
MORGAN RUSHWORTH PBXS CNC 4100/160 HYDRAULIC PRESS BRAKE

The Morgan Rushworth PBXS CNC press brakes are fitted with the ESA VIS-875W CNC control featuring a 21" touch screen and both numerical and 2D graphical program entry. Bending can also be graphically visualised in 2D or 3D showing the machine frame, top and bottom tools, back gauge fingers and part orientation. PC based software is included and, with the control networked, can be used to load programs from the office. The PBXS CNC models feature 4-axis CNC control of the left and right ram cylinders, the back gauge depth and back gauge height. The position of the two cylinders is fully synchronised with high precision scales on the side frames ensuring ram parallelism. These machines follow a rigorous design and manufacturing process to ensure minimum deflection of the machine frame under maximum working pressure. AKAS laser tooling guards are standard and offer a vastly improved operator experience without compromising safety.

All PBXS CNC models are supplied with sectionalised euro style top tools and a multi vee bottom die. The range covers models from 40 tonnes through to 1000 tonnes capacity with bending lengths from 1250mm up to 8100mm in the standard design. Special models can be built with larger widths and higher tonnages or for use as tandem machines. A comprehensive range of options are available to fully tailor the machine to requirements including 6-axis or 8-axis configurations.

FEATURES

- ESA VIS-875W multi-axis CNC control with numerical and 2D graphical programming and 2D or 3D visualisation, mounted on pendant arm
- Fully synchronised CNC control of left and right upper beam cylinder position – Y1 + Y2 axis
- CNC control of back gauge depth – X axis
- CNC control of back gauge height – R axis
- Manual side to side movement of back gauge fingers – Z axis
- Euro style top tool holders with intermediates including wedges for crowning
- Sectionalised goose neck top tool and multi vee bottom die
- Bottom tool wedge crowning system
- AKAS laser tooling guards for enhanced ease of use
- Strong rigid welded mono block frame able to withstand deflection under maximum load
- High precision linear scales for measurement of the stroke depth which are mounted on the side frames rather than the top beam to prevent any inaccuracy through distortion as the beam comes under load
- Hydraulic ram travel guided in low friction slide ways
- Large open height and generous ram stroke
- Deep reinforced throat in side frames
- High approach and return speeds for production bending
- Front support arms with flip stop, adjustable on a linear rail
- Dual foot switch console with emergency stop
- Electrically interlocked side guards
- Electrically interlocked rear access door

OPTIONS

- Optional off line ESA Bend 3D Software with Control Viewer
- Independent CNC control of side to side movement of back gauge fingers – Z1 + Z2 axis
- Independent CNC tower back gauge system – X1 + R1 + Z1, X2 + R2 + Z2
- Laser angle measurement system with live feedback to CNC control
- Manual bottom tool crowning system with position counter
- CNC bottom tool crowning system
- Quick release top tool clamping system
- Hydraulic top and bottom tool clamping system
- Additional back gauge fingers
- Additional front support arms
- Brush table for front support arms
- CNC sheet follower support arms
- Parking area for sheet follower support arms – one per side

TECHNICAL INFORMATION

MODEL	PBXS CNC 4100/160	
Bending Power	tonne	160
Bending Length (Over Tooling)	mm	4100
Bending Length (Between Frames)	mm	3550
Y Axis Approach Speed	mm/sec	170
Y Axis Bending Speed (Maximum)	mm/sec	10
Y Axis Return Speed	mm/sec	120
X Axis Travel	mm	750
X Axis Speed	mm/sec	330
R Axis Travel	mm	160
R Axis Speed	mm/sec	240
No of Back Gauge Fingers		4
No of Sheet Support Arms		4
Stroke	mm	260
Daylight	mm	530
Throat Depth	mm	410
Table Height	mm	880
Table Width	mm	60
Oil Capacity	litre	210
Motor Power	kW	15
Nominal Power (excluding options)	kW	19
Length	mm	4850
Width	mm	1650
Height	mm	2905
Weight	kg	12000

OTHER IMAGES

