7000	6000	500	300	600	37	90	8	70	7260	2495	5440	52000
UAM-500/8000	5000	8000	7000	500	300	600	37	90	8	70	8260	2350	5840	59000
UAM-600/4000	6000	4000	3200	600	350	700	45	80	8	100	4260	3530	4950	44000
UAM-600/5000	6000	5000	4000	600	350	700	45	80	8	100	5260	3530	5100	49000
UAM-600/6000	6000	6000	5000	600	350	700	45	80	8	100	6260	3530	5370	55900
UAM-600/7000	6000	7000	6000	600	350	700	45	80	8	80	7260	3530	5610	65000
UAM-600/8000	6000	8000	7000	600	350	700	45	80	8	80	8260	3530	5910	72000
UAM-700/4000	7000	4000	3200	650	350	700	55	70	9	90	4260	3600	5270	49800
UAM-700/5000	7000	5000	4000	650	350	700	55	70	9	90	5260	3600	5420	55200
UAM-700/6000	7000	6000	5000	650	350	700	55	70	9	90	6260	3600	5620	61700
UAM-700/7000	7000	7000	6000	650	350	700	55	70	9	90	7260	3600	5820	69100
UAM-700/8000	7000	8000	7000	650	400	800	55	70	9	90	8260	3600	6120	77200
UAM-800/4000	8000	4000	3200	700	400	800	2x37	70	10	80	4260	3910	5700	63400
UAM-800/5000	8000	5000	4000	700	400	800	2x37	70	10	80	5260	3910	5850	67800
UAM-800/6000	8000	6000	5000	700	400	800	2x37	70	10	80	6260	3910	6000	75000
UAM-800/7000	8000	7000	6000	700	400	800	2x37	70	10	80	7260	3910	6150	83100
UAM-800/8000	8000	8000	7000	700	400	800	2x37	70	10	80	8260	3910	6520	92700

\* no crowning. REMARK: Working speed in CE-regulated countries is limited to 10mm/s. Approaching Speed in CE-regulated countries is limited to 220mm/s

## MINIBEND CNC PRESS BRAKE

The Ultima Minibend is a good example of efficient interaction between operator and machine. By providing the best working conditions to the operator and creating a user friendly environment, will result in outstanding productivity at every stage of the job.

The Ultima Minibend is ergonomically designed: movable foot pedal, pivoting control panel, seated or semi-seated operation...

The machine frame can be designed to the ergonomic needs of the operator; this to achieve the best possible working conditions in any application possible.

The Ultima Minibend is engineered to produce parts commonly found in the production of electrical equipment, medical instruments, vending machines,... this is a fast and cost effectively way.

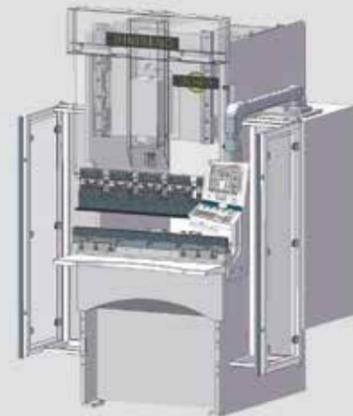


# PRODUCT FEATURES



1

The ESA 650 is a 2D / 3D graphical Windows-based controller with a 17 or 19 inch Touch Screen. Programming the machine is made fast and easy, within seconds the operator is able to bend a high quality part.



2

The Ultima Minibend is a single cylinder hydraulic pressbrake, especially designed torsionally stiff welded machine frame, upper beam guided by high precision linear guides for the production of small parts in the productive way possible. Available in bending length of 1020mm and bending force of 30ton. Backgauge X/R is CNC-controlled and manual finger adjustment.



3

A heavily built, rigid, precision backgauge on ball screws with linear guiding insures fast and precise positioning. Adjustment in width is on a precision linear guide way. Option for 4-axis backgauge X-R-Z1-Z2 or more...



4

D-Remote Assistance is a feature of the ESA 650, that allows a Deratech technician to temporarily log-on to the controller of the machine over a network or internet. This to provide help or resolve issues without directly touching the machine. This feature is simple to set-up, secure and only taking a few moments for our engineer to connect and begin the support session, resulting in time and cost saving solution for the end-user.



