

DataBend DB100ESRB









The DataBend 100ESRB as generally described is supplied complete with the following equipment:

- Databend CNC unit.
- Foot pedal cycle start.
- Clockwise bending rotation (anti-clockwise on request - no cost option).
- Two day operator training at our works.
- Operator manual and circuit diagrams.
- Automatic mandrel lubrication.
- Fibre optic safety mat system
- Safety barrier rail
- Recapture software
- Sequential software
- Safe load procedure (foot)
- CE mark

The AddisonMcKee DataBend 100ESRB machine is all electric in operation and is manufactured to a modular design enabling a number of variants to be offered based upon the same structure. This enables machines to be designed, or in some instances modified, specifically to suit individual customer needs.

The AddisonMcKee DataBend 100ESRB machine is a 100mm high performance draw bending machines designed for maximum productivity demanded by todays industry. All AddisonMcKee machines are built using exacting standards demanded and enforced by our own Total Quality Assurance programme.

The machine comes as standard with the following features:

- Touch Screen Control for ease and speed of operation
- Full Colour Graphics
- Graphical Representation of the Component Shape
- XYZ to YBC Conversion
- Tooling Data Storage Facility
- Sequence Teach Facility
- Production Monitoring Facility
- Piece Counter (Electronic)
- Floppy Disc Drive Backup Unit and CD ROM
- Phased Mandrel Retraction
- Powered Follower Slide
- Wiper Die Bracket
- Three Mandrel Rods
- On-line Modem Diagnostics

Capacity

| Tube outside diameter | Standard | 100 | mm | MAX |
|---|----------|------|-----|-----|
| Tube wall thickness | | 2.5 | mm | MAX |
| Centerline radius | | 500 | mm | MAX |
| n n n | | 50 | mm | MIN |
| Bend arm rotation (<i>i.e. bend angle</i>) | C axis | 193 | deg | MAX |
| Length of tube over the mandrel rod into the collet | Y axis | 5000 | mm | MAX |
| Length of tube over the mandrel rod through the collet | Y axis | 8000 | mm | MAX |
| Length of tube into the collet before last bend - <i>subject to tooling limitations</i> . | | 550 | mm | MIN |
| Tube working height | | 1250 | mm | |
| Tube height from tooling platform | | 70 | mm | MIN |
| n n n n | | 420 | mm | MAX |
| Mandrel retraction stroke | | 600 | mm | |
| Follower slide stroke | | 650 | mm | |
| Clamp slide stroke – fall away only | | 148 | mm | |
| Reaction slide stroke | | 550 | mm | |
| Vertical shift pitch | Z axis | 350 | mm | |
| Horizontal shift | X axis | 650 | mm | |
| Clamp slide – CLR adjustment stroke | | 310 | mm | MAX |
| Boost stroke | | 2500 | mm | |
| Boost force | | 80 | KN | |

Axis specification

| AXIS | SPEED 100% | UNITS | RESOLUTION | UNITS | REPEATABILITY | UNITS |
|------------|---------------|--------|------------|----------|---------------|---------|
| Y - feed | 80 | M/min. | 0.008 | mm/count | 0.05 | mm |
| B - rotate | 70 | r.p.m. | 0.0028 | °/count | 0.05 | degrees |
| C - bend | 10 | r.p.m. | 0.001 | °/count | 0.05 | degrees |
| X - radius | 7.5 | M/min. | 0.0033 | mm/count | 0.05 | mm |
| Z – shift | 5.6 | M/min. | 0.0005 | mm/count | 0.05 | mm |

| Total machine kVA @ 415V | 99 |
|--------------------------|----|
| C axis stall torque kNm | 44 |

Dimensions

| Overall length to the rear from tool post | 10130 | mm |
|--|-------|-----------|
| Bend arm radius (clamp out) | 1665 | mm |
| Length forwards from tool post | 360 | mm |
| Length of reaction arm - at MAX. center line radius from Y axis center | 1800 | mm |
| Overall width | 2400 | mm |
| Overall height | 1850 | mm |
| Machine weight | 16000 | Kg (Est.) |

Optional Extras

To complement the machine, a wide variety of optional extras are available. Some of these may be essential for your production needs, such as items to suit climatic conditions, or desirable for specific processes, such as automation systems.

Machine capacity figures are based on using material to the specification of BS3602:part 1:1987 having a mean tensile strength of 450 N/mm² bent at a radius of 2 times the outside diameter.

This document has been compiled in good faith. (Errors and omissions excepted).

This information applies to machines manufactured after serial number - 9338

The information in this document is not binding in detail.

In pursuit of excellence AddisonMcKee retain the right to amend designs from time to time without prior notice.