

## Morgan Rushworth PBXS CNC 3100/300 Hydraulic Pressbrake



The Morgan Rushworth PBXS CNC hydraulic pressbrakes are fitted with the ESA S 660 W CNC control, featuring a 19" touch screen and both numerical and 2D graphical program entry which is a very user friendly and intuitive to use. Bending can also be graphically visualised in 2D or 3D showing the machine frame, top and bottom tools, back gauge fingers and part orientation. Whilst data input into the S 660 W is very rapid, there is also the option of preparing the program on a PC using the offline software provided, enabling feasibility checks prior to production. Multi-bend operations with complex forms can therefore be effectively managed, reducing operator error or over bending. With the control networked, programs can be loaded direct from the office if required. Additional software if available which can import 3D CAD drawings and interpret the bending information ready to load directly into the control.



The 4-axis CNC capability controls the left and right ram cylinders, the back gauge depth and back gauge height. The position of the two rams are fully synchronised and accurate to 0.01mm utilising proportional valve technology to ensure ram parallelism and perfect bends. The monoblock welded steel frame ensures minimum deflection under maximum load. The PBXS CNC range

spans from the 1250mm x 40T machine up to the 8100mm x 1000T model. A comprehensive range of options including automated anti-deflection tables are available to fully tailor the machine to your requirements.

Features

- ESA S 660 W CNC 19" touch screen control
- Full synchronisation of Y1 + Y2 axes with proportional hydraulic valve system and constant monitoring by CNC system to +/- 0.01mm accuracy
- High precision linear scales for measurement of stroke depth mounted on side frames rather than top beam to prevent any distortion in accuracy as beam comes under load
- CNC controlled X-axis ballscrew backgauge with servo drive motors
- 2 micrometric backgauge finger-stops with lateral adjustment
- Steel mono-block construction
- Polished chrome plated and ground cylinders
- Long stroke and large open height dimensions
- High approach and return speeds for production bending
- Euro style quick release top tool holders with intermediaries including wedges for crowning
- 88 degree sectionalised goose neck top tool
- 4 way sectionalised multi vee bottom tool
- 2 sliding front support arms with linear guide rails for lateral adjustment and hand wheel for height adjustment, 1000mm long from centre of bottom tool vee
- Double footswitch control and pendant type control arm
- AKAS laser guard protection for enhanced safety
- Electrically interlocked side guards
- Electrically interlocked rear access door

Technical Specification

| MODEL   | PBXS CNC<br>3100/300 |
|---|----------------------|
| Bending power tonnes                                | 300                  |
| Bending length mm                                   | 3100                 |
| Distance between columns mm                         | 2550                 |
| Y rapid speed mm/sec                                | 110                  |
| Y working speed mm/sec                              | 10                   |
| Y return speed mm/sec                               | 100                  |
| Travel in X axis mm                                 | 1000                 |
| Speed of X axis (Standard AC axes) mm/sec           | 330                  |
| Travel in R axis mm                                 | 160                  |
| Operational speed of dynamic Servo R axes<br>mm/sec | 240                  |
| No of backgauge finger blocks                       | 2                    |
| No of sheet support arms                            | 2                    |
| Oil capacity Ltr                                    | 280                  |
| Motor power kW                                      | 22                   |
| Stroke mm   | 320                  |
| Daylight mm   | 660                  |
| Throat depth mm                                     | 500                  |
| Table height mm                                     | 905                  |

| MODEL            | PBXS CNC<br>3100/300 |
|------------------|----------------------|
| Table width mm   | 380                  |
| Machine width mm | 1815                 |
| Length mm        | 3850                 |
| Height mm        | 3150                 |
| Weight kg        | 15000                |

### Options

- Cybelec ModEva 12S 3D graphical CNC control
- Cybelec ModEva 15S 3D graphical CNC control
- Cybelec ModEva 15S 3D graphical touchscreen CNC control
- Delem DA66W 2D graphical CNC control
- Delem DA66T 2D graphical touchscreen CNC control
- Delem DA69W 3D graphical CNC control
- Delem DA69T 3D graphical touchscreen CNC control
- X1 + X2, R or R1 + R2, Z or Z1 + Z2 axes
- Additional Back Gauge Finger X Axis Backgauge
- Additional Back Gauge Finger X, R Axis Backgauge
- Quick Release Tool Clamps
- Mechanical anti deflection table
- CNC motorized anti deflection table
- Brush table for front support arms
- Additional sliding front support arms
- Sheet follower support arms controlled by the CNC
- Parking area for sheet follower support arms – one per side
- Laser Angle Measuring System