



Your Partner in Innovation



**Quality
Metal
Working
Machinery**

Complete
Machine Tools





Sourcing of Machinery

When a machine is not off the shelf and a bit obscure, Complete Machine Tools has the right contacts and knowledge to source these machines from around the world.

Who we are

Complete Machine Tools have origins dating back to 1979 where the company was based in South Africa under the name of VS Machine Tool Centre. In 1998 Complete Machine Tools was setup in Australia and set down its roots in Queensland where it has been operating since.

Technology

At Complete Machine Tools we believe that the only way forward is to embrace the technology that's available in the world today. This belief is applied to both the machines we sell and the systems we use in house. In 2016 an ERP system was implemented allowing a complete view of financials, sales, purchasing, stock management, project management and service all in a single software package.

Spare Parts

Spare parts are also a crucial consideration when purchasing machinery. At Complete Machine Tools we stock a wide range of spare parts for all our machines which means your machine downtime will be minimal if something goes wrong. With our dedicated service and repair division and the wide range of spare parts kept in stock you can feel confident you are making the right choice.



Pre-Delivery Checks

All machines are thoroughly tested and checked prior to dispatch so you have assurance that the machine will be ready to go once you receive it.

After Sales

After sales support is critical when purchasing machinery. We understand how important it is to have your machine back up and running when a machine breaks down. That is why Complete Machine Tools has its own dedicated service and repair division for fast and reliable maintenance of your machinery. We go to all lengths to fix your machine; regardless of where you are in Australia. We offer servicing in all states for your peace of mind.



Office | Showroom

In 1998 Complete Machine Tools set up shop in Salisbury, Qld and stayed there till 2013. In 2012 a piece of land was purchased in Seventeen Mile Rocks, Qld and building was commenced shortly after. In 2013 Complete Machine Tools relocated to its purpose-built premises where it is now located.

MACHINERY FOR ALL ASPECTS OF METAL WORKING



INDUSTRIES SERVICED:
Engineering
Sheetmetal
Fabrication
Steel Merchants
HVAC

EVERISING & **LINIA** **VTOP** **CMT**



LEADWELL

ACCURL CMT



DENER

ACCURLCMT CNC PRESS BRAKE | ESA S630 CONTROLLER

MODEL: 135 TON X 3200MM



Please be aware that all pictures used in this quote are examples for your own convenience, effective configurations may vary.

OVERVIEW

1. ESA S630 touch screen controller with 2D graphical interface (Screen size -10").
2. Front sheet supports on linear guides for easy positioning.
3. Four back gauge fingers on linear guides.
4. Quick change top tool clamps with tab for removal of tool out from front of the machine.
5. Motorized back gauge and beam height adjustment controlled by touch screen controller.
6. X & Y axis positioning by servo motors.
7. European segmented top hardened and ground tooling.
8. Multi-vee bottom tool & knife top tooling (800 mm segments).
9. Open rear of machine structure with safety light curtains.
10. Large slide ways for Y axis ensuring excellent accuracy and rigidity.
11. Solid one piece beam precision welded and stress relieved.
12. Ball screw back gauge with linear guide ways.
13. Lasersafe guarding system with beam monitoring encoder - compliant with OH&S standards.
14. Retract function on X axis.
15. Quality hydraulics & electrics.
16. Pendant control.
17. Automatic re-positioning of X & Y axis after each bend.
18. Backlash compensation on X & Y axis.
19. Movable foot control with independent up & down pedals.
20. XGT manual crowning table.

VIDEO



Click to play video in browser

Please be aware that machines shown in the above video are examples for your own convenience, effective configurations may vary.

