

Product Brochure For S889

Hydraulic CNC Pressbrake - APHS-C4106x160

160T x 4100mm, 5 Axis, ESA S530 CNC Control

Includes Programmable X, Y1, Y2, V & R-Axis. CNC Table Crowning
 & Laser Guarding System



ORDER CODE:	S889
MODEL:	APHS-C4106
Control Unit (Type):	ESA-S530 CNC
Nominal Pressure - Tonnage (Ton):	160
Nominal Pressure - Kilonewtons (kN):	1600
Length of Work Table (mm):	4100
Distance Between Columns (mm):	3550
Throat Depth (mm):	410
Maximum Open Height (mm):	530
Ram Stroke (mm):	260
Machine Axis (No.):	5
Safety Guarding System (Type):	Laser System
X Axis Backgauge Travel (mm):	750
R Axis Backgauge Travel (mm):	-
Z1 & Z2 Axis Back gauge fingers:	-
Table Bed Crowning System (Type):	-
Motor Power (kW / hp):	15 / 20
Motor Voltage (V):	415
Floor Space (mm):	-
Nett Weight (kg):	12100



Description

ESA S530 CNC CONTROL UNIT

2D -graphical compact 4-axis control

Complete off-line 2D programming software

Numerical automatic identification of the best bending sequences with collision detection

2D graphic editor for tools data entry

Programming of the axes position with automatic checks, automatic calculation of the R position, bending tonnage and crowning.

High memory capacity for program steps and tooling data (Ability of 7000 programs and 80-step programming in each bending program)

High number of product and 99 repeats of each program step

Ability of graphical bending by a software installed on a computer (Graphical bending files can be transferred to the control by USB flash disk)

Product programming with direct angle input or in absolute dimensions. For each CNC program, the programmable and/or computed functions include: bending length /thickness, material selection, tooling selection, bend method, mute position, pinching point, press force/speed, incremental travel and retraction of backgauge, dwell time, delay time for axes re-positioning, decompression speed, tilt adjustment, corrections on Y and X axes.

Manual operation of backgauge axes

16 selectable languages

Memory storage on USB flash disk (information for top and bottom tools and programs)

Features

- Baykal machine frames consist of a monolithic structure with hot rolled steel sheets of Fe 520 welded together. The two housings (shoulders) are obtained from the same sheet to ensure the same elasticity under stress. The ram and table are also obtained from Fe 520 steel sheets and are opportunely dimensioned to avoid deflection
- The hydraulic cylinders are manufactured from high resistance steel incorporating chromium plated & ground rods. Completed with lapped pistons to ensure longevity of the hydraulic seals
- The hydraulic unit is made by major companies in the field. It consists of electronically controlled proportional valves with independent closed loop control of the two cylinders.
- 5 CNC Controlled Axis (Y1, Y2, X, R, W) as standard. Multi Axis available
- Full electronic Synchronisation with proportional valve technology.
- German manufactured Laser-Safe Guard System mounted at each end of machine ensuring correct interfacing and operator safety whilst in operation. Laser-safe is designed so each guard will slide up or down to allow for many different types and sizes of tooling enabling safety at the appropriate points as required by the Australian standards. Manual height adjustment with scales and lock for easy positioning.
- Sliding steel fabricated front sheet supports enabling a wide range of material sizes to be aligned and supported at the correct required width and height. This function is achieved by the precision linear guides mounted on the front apron parallel to the tooling length. This design can also be adjusted vertically to support material with return bends.

Product Brochure For S889

- Ram positions (Left & Right) are obtained from independent linear encoders whilst monitoring and adjusting proportional valves. This produces a double closed loop system, with guaranteed beam positioning of $\pm 0.01\text{mm}$ (Y1 and Y2 Axis)
- Electronic control of bending parallelism is via the ESA CNC Control
- Accuracy is further ensured by mounting the linear encoders on a C-frame connected directly to the Bed, rather than the side frames. This ensures that deflection of the side frames and uneven loads have no effect on Beam position.
- CNC Controlled Back-gauge:- X-Axis stroke 750mm with DC motor mounted on hardened and machined guides, translation via spherical recirculating ball screws
- EAS CNC Control fully programmable with 2D graphics offline software included
- Axes are driven by ESA servo amplifiers ensuring the perfect interface with the ESA Control
- Precision linear scale measurement : HEIDENHAIN or GIVI MISURE
- Y1-Y2 - X-R CNC - controlled stroke axes
- CNC controlled hardened ballscrew backgauge with X-axis
- X axis range = 750mm speed = 350 mm/s max.
- 2 micrometric backgauge finger stops with lateral adjustment
- Front support arms fully adjustable mounted on linear rails x 2 off easy positioning over the complete working length of the machine
- Quality Siemens Electric control switch Gear is used
- Pendant control panel centralising all Press-Brake Functions
- Foot Pedal Control, Emergency stop buttons
- 2 axis tower type backgauge with AC servo motors
- X-R CNC axis ,
- bar length 2400 mm (size 200x150 mm)
- Z movement manual with double ball linear guides
- fixing on lateral housings
- "X" axes stroke 750 mm
- "R" axes stroke 160 mm
- 2 micro adjustable fingers with 2D stops sliding all long the bar
- Hardening on fingers
- All movements on ball screws and ball guides
- AC servo brushless motors
- "X"• axis speed of 350 mm/sec
- "R"• axis speed 240 mm/sec
- Mechanical accuracy 0.1 mm
- Hydraulics: Hoerbiger & Parker (German & USA)
- Electrics: Siemens or Telemecanique (German or French)
- Scales: Misure or Heidenhain (Italian or Dutch)
- Tooling: Technostamp or Roller (Italian)
- Control: ESA (Italy)
- PLC: AKAS
- Mild steel capacity is rated on hot rolled material with 250MPA

Includes

- ESA S530 2D Graphical CNC Control
- Offline graphical 2D software
- Y1-Y2 cylinder axis
- X - R Backgauge
- W - table crowning
- Quick release top tool clamping system
- AKAS Safety laser front guarding system
- Mechanical crowning on bottom table
- 13mm slot in bottom table for single vee dies

Product Brochure For S889

Specific Features



ESA S530 CNC Controller



ESA S530 Program



German Made Fiessler Class 4 Laser Guard



Sliding Sheet Supports



Quick Action Wedge Clamp Tooling



Ballscrew Back Gauge

Recommended Accessories

M800

Rubber Mat - Anti-Fatigue

M805

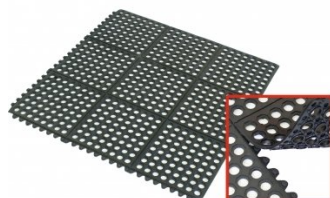
Rubber Mat - Anti-Fatigue

O000

SpillFix Universal Organic Absorbent

O043

Rust & Corrosion Preventive



Product Brochure For S889

O042

General Purpose Lubricant & Corrosion Inhibitor



O040

Rust & Corrosion Preventive



O044

Rust & Corrosion Preventive



O004

Superdraulic ISO 46 Hi Temp Hydraulic Oil



S091

Soluble Metal Cutting Fluid - 20 Litre