Green technology,  
energy saving system

## ULTIMA-HYBRID UBB-D

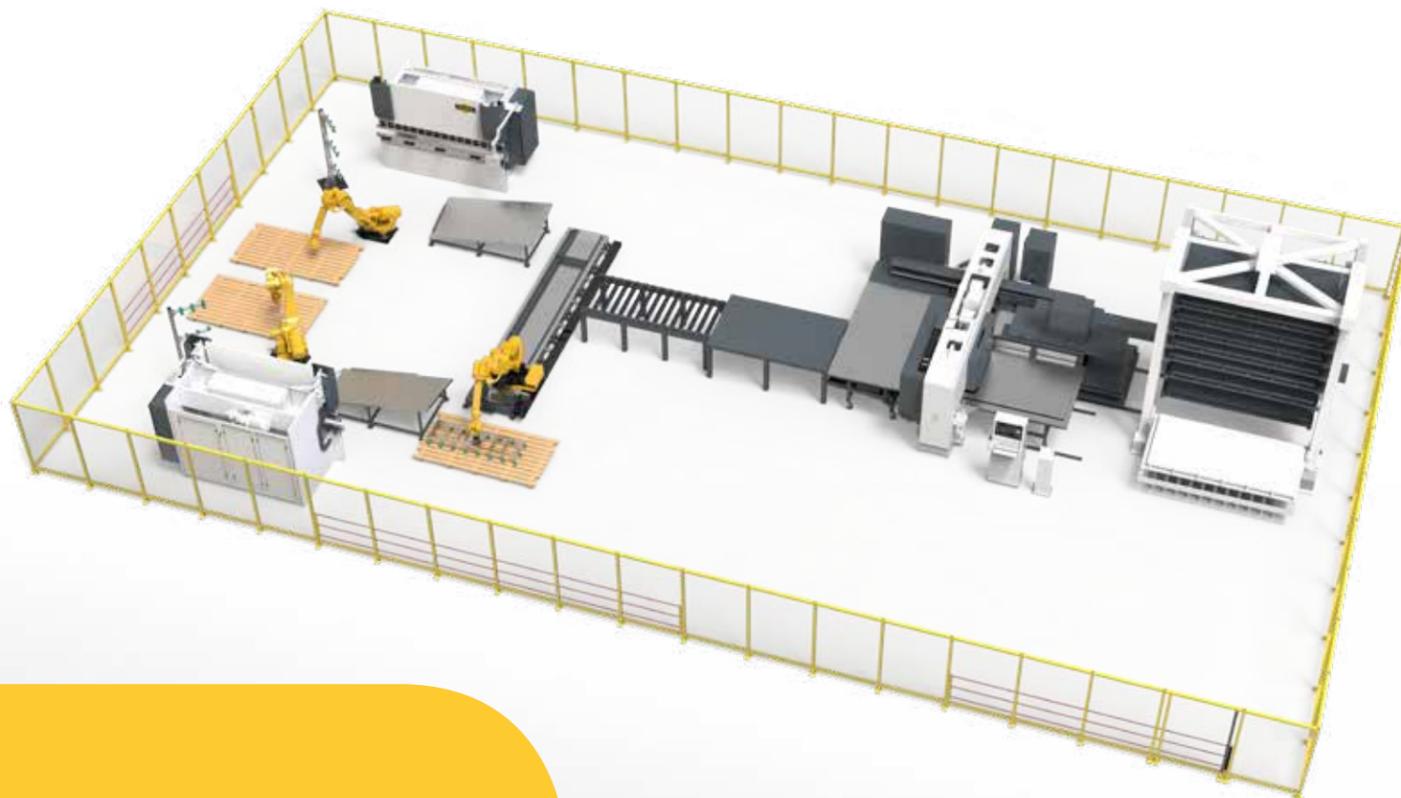
Model	Force (kN)	Max. bending length (mm)	Distance between uprights (mm)	Throat depth (mm)	Cylinder stroke (mm)	Opening height (mm)	Main power (kw)	Oil volume (L)	Speed (mm/s)			Dimensions (mm)			Weight (kg)
									Approaching speed	Working speed	Returning speed	Length	Width	Height	
TBB-35/1250D*	350	1250	900	200	160	410	4,7	70	300 (220)	20 (10)	200	1650	1210	2490	3000
TBB-50/1650D*	500	1650	1200	300	160	410	2x4,7	2x70	300 (220)	20 (10)	200	2180	1440	2410	4500
TBB-60/2050D*	600	2050	1700	300	160	410	2x4,7	2x70	300 (220)	20 (10)	200	2680	1440	2410	4900
TBB-70/2500D	700	2500	2000	300	160	425	2x4,7	2x70	300 (220)	20 (10)	200	2990	1470	2410	6400

5

Manual fast clamping with vertical tool change.



\* no crowning. REMARK: Working speed in CE-regulated countries is limited to 10mm/s. Approching Speed in CE-regulated countries is limited to 220mm/s.



## AUTOMATIC SYSTEMS

Deratech Group is able to design and produce **robot bending cells**, manipulators and other **automated bending lines** that can be integrated in your production, creating your **NON STOP PRODUCTION CENTER**. We are also able to design and produce complete **shearing, laser and punching systems** with picking, stacking, manipulators, and many other types of functionality.

