

FastBEND-2D-(T) FastBEND-3D-(T)

HacoBend 2D Firmware



Multifunctional

Our **Fastbend 2D** and **Fastbend 3D** is a multifunctional press brake control that allows the user to create and execute bending programs in a Windows environment. The simple user interface guarantees a clear overview of the production. 2D-drawing mode makes it possible to create 2D-profiles on the machine.

Fast

The **Fastbend 2D** and **Fastbend 3D** - with its high speed processor - are able to process data very fast and it can also carry out complicated mathematical calculations. All these calculations happen automatically, so the operator doesn't need to make any calculations by himself.

Hardware Features

Standard firmware : HacoBend

- 15" multicolor TFT flat screen
- DC single axis back gauge control (Optional up to 16 controlled axes)
- Depth axis servo control
- Auxiliary outputs
- Windows environment
- Floppy disk support (save, load, backup, restore,...)
- Built-in test routines and parameters
- Network + offline possibilities
- USB – connection

Optional

- Touch-screen
- Barcode reader
- Robot mode

Software Features

HacoBend is the program running on the control, and is also available offline (in the office). During the creation of the profile, the software automatically calculates the number of bending solutions in real-time. The part program is generated immediately.

Features

General:

- Automatic or manual mode
- Absolute or incremental back gauge positioning
- Execution of generated 2D-programs (2D profiles)
- Execution of generated 3D-programs (Fastbend 3D)
- 2D simulation of generated 2D-program (Fastbend 3D)
- 3D simulation of generated 3D-program (Fastbend 3D)
- Visualisation 2D-profile with thickness
- Visualisation 3D-profile with thickness (Fastbend 3D)
- Work on depth, angle or pressure
- Tilt function (machine tilt or per step)
- Automatic calculation of needed force or depth
- Material library with all available materials
- Add materials to material list.
- Tool library with all available tools
- Programmable retraction
- Multiple languages (optional Chinese)
- Manual (English)
- Importing of dxf (2D sections !)

2D Profile concept :

- drawing method : FastCad (direction/fixed length)
- Solutions calculated during drawing
- 10.000.000.000 calculation of solutions / sec
- Immediate display of solutions with visualisation.
- Immediate warning in case of unbendable shape.
- Automatic reduction of movements between steps.
- Optimisation of weight distribution
- Drawing and calculation of hemming bends
- Drawing and calculation of arcs (bumped radius)
- Unlimited nr. of bends.
- Insert segment at start/end/within profile
- Zoom on drawing
- Display of dimensions during drawing
- Measure functions
- Line/angle adjustment to fit certain measurements
- Parametric drawing
- Messages concerning tools during drawing
- Select tools during drawing
- Bending sequence info during drawing

2D Bending sequence & back gauge setting :

- Display course of bending sequence search
- Search for ALL solutions
- Saving of 25 "best" sequence (according to score)
- Score for bending sequence (parameters: collisions, safety zone for fingers, motions, production time)
- Score for gauging quality
- Select different bending sequence
- Extensive solution search for arcs (e.g. 180° arc)
- Retraction taken into account during solution search
- Display production info during back gauge setting
- Automatic retraction calculation
- Display target retraction
- Move finger over adjustable distance