SPECIFICATIONS

Nominal pressure	1350 KN
Distance between uprights	2600 mm
Open height	450 mm
Length of table	3200 mm
Throat depth	450 mm
Stroke of ram	150 mm
Main motor	7.5 KW
Dimensions	3740 x 1650 x 2355 mm

COMPONENTS

CNC system	ESA	Italy
Servo motor	Delta	Taiwan
Servo drive	Delta	Taiwan
Hydraulics	Rexroth	Germany
Hydraulic pump	Sunny	USA
Electrical	Schneider	France
Linear guideway	Hiwin	Taiwan
Laser guarding	Lazersafe	Australia
Main motor	Siemens	Germany

FEATURES

CNC CONTROLLER - ESA S630

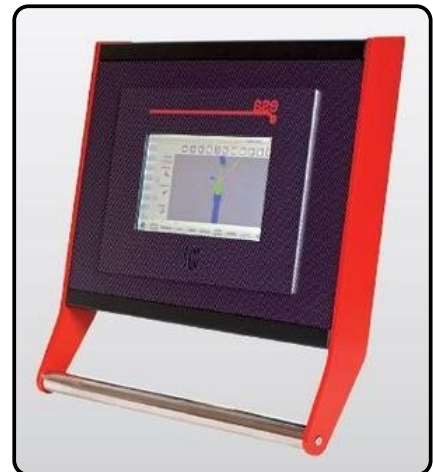
The most powerful in its class with a 10" touch screen and powerful graphics. All the performances of a high-level CNC in an economical and user friendly controller. High level graphic programming for ease of use and sophisticated algorithms to make the most of your machine. Direct management of any kind of servo valve with no need of external amplifiers. Can manage up to four axes in any combination, including electrical press brakes and tandem.

Typical applications:

- Conventional press brakes (mechanical and hydraulic), synchro hydraulic press brakes,
- Servo controlled hydraulic single cylinder press brakes, electrically driven press brakes, tandem press brakes,
- Hydro-mechanical press brakes American style,
- Guillotine shears, with 3-4 axes.

Basic unit equipped with CPU AMD ETX-LX800 500MHZ, 128MB DRAM including:

- Graphic colour 10" touch screen display (1024 x 600 pixels resolution).
- 128MB silicon disk.
- Interactive 2D graphic editor for work pieces and tools data entry.
- Manual 2D graphic identification of the best bending sequence (option).
- 4 fast counting circuits for line drive 0-5Vdc differential encoders or npn/push pull. The encoders are powered at 5Vdc (max 200mA per channel).
- 4 analog outputs (+/- 10V) with 13 bits + sign resolution.
- 4 digital inputs for the zero micros.
- 4 analog inputs, 12 bits resolution, ranges 0÷ 10 V, 0÷ 5V.
- 2 general purposes analog outputs, 0÷ 10V (8 bits resolution).
- 32 digital inputs (24Vdc).
- 32 digital outputs (24Vdc, 0,7A max) protected against overload and short circuits.
- 2 serial port rs232.
- 1 Can port with 9 pins subd f connector.
- 1 ethernet port 10/100 Mbit (Lan connection).
- 1 VGA port for external monitor connection.
- 2 USB (2.0) ports.
- 24Vdc power supply.



FRONT QUICK RELEASE CLAMPING

The upper quick release tooling on the CMT press brake is unique in its class. With this clamping system you don't have to slide the tool out from the side of the machine rather just release the lever, press the red button in and the tooling can simply and easily be removed from the front of the machine.

This is a great feature because it saves a lot of time by not having to slide all pieces out of the machine to remove the centre one or any tooling, instead it can be removed independently without touching the other tools and also this clamping design saves space because on the sides of the machine you don't have to have clear area to slide the tools out of.

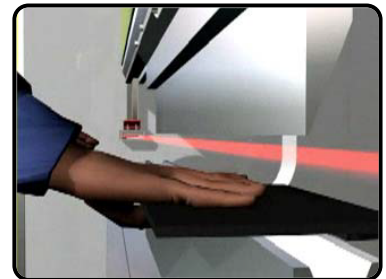


LAZERSAFE GUARDING SYSTEM

Australian workplace health & safety standards insist that a Lazer guard is fitted to these machines. Machine is fitted with Lazersafe guarding system.