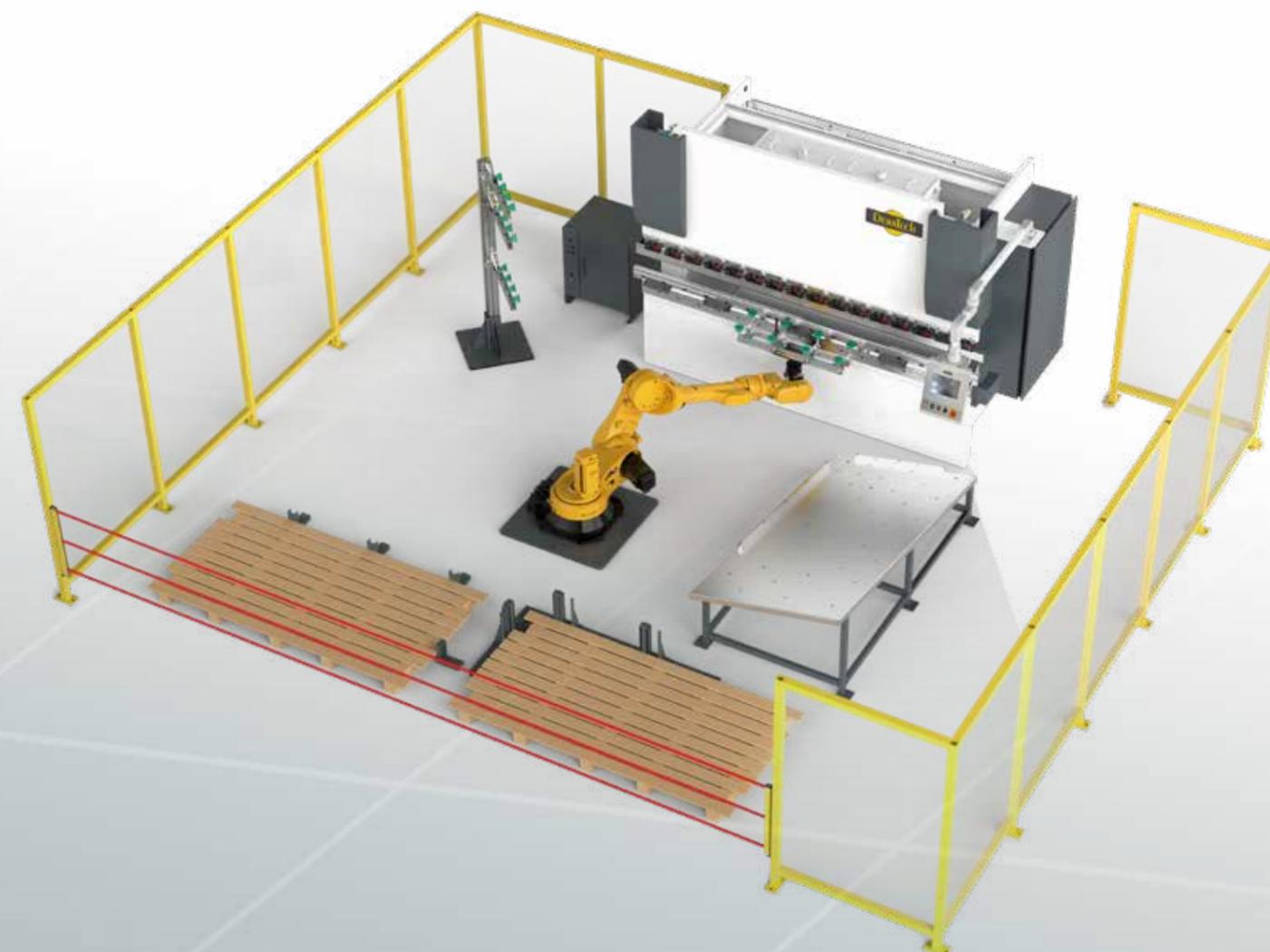
- ▲ MORE EFFICIENCY
- ▲ MORE OUTPUT 24/7
- ▲ LESS DOWN TIME
- ▲ CONSTANT QUALITY
- ▲ REMOTE PROGRAMMING
- ▲ AUTOMATIC QC Check

The help of intelligent systems will already create the basis for a successful future today... **ROBOT** Integration or loading/unloading systems, sorting systems, Industry 4.0 will be the key to your production flow in the future.

We all need to be ready to compensate economic fluctuations and our production methods should be able to deploy your resources with high flexibility.

*Operators for CNC controlled sheet metal working machinery, need a very specific set of skills, this makes it not easy to find suitable staff. Automated bending cells, Loading and unloading solutions for laser and punching machines, even for production of complex parts, will deliver top quality products 24 hours a day and 7 days a week. Automatic Bending centers are the key in the process, ideal for large volume productions but also designed to be flexible to be ideal for smaller volumes of components with high quality and repeatability. Our Automatic bending centers can be integrated in a Fully Automated punching or laser system.*

**INVEST IN THE FUTURE AND STAY AHEAD OF THE COMPETITION WITH AUTOMATION POWERED BY DERATECH GROUP**



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