

CUTTING
PUNCHING
BENDING
WELDING
MILLING

tailift

CNC BENDING MACHINE

TCH/TCD/TCS/TCE
SERIES



Official Website

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TAILIFT , LIFT YOUR LIFE

ABOUT US



| Company Profile

Tailift Group is a Taiwan-funded enterprise specializing in the manufacturing of sheet metal industrial equipments that established in 1973. The company was founded by Chairman Mr. Lin Xiwen, who led a professional team with engineering technicians. Tailift has earned a reputation of professionalism, innovation, and exceptional service in the global market.

Throughout its 50-year history, Tailift has valued its employees as its greatest asset. The average tenure of our personnel exceeds 15 years. Our team adheres to TPS management principles to ensure the precision and quality of equipments. Meanwhile we foster a simple yet strong culture dedicated to the growth alongside with customers.

Since commencing the production of radial drilling machines in 1975, Tailift has expanded its range include logistics handling equipment (such as stackers), sheet metal processing equipments (including CNC turret punch presses, laser cutting machines, and CNC Bending machines), as well as automation equipments (such as multi-axis tea press and Lithium battery welding line). Tailift now offers one-stop technical solution of laser cutting and welding , meterial bending and punching equipments to ensure high value through wide applications over the world.

WELCOME
歡迎蒞臨
Tailift

TAILIFT , LIFT YOUR LIFE

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Presentation



When you are bending delicate and oversized parts?

Use the widest bending range to meet your various requirements – simply and without compromise.

- Various tonnages and bending lengths
- A large material range from aluminum to Hardox
- Precise positioning of your parts with 2-, 3-, 4-, 5- or 6-axis backgauge systems
- Capable of 18 Axis+7 Axis of Robot Hand



Tailift's ideas of bending:

Classic bending machines from TAILIFT impress with functions that save resources, make operation easier and ensure precise quality – from the very first part .

Find out more about how you can make your bending process more successful with TCH/TCD/TCS /TCE series.

Oil Pump / Valve System of Rexroth or HaWe (optional)

- Up to 10% performance increased by reducing the cycle time
- Up to 50% energy-saving compares to traditional system
- Up to 0.005mm positioning accuracy
- Up to 400mm stroke size flexible optimization
- Reliable -Minimization of the risk of leakage
- Noise reduction in all working modes
- Integrated hydraulic control system into CNC bending controller
- Reduce pipeline installation and oil consumption and producing cost



Invance/Tailift main motor:

For Tailift bending machine servo motor is the main power source of hydraulic pump.

- Pressure -loop control by servo motor
- Lower oil temperature
- Higher the accuracy of pressure control



“

A more user-friendly design ensure an excellent bending experience effectively and easily.

”



X/R Servo Motor

X and R axis are servo motor drive with synchronous belt. The servo motor can achieve precise positioning and motion control at high speed.

Crowning Table

Crowning system is adopted to eliminate the effect of machine body deformation. Crowning value is automatically adjusted by CNC system. High accuracy and operating convenience during bending.



Movable Front Loader Bracket

Fitted in front of the worktable, position of the front loader bracket can be adjusted manually as requested.

Quick Release and Clamping Device

Quick clamping device for upper tools, the installation is simple and stable, prevent upper tools falls down, quick release and clamping time, and reduces setting time. Push-pull quick clamping as a standard configuration avoids part interference when bending at a small angle.

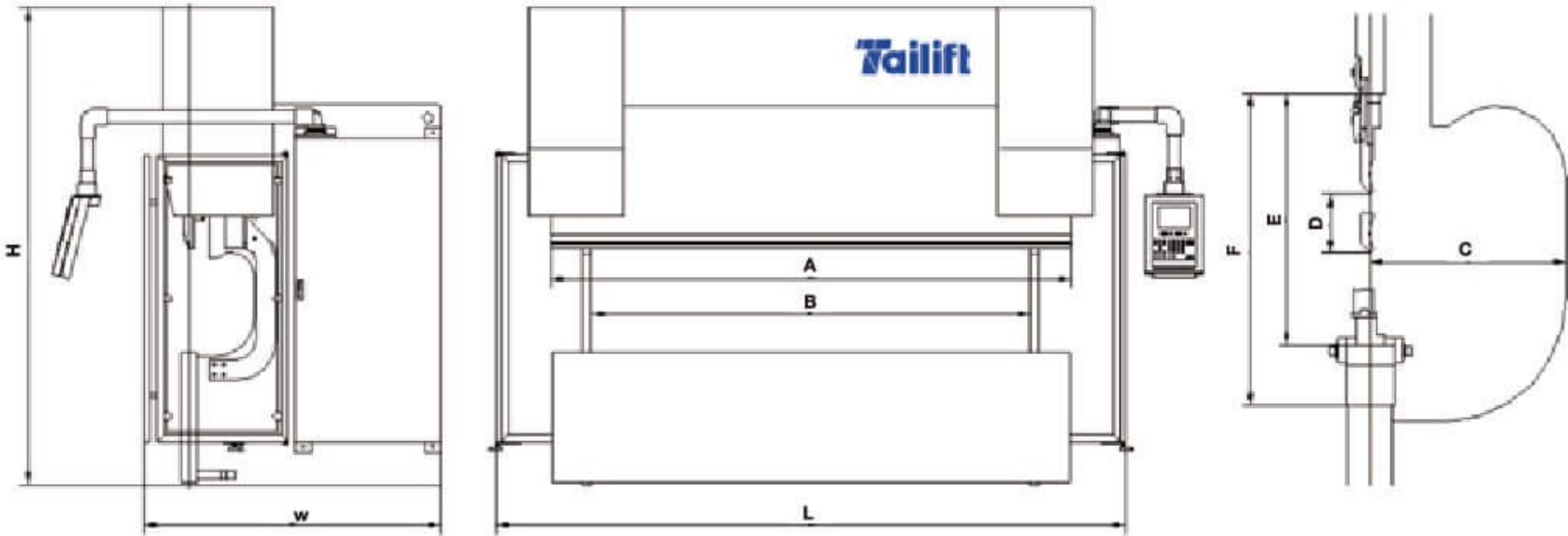




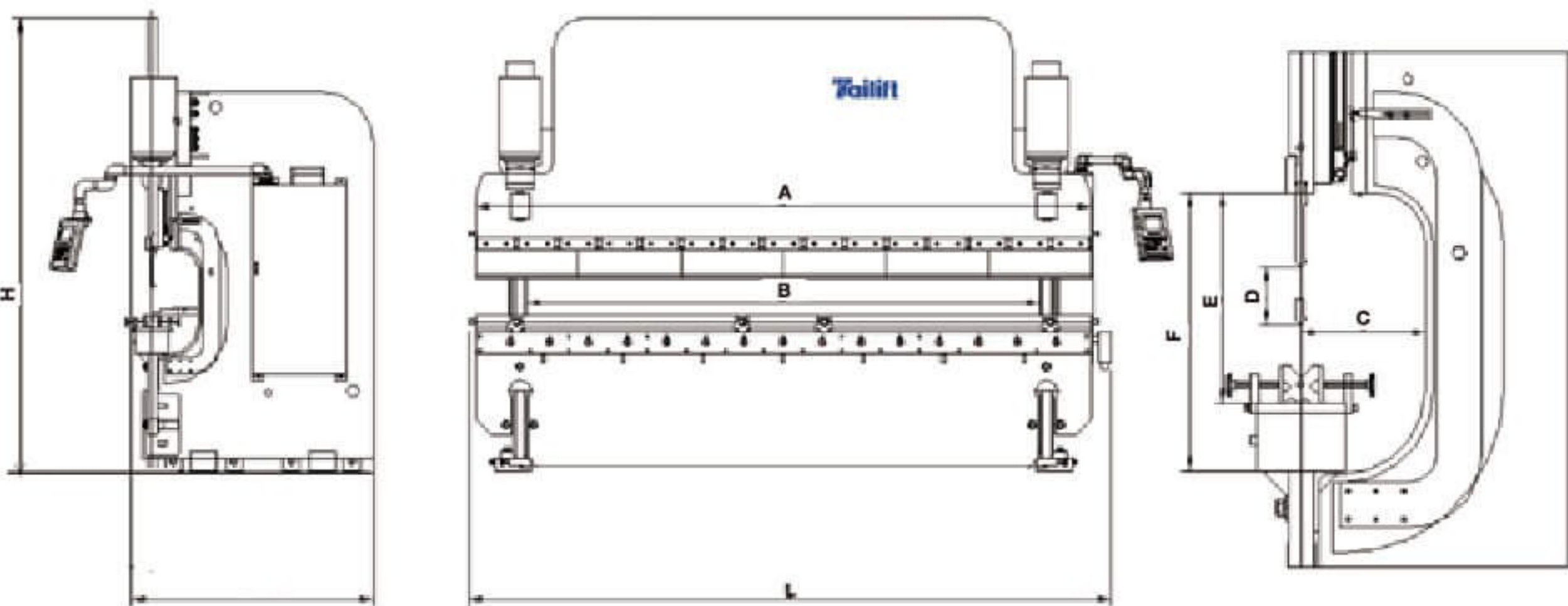
No	Name	Mode	Origin
1	CNC system	CS15/21	Taiwan
2	Hydraulic valve group	Rexroth	Germany
		Hawe/Rexroth	Germany
3	Grating ruler	GIVI	Italy
4	X servo motor	Innovance	China
5	R servo motor	Innovance	China
6	Oil pump	SUNNY	America
		Hawe	Germany
7	Servo main motor	Innovance	China
		Tailift	Taiwan
8	Sealing rings	NOK	Japan
9	Hose connectors	PARKER	USA
10	Eelectronic device	SCHNEIDER	China
11	Guide rail/rack	HIWIN	Taiwan

Rack Diagram

50 ~ 250 Ton



Over 250 Ton

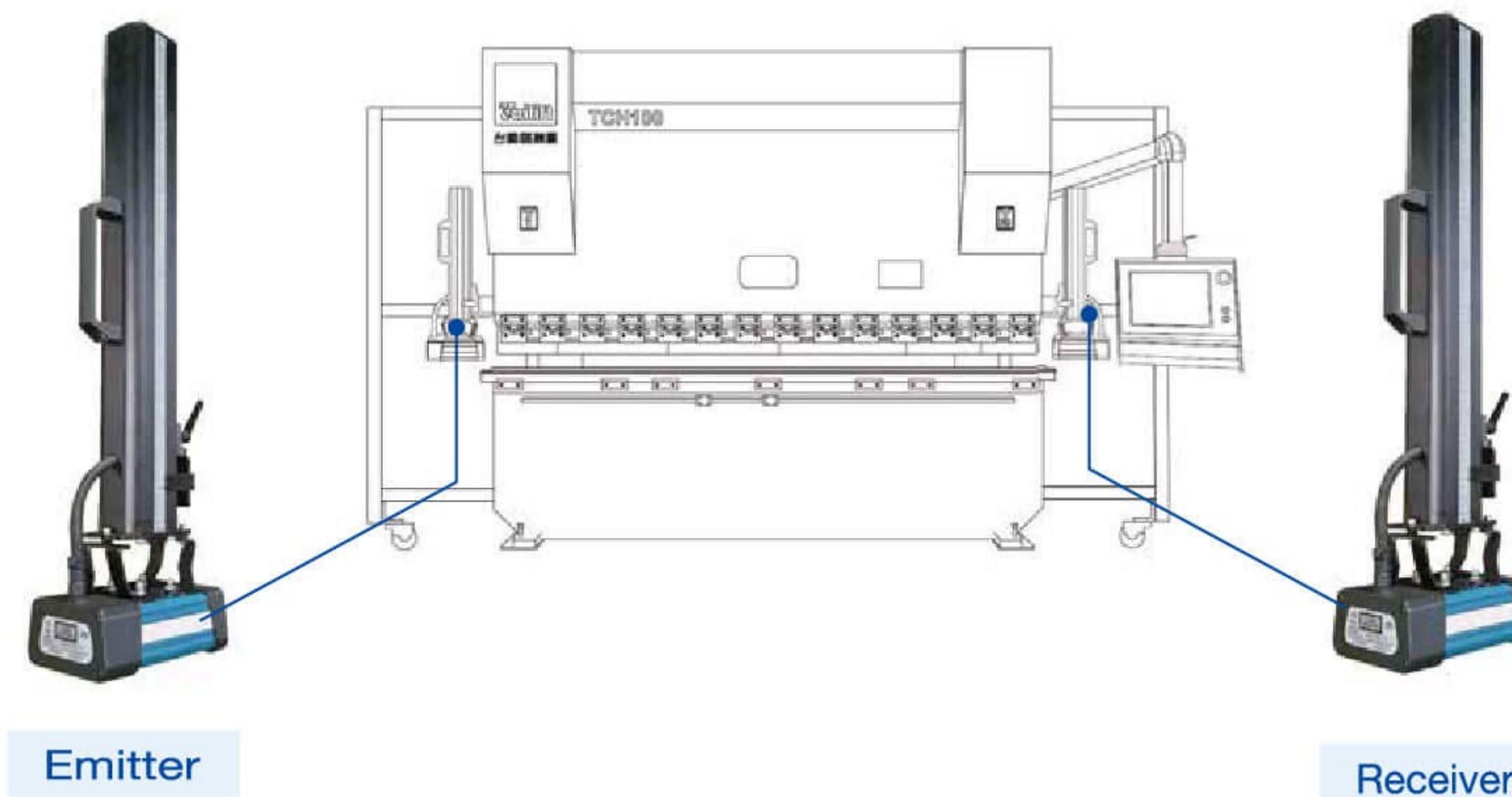


Laser Safety Device (optional)

Laser safety device protects the press brake operator from the danger of crushing between the moving and fixed part of the machine.

The laser safety device is mounted on the moving part of the machine, and the protection zone moves with the part, when an obstacle is detected, such as an operator's fingers, detection is immediate and the machine can be stopped.

Laser safety device for bending machine





Advantages:

- Cylinder stroke 250mm
- Maximum opening height 545mm
- Y1 Y2 X R V 4+1 axis +2axis(Z1+Z2)
- Fine-tunable gauge fingers, with Z1.Z2 being motorized
- Precision rear positioning, sealed, dust-proof backgauge transmission with double linear guides
- Max range of rear positioning: 1080mm
- Big power servo main motor
- Closed-loop synchronization technology
- Unique "FLOATING FINGER DESIGN"



Cylinder Range:

- Big range up to 250mm cylinder stroke
- Better parameters and configurations, more powerful functions



Stop finger:

- Floating finger design
- Fine-tunable gauge fingers, with Z1.Z2 being motorized

Back gauge:

- High-repositioning accuracy
- Sealed and dust-proof
- X R Z axis transmission with double linear guide rail



SPECIFICATION		TCH50 1.6M	TCH70 2M	TCH70 2.5M	TCH100 2.5M	TCH100 3.2M	TCH100 4.1M	TCH160 3.2M	TCH160 4.1M	TCH160 6.1M	TCH200 2.5M	TCH200 3.2M	TCH200 4.1M	TCH200 5.1M	TCH200 6.1M
Bending Force(kN)		500	700	700	1000	1000	1000	1600	1600	1600	2000	2000	2000	2000	2000
Bending Length A(mm)		1600	2000	2500	2500	3200	4100	3200	4100	6100	2500	3200	4100	5100	6100
Distance between Uprights B(mm)		1230	1700	2100	2100	2700	3300	2700	3300	5000	2100	2700	3300	4600	5400
Max Open Height E (mm)		495	495	495	545	545	545	545	545	545	545	545	545	545	545
Throat Depth C(mm)		260	320	320	320	320	320	400	320	400	400	400	400	400	400
Backgauge X Axis	Range(mm)	750	850	850	850	850	850	850	850	850	850	850	850	850	850
	Max Run Speed(mm/s)	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Backgauge R Axis	Range(mm)	150	200	200	200	200	200	200	200	200	200	200	200	200	200
	Max Run Speed(mm/s)	320	250	250	250	250	250	250	250	250	250	250	250	250	200
X.R Axis	Postion accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
	Reposition accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Backgauge Z1 Z2 Axis By Electric Motor	Range(mm)	830	1300	1700	1700	2300	2900	2300	2900	4600	1700	2300	2900	4200	5000
	Speed(mm/s)	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Stroke YI,Y2 Axis	Range(mm)	200	200	200	250	250	250	250	250	250	250	250	250	250	250
	Postion accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Reposition accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ram Speed	Rapid down(mm/s)	200	200	200	200	200	160	160	160	150	160	150	140	140	130
	Running(mm/s)	1~15	1~15	1~15	1~15	1~15	1~15	1~15	1~15	1~10	1~15	1~15	1~15	1~10	1~10
	Return(mm/s)	200	200	200	180	160	140	140	160	130	140	140	130	110	110
Oil Tank Capacity(L)		28	280	280	280	280	280	280	280	380	280	280	380	380	380
Main Servo Motor Power(kw)		7.5	11	11	13	13	13	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
Dimensions	L(mm)	1800	2250	2780	3010	3310	4610	3330	4630	6310	2700	3430	4330	5460	6380
	W(mm)	1480	1580	1580	1670	1670	1770	1680	1790	1800	1780	1680	1790	1780	1800
	H(mm)	2100	2130	2130	2720	2720	2720	2720	2720	3010	2820	2820	2820	2950	3100
Weight(kgs)		4000	5300	6100	7800	9100	10900	10100	12100	20000	10300	10500	14100	20200	24100

SPECIFICATION		TCH250 3.2M	TCH250 4.1M	TCH250 5.1M	TCH250 6.1M	TCH320 3.2M	TCH320 4.1M	TCH320 5.1M	TCH320 6.1M	TCH400 3.2M	TCH400 4.1M	TCH400 5.1M	TCH400 6.1M	TCH500 4.1M	TCH500 6.1M
Bending Force(kN)		2500	2500	2500	2500	3200	3200	3200	3200	4000	4000	4000	4000	5000	5000
Bending Length A(mm)		3200	4100	5100	6100	3200	4100	5100	6100	3200	4100	5100	6100	4100	6100
Distance between Uprights B(mm)		2700	3300	4600	5400	2700	3300	4600	5400	2700	3300	4600	5400	3300	5400
Max Open Height E (mm)		545	545	545	545	600	600	600	600	600	620	620	620	620	620
Throat Depth C(mm)		400	400	400	400	400	400	400	400	450	450	450	450	500	500
Backgauge X Axis	Range(mm)	850	850	850	850	850	850	850	850	850	850	850	850	850	850
	Max Run Speed(mm/s)	250	250	200	200	250	250	200	200	250	250	200	200	200	200
Backgauge R Axis	Range(mm)	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	Max Run Speed(mm/s)	200	200	180	150	200	200	180	150	200	200	160	150	200	150
X.R Axis	Postion accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
	Repostion accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Backgauge Z1 Z2 Axis By Electric Motor	Range(mm)	2300	2900	4100	4900	2300	2800	4100	4800	2300	2800	4000	4800	2800	4800
	Speed(mm/s)	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Stroke YI,Y2 Axis	Range(mm)	250	250	250	250	310	310	310	310	330	330	330	330	400	400
	Postion accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Repostion accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ram Speed	Rapid down(mm/s)	160	160	150	140	150	150	140	130	140	140	130	120	110	100
	Running(mm/s)	1~12	1~12	1~12	1~12	1~12	1~12	1~12	1~12	1~10	1~10	1~10	1~10	1~10	1~10
	Return(mm/s)	130	130	130	130	130	110	110	110	110	110	100	100	100	100
Oil Tank Capacity(L)		280	280	280	280	280	280	380	380	280	280	380	380	380	380
Main Servo Motor Power(kw)		22	22	22	22	25	25	25	25	30	30	37	37	37	45
Dimensions	L(mm)	3450	4350	5350	5650	3550	4460	5530	6510	3560	4560	5460	6530	4560	6580
	W(mm)	1830	1830	1900	1920	2130	2150	2150	2310	2350	2350	2350	2350	2580	2580
	H(mm)	2820	2820	2920	2920	3120	3430	3430	3500	3500	3600	3600	3600	4700	5200
Weight(kgs)		14000	16600	21100	24200	17700	20300	25000	30400	25100	27800	33500	37500	37000	47000



Advantages:

- Dual Servo Motor Drives
- Dual Oil Pump Technology



Description:

- Dual servo motor drives with dual oil pump technology, providing fast speed and high efficiency.
- Advanced pressure control technology for energy efficiency, reduced oil consumption, and enhanced machine stability and reliability.
- Compact oil tank design for low maintenance and usage costs.
- Innovative pipeless structure design to eliminate the risk of loose pipe joints and oil leakage





Advantages:

- Unique Dual Rail Structure
- 330mm/s Approaching Speed
- Proven Bending Technology With High Stability And Reliability



Advantages:

- Cylinder stroke 200mm
- Maximum opening height 485mm
- Y1 Y2 X V 3+1 axis
- Precision rear positioning, X axis transmission are double linear guides
- Max range of rear positioning: 980mm



Stop Finger:

- Precision positioning
- X axis transmission with double linear guide rail

Back gauge:

- High-precision rear positioning system, high-precision positioning adjustable stopper fingers.
- High-quality back gauge, equipped with double linear guide rails.
- Fast speed, heavy load capacity, high precision.

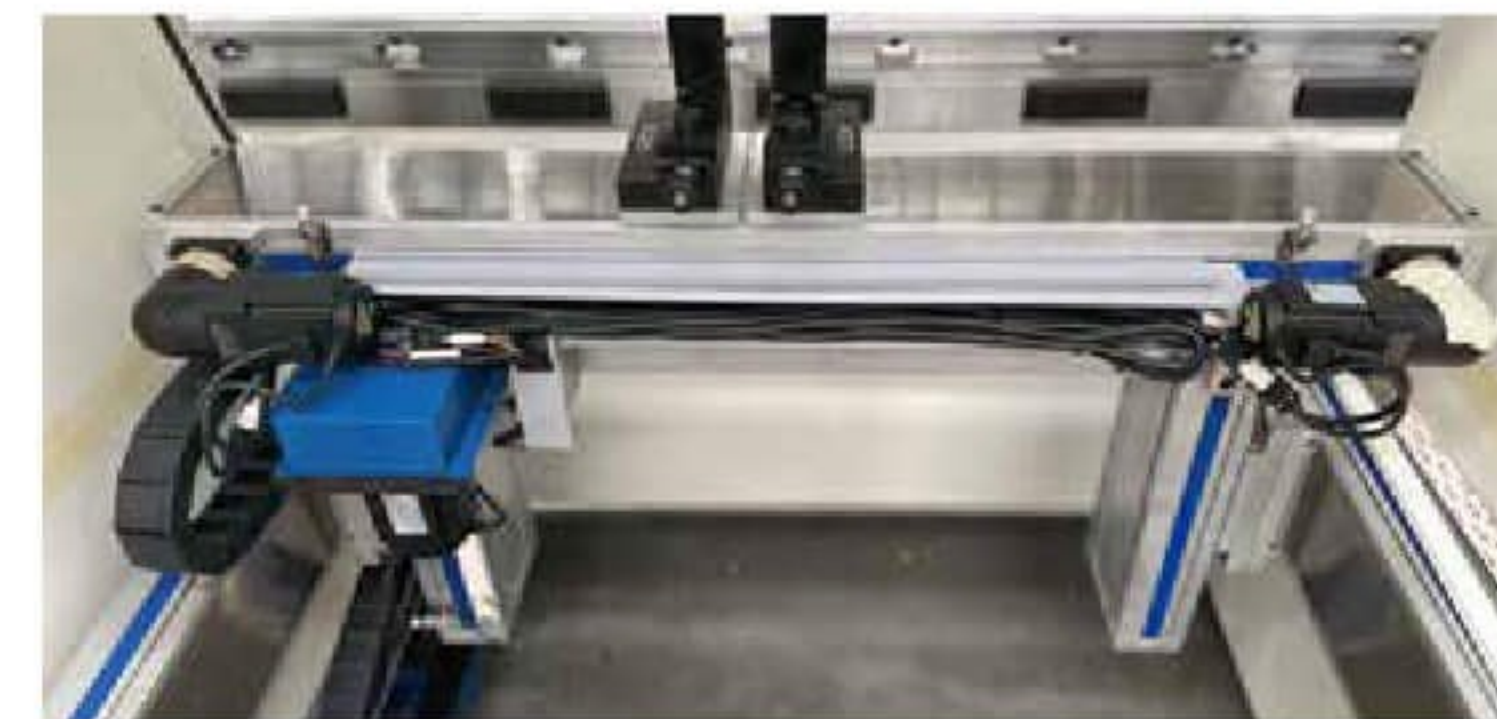


SPECIFICATION		TCD100 2.5M	TCD100 3.2M	TCD100 4.1M	TCD160 2.5M	TCD160 3.2M	TCD160 4.1M	TCD160 6.1M	TCD200 3.2M	TCD200 4.1M	TCD200 6.1M	TCD250 3.2M	TCD250 4.1M	TCD250 6.1M
Bending Force(kN)		1000	1000	1000	1600	1600	1600	1600	2000	2000	2000	2500	2500	2500
Bending Length A(mm)		2500	3200	4100	2500	3200	4100	6100	3200	4100	6100	3200	4100	6100
Distance between Uprights B(mm)		2100	2700	3300	2100	2700	3300	5400	2700	3300	5400	27 00	3300	5400
Max Open Height E (mm)		485	485	485	485	485	485	485	485	485	485	485	485	495
Throat Depth C(mm)		320	320	320	400	400	400	400	400	400	400	400	400	400
Backgauge X Axis	Range(mm)	760	760	760	760	760	760	760	760	760	760	760	760	760
	Max Run Speed(mm/s)	250	250	250	250	250	250	20 0	250	200	20 0	200	200	150
Backgauge R Axis	Range(mm)	200	200	200	200	200	200	200	200	200	200	200	200	200
	Max Run Speed(mm/s)	250	250	25 0	20 0	250	250	20 0	250	25 0	150	20 0	20 0	150
X.R Axis	Postion accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
	Repostion accuracy±(mm)	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Backgauge Z1 Z2 Axis	Range(mm)	1700	2300	2800	16 00	2300	28 00	4900	2200	2800	4900	2300	28 00	4900
Stroke Y1,Y2 Axis	Range(mm)	200	200	200	200	200	200	200	200	200	200	200	200	200
	Postion accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Repostion accuracy±(mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ram Speed	Rapid down(mm/s)	300	300	300	200	200	180	150	180	180	140	160	150	130
	Running(mm/s)	1~15	1~15	1~15	1~10	1~10	1~10	1~10	1~10	1~10	1~10	1~10	1~10	1~10
	Return(mm/s)	200	200	200	16 0	16 0	15 0	13 0	160	160	140	150	150	130
Oil Tank Capacity(L)		280	280	280	280	280	280	380	280	280	380	280	280	380
Main Servo Motor Power(kw)		13	13	13	18.5	18.5	18.5	18.5	18.5	18.5	18.5	22	22	25
Dimensions	L(mm)	2730	3360	4350	2760	3390	4380	6500	3450	4410	6500	3370	4410	6500
	W(mm)	1670	1670	1670	1700	1700	1700	1920	1920	1920	1920	1920	1920	2100
	H(mm)	2750	2750	2750	2830	2830	2380	2830	2920	2920	3100	3100	3100	3230
Weight(kgs)		8100	9000	10600	9100	10300	12600	18900	10800	12700	22000	14000	16000	26500



Advantages:

- Oil Free
- Low Maintenance
- Low Energy Consumption



Description:

- High speed precision, ideal for bending small and medium-sized parts.
- Ullly electric and oil-free, low energy consumption, low maintenance.
- Friendly controller with adjustable working table height for more convenient operation.
- Compact machine footprint, can integrate into various production processes, and easy for transportation.



SPECIFICATION		TCE50 1.6M	TCE70 2M	TCE70 2.5M	TCE100 2.5M
Bending Force(kN)		500	700	700	1000
Bending Length A(mm)		1600	2000	2500	2500
Distance between Uprights B(mm)		1230	1700	2100	2100
Max Open Height E (mm)		465	485	485	485
Throat Depth C(mm)		260	320	320	320
Backgauge X Axis	Range(mm)	750	750	750	850
	Max Run Speed(mm/s)	320	320	320	320
Backgauge R Axis	Range(mm)	150	150	150	200
	Max Run Speed(mm/s)	320	250	250	250
X.R Axis	Postion accuracy±(mm)	0.025	0.025	0.025	0.025
	Reposition accuracy±(mm)	0.025	0.025	0.025	0.025
Backgauge Z1 Z2 Axis	Range(mm)	830	1300	1700	1700
	Speed(mm/s)	350	350	350	350
Stroke Y1,Y2 Axis	Range(mm)	165	200	200	200
	Postion accuracy±(mm)	0.01	0.01	0.01	0.01
	Reposition accuracy±(mm)	0.01	0.01	0.01	0.01
Ram Speed	Rapid down(mm/s)	200	200	200	200
	Running(mm/s)	1~30	1~30	1~30	1~30
	Return(mm/s)	200	200	200	200
Main Servo Motor Power(kw)		11X2	21X2	21X2	25X2
Dimensions	L(mm)	1780	2260	2830	2890
	W(mm)	1420	1520	1520	1710
	H(mm)	2100	2360	2360	2510
Weight(kgs)		4000	5100	6200	8100