Key Benefits:

- Australian made in Perth.
- Delivers comprehensive operator protection at close proximity to work piece. *(With light curtains the operator has to be further away from work piece).*
- Allows tools to close at high speed, increasing productivity.
- Complex shapes can be achieved with the "Tray / Box" and "Field Muted" modes of operation.
- Encoder feedback provides closed-loop monitoring of speed and stopping distance of the press beam.
- A flat band of continuous laser light detects obstructions as small as 4 mm while remaining vibration tolerant.
- The mute point is automatically determined, easily set & continuously monitored.
- The rear section of laser is easily muted to ignore the back gauge in "up-close" situations.
- Failure detection is performed by real-time monitoring of the process under control.



HYDRAULIC SYSTEM

The CMT NC press brake uses quality Rexroth hydraulics. The block is small, compact and very reliable. Rexroth is a world-renowned hydraulics manufacturing company based in Germany with branches all around the world. The hydraulic motor & pump is conveniently situated on the outside of the machine for easy maintenance.



ELECTRICAL SYSTEM

Schneider Electric (France) are used on the CMT NC range of press brakes ensuring reliability and a long life. All parts are easily accessible in Australia.



X & Y AXIS POSITIONING - SERVO MOTORS & DRIVES

The back gauge (X axis) and top beam positioning (Y axis) use independent servo motors and drives. The key benefits are that both axis are positioned simultaneously and the positioning speeds are greatly enhanced because of the utilization of servo motors and drives.

Back gauge positioning speeds are approx 250 - 300mm/sec.



FRONT SHEET SUPPORTS

The front sheet supports travel on linear guide ways for smooth and easy movement. The supports themselves are made of a highly durable plastic to help the material from being scratched. The supports are also on a pivoting structure so when not needed to be used can easily be turned to the side and out of the way.



PRESSURE GAUGE

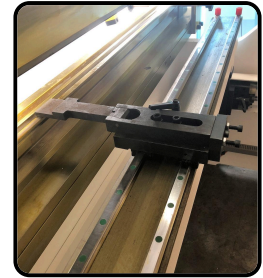
Pressure gauge with adjustment handle conveniently located at the side of the machine.



BACK GAUGE

The back gauge uses ball screw & linear guide ways to ensure accurate and smooth positioning. Used in conjunction with a servo motor, this setup provides very quick positioning to drastically reduce waiting times for axis to position.

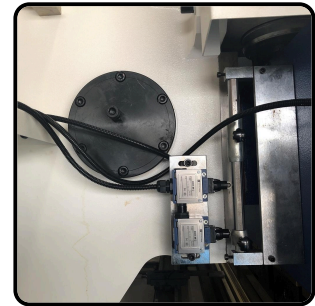
The back gauge fingers also run on linear guide ways so moving them is an effortless and a quick process.



ADJUSTABLE BEAM OPEN HEIGHT

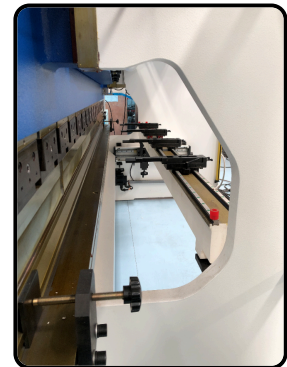
The CMT press brakes have limit switches mounted on the side of the machine frame which are adjustable and gives the ability to adjust how much opening between tools the operator requires.

This is particularly useful when small pieces are being bent and a small opening between tools is required for quicker bending cycles.



LARGE THROAT OPENING

A large throat opening of 450 mm enables the user to do full length pieces and have less interference when bending past the side plate uprights. The uprights on a machine is always a consideration when bending long lengths but with a 450 mm throat it helps to be able to bend larger profiles.



