



HACO FLEX BEND

Robot bending cell

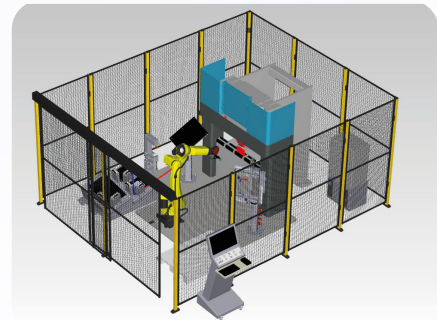
HACO FLEX BEND

Challenges for increased productivity, quality and finding skilled operators lead to an increasing demand for automated bending systems or robot bending systems. For several years, HACO provided customers with tailor made solutions in the domain of automated bending. Today HACO is proud to offer a standardized bending cell meeting customer's most demanding requirements.

HACO FLEX BEND is a compact robot bending cell which automates the bending of small to medium sized parts in a fast and cost-efficient manner with top precision. Programming is handled completely offline and requires no robot teaching at the machine.

Main Features

- Fast automatic programming of the press brake and robot
- Space saving design, only 4 x 5 mm of floor space
- Part sizes from 35 x 100 mm up to 300 x 500 mm
- Product weight max 5 kg



Advantages

- High cost effectiveness even for smaller series
- User friendly software
- Constant quality

Product specifications



PRESS BRAKE

Electrical pressbrake EMaster 13040

- Tonnage 40 tons – Machine length 1.3 meter
- 4-axis backgauge with finger detection: X, R, Z1 & Z2
- Controller FASTBEND 3D MT
- Clamping European Standard
- Daylight opening 375 mm – stroke 150 mm
- Fast approach speed: 150mm/s
- Bending speed : 20 mm/s – Fast return speed: 150 mm/s



ROBOT

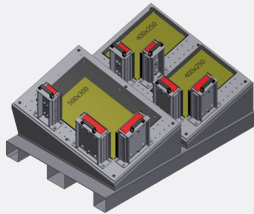
FANUC robot M-20iD/35 with 30iB controller

- 6 axis robotic arm
- Armlength: 1831 mm
- Payload: 35 kg

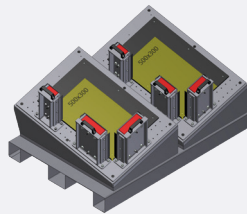
Pheripherals

Picking station

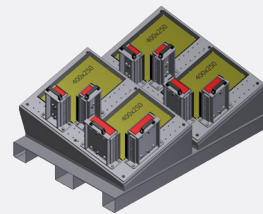
The picking station features magnetic sheet separation and brushes to facilitate efficient selection, ensuring the vacuum/magnetic gripper grasps only a single sheet by utilizing magnetic repulsion to separate the top sheets.



- 3 sheet picking pattern
- 600 x 400mm (1x)
- 425 x 275mm (2x)
- stackheight: 200 mm
- thickness from 1 to 4 mm



- 2 sheet picking pattern
- 600 x 400 mm
- stackheight: 200 mm
- thickness from 1 to 4 mm



- 4 sheet picking pattern
- 425 x 275 mm
- stackheight: 200 mm
- thickness from 1 to 4 mm

Double sheet detection

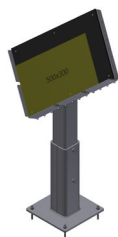
Assures the robot has only picked up a single base plate.



- Sheet thickness from 1 to 6 mm
- Material independent (ferro and non-ferro metal)

Reference station

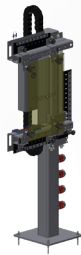
Reference station, where the base products can be referenced so that each base product is in an identical position for the robot to pick up.



- The reference table is a static, angled surface
- The dimensions of the reference table are 500 x 300 mm

Retake station

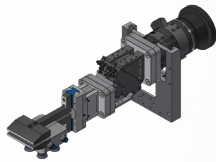
This universal retake station contains manually adjustable arms and is equipped with suction cups as well as with magnets.



- For sheets of 300 x 500 mm
- Movable arms manually adjustable in height and width
- Standard version with 4 suction cups diameter 50 mm
- 4 pneumatic magnets (47 N)

Robot gripper

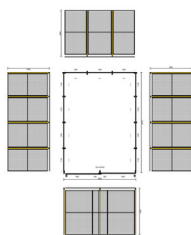
The robot is standard equipped with a universal mechanical robot gripper.



- Parallel gripper with course 8 mm
- Adjustable suction cups
- 90° rotation element

Safety equipment

The robot bending cell is equipped with various safety features to protect operators from potential hazards during the operation of the robot.