The appearance of CS15 CNC system is as follows:

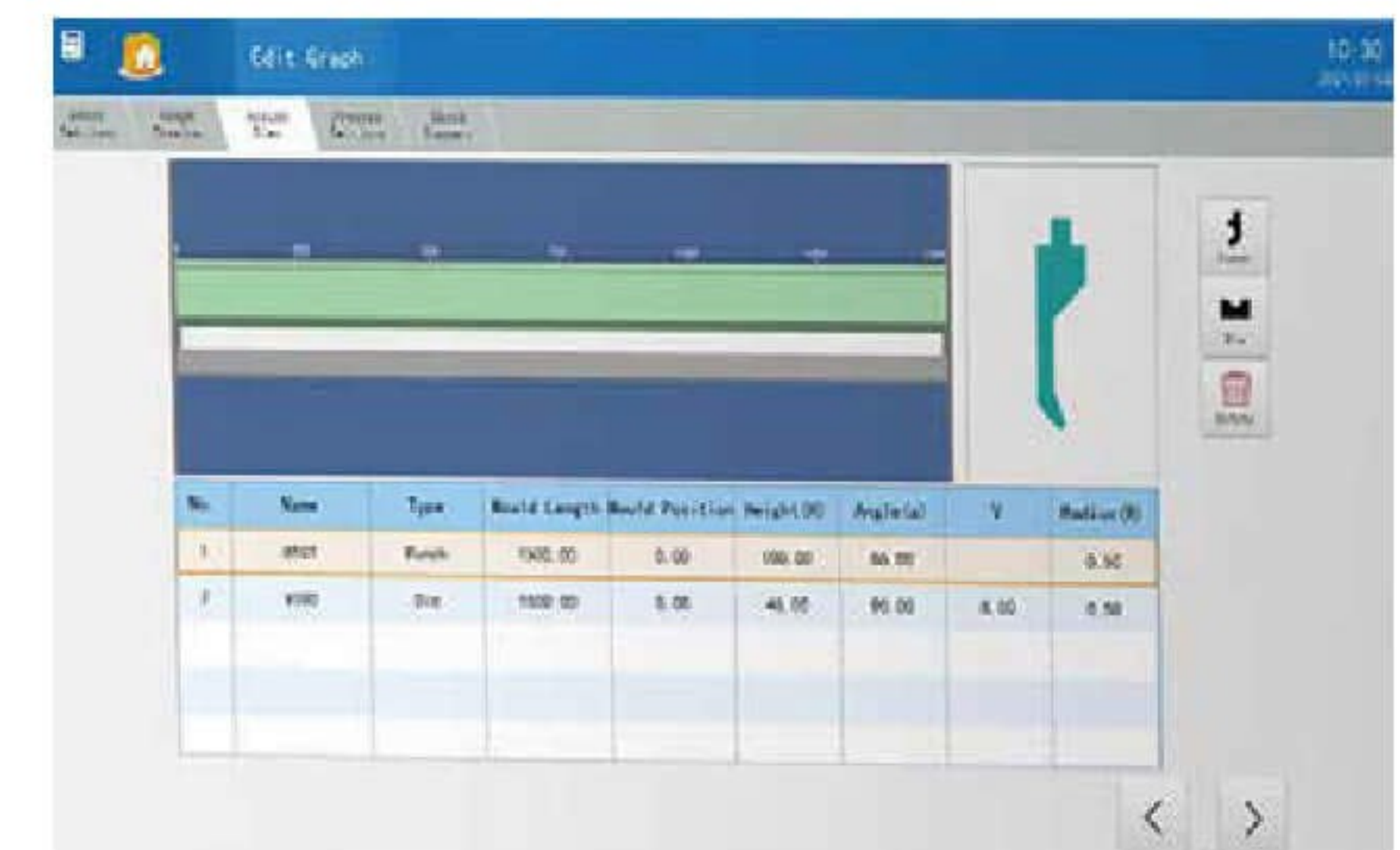
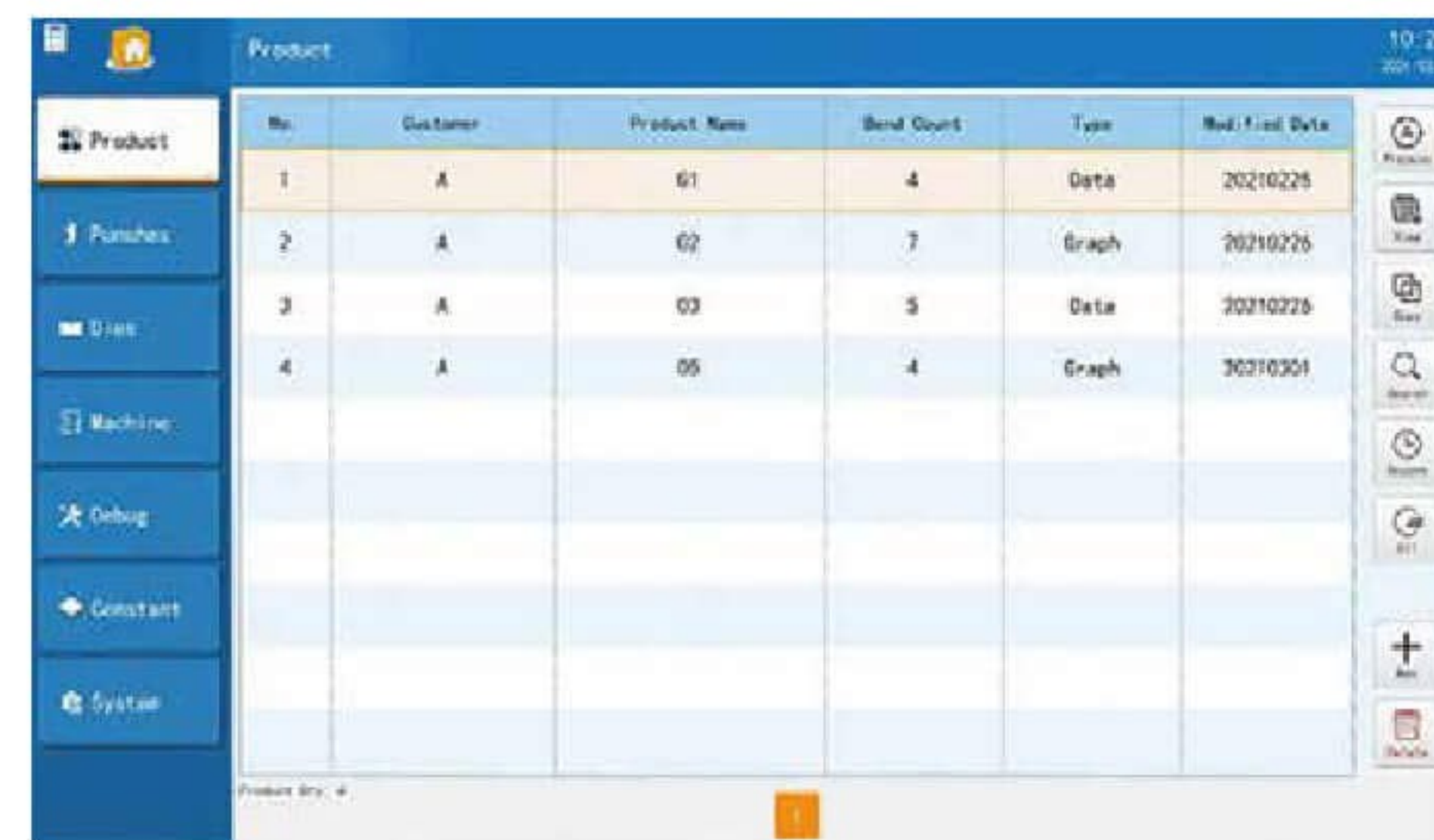
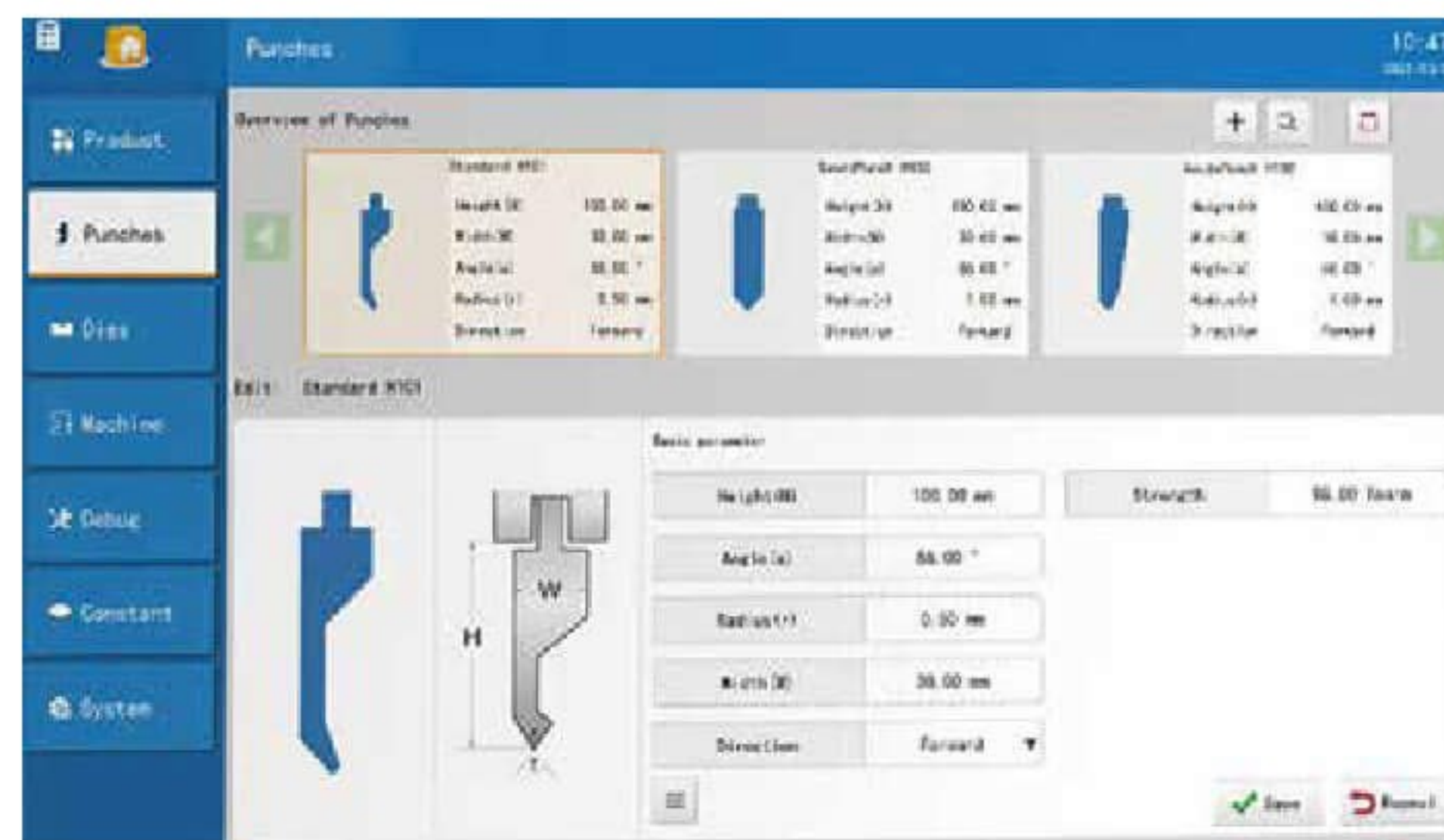
- The system uses 15.6" TFT LCD screen with resolution of 1920*1080px and high-sensitivity touch screen, which can be operated using gloves or connected to mouse.
- Manual/automatic, oil pump and emergency stop buttons are respectively installed below the system screen.
- There are two USB ports at the bottom of the system for connecting external drives such as USB, keyboard and mouse.
- The Linux operating system is stable and reliable. It only takes a few seconds to switch on.
- The content will not change. It can interact with industrial robots and solve the problem of personnel shortage through automation.
- The system has a rich interface and can be easily connected to an automated production line.