MULTIPOINT COMPENSATION CROWNING TABLE

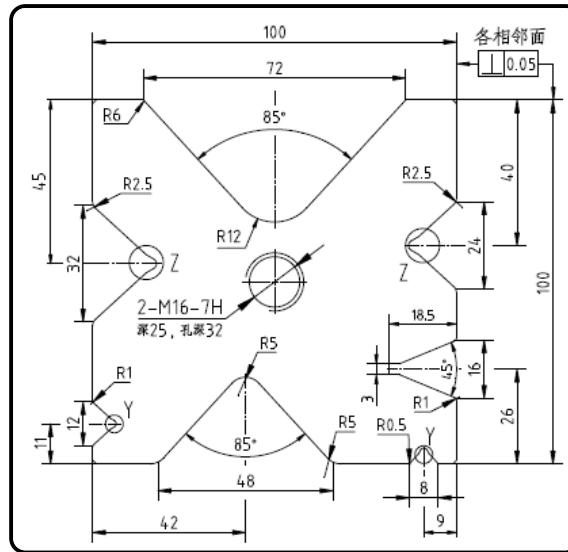
As standard a multipoint compensation crowning table is used on the CMT press brakes. Traditionally paper to pack under the tool was used to compensate for deflection in the middle of the machine. With the manual crowning table any deflection can be accounted for and rectified by manually adjusting the wedge system at the point where the deflection on the bottom table is taking place ensuring a consistent bend from one side to the other and in the middle.



XGT		B	H	L	Δh_{Max}	Adjustment
		<mm>	<mm>	<mm>	<mm>	
		200	80	2500	1.0	"H": Hand
				3200		
		4000				

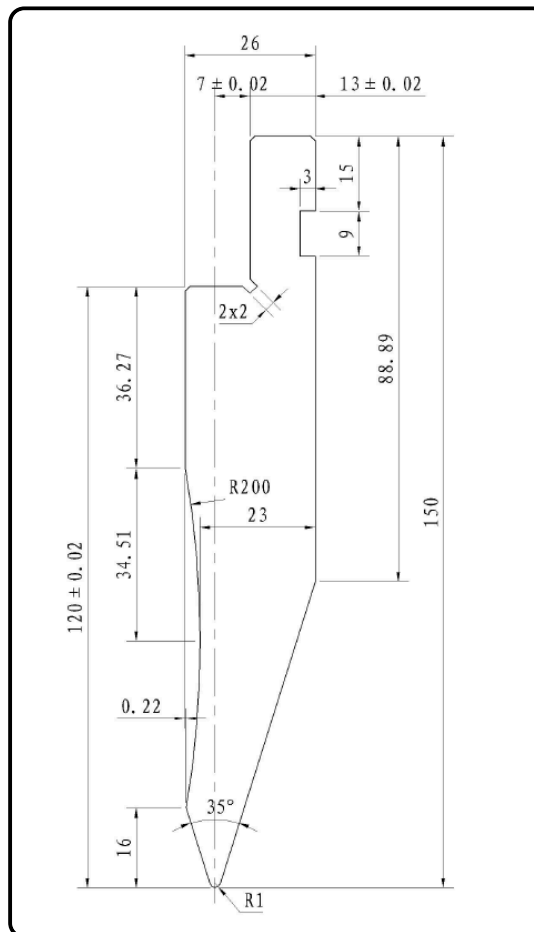
BOTTOM TABLE CONFIGURATION

Standard bottom tooling included with the machine is: Bottom vee block 100mm x 100mm with the following size vee's 72, 48, 32, 24, 12, 8mm and a 16mm deep vee.



TOP TOOLING

Our standard tool we supply is: 4 x 835mm sections + 1 x 660mm section (Full machine length) ~1mm Radius Standard Tool. **Additional** 835mm length segmented (100 Left Ear (Wing), 10, 15, 20, 40, 50, 200, 300 & 100 Right Ear (Wing)).



PARTS WARRANTY



As standard our range of NC Press Brakes comes with a 1 year warranty on parts. This will give you peace of mind that you're covered for any component failure over the first year of the machines life.