CS15

CS21

System Interface





DA-53T

DA-53T Features:

- "hot-key" touch navigation
- 10.1" high resolution color TFT
- Up to 4 axes (Y1, Y2 + 2 aux. axes)
- Crowning control
- Tool/material readout library
- Servo and frequency inverter control
- Advanced Y-axis control algorithms for closed-loop as well as open-loop valves.
- Tandemlink (option)
- USB memory stick interfacing
- Profile-53TL offline software

Standard:

- Colour high brightness LCD display
- 10.1" wide screen TFT
- LED backlight
- Crowning control
- 1024 X 600 pixels
- Industrial grade touch screen
- Storage capacity 1GB
- Data backup/restore via USB
- USB flash memory stick
- Integrated valve amplifier
- Power-down memorisation
- Profile-53tl offline software



DA-58T

DA-58T Features:

- 2D graphical touch screen programming
- 15" high resolution color TFT
- bend sequence calculation
- Crowning control
- Servo and frequency inverter control
- Advanced Y-axis control algorithms for closed-loop as well as open-loop valves.
- USB ,Peripheral interfacing

Standard:

- Colour high brightness LCD display
- 15" TFT
- LED backlight
- Crowning control
- 1024 x 768 pixels
- Industrial grade touch screen
- Storage capacity 1GB
- Data backup/restore via USB
- USB flash memory stick
- Integrated valve amplifier
- Power-down memorisation



DA-66T

DA-66T Features:

- 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17" high resolution color TFT
- Full Windows application suite
- Delem Modusys compatibility (module scalability and adaptivity)
- Open system architecture
- USB ,Peripheral interfacing
- Sensor bending & correction interface

Standard:

- Colour LCD display
- 17" TFT, high brightness
- 1280 x 1024 pixels, 32 bit colour
- Full touch screen control (IR-touch)
- Storage capacity 1 GB
- 3D graphics acceleration
- Standard Windows® networking
- Emergency switch
- Integrated OEM-panel
- USB flash memory drive



DA-69T

DA-69T Features:

- 3D and 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17" high resolution color TFT
- Full Windows application suite
- Delem Modusys compatibility (module scalability and adaptivity)
- Open system architecture
- USB ,Peripheral interfacing
- Sensor bending & correction interface

Standard:

- Colour LCD display
- 17" TFT, high brightness
- 1280 x 1024 pixels, 32 bit colour
- Full touch screen control (IR-touch)
- Storage capacity 2 GB
- 3D graphics acceleration
- Standard Windows® networking
- Emergency switch
- Integrated OEM-panel
- USB flash memory drive



CybTouch8

Easy Operation:

- Large touchscreen, with vivid colors and high-contrast
- Simple pages, clear display, large keys
- Intuitive and user-friendly interface
- Complete programming for efficient mass-production with multiple bends
- Easy single bends with the EasyBend page
- On-line help and interactive warning pop-ups
- Comfortable wireless data backup and software updating using PC or Notebook.
- USB memory stick port for data transfer/backup
- USB memory stick interfacing
- Large variety of languages available

Powerful:

- Controls 3 axes (with 4th axis as option)
- 2D graphic profile creation with manual sequencing (option).
- Bend allowance calculation.
- Pressure – crowning calculation
- Modulable tools for each part or bend
- Angle and back gauge correction
- Delivered with PC1200 offline software



CybTouch12

Easy Operation:

- Large touchscreen, with vivid colors and high-contrast
- Hand drawing TouchProfile function
- Simple pages, clear display, large keys
- Intuitive and user-friendly interface
- Complete programming for efficient mass-production with multiple bends
- Easy single bends thanks to the EasyBend page
- Online help and interactive warning pop-up.
- Comfortable wireless software updating and data back-up using PC or Notebook
- USB memory stick interfacing
- Large selection of languages available

Powerful:

- 4 axes control (Y1-Y2-X-R)
- TouchProfile 2D graphic part creation with manual sequencing
- Bend allowance calculation.
- Pressure – crowning calculation
- Modulable tools for each part or bend
- Punch depth calculation
- Angle and back gauge correction
- Delivered with PC-ModEva offline software



CybTouch15

CybTouch15 Features:

- 15" modern streamlined glass surface touch screen that can be used with gloves
- User friendly HMI thanks to intuitive programming and easy to set
- 2D graphical profile drawing(Touch Profile) and precise 2D program creation
- Automatic bending sequence calculation
- Easy single bends thanks to the EasyBend page
- Wide storage capacity
- Internal backup and restore functions
- Wireless communication for extended diagnostics and updates (with laptop)

Standard:

- 2 models
- CybTouch 15PSe, economical version with only 8I / 13O
- CybTouch 15PS, full version with 16I / 21O
- CybMVA module for Y1, Y2 in the 6 axes configuration
- Available in housing or panel design
- Tandem management
- VisiTouch 2D or VisiTouch MX offline software

The bending machine can easily realize basic bending styles such as right angle ,acute angle,etc.,and can also realize arc,dead edge, return type, closed type and other complex sheet metal bending requirements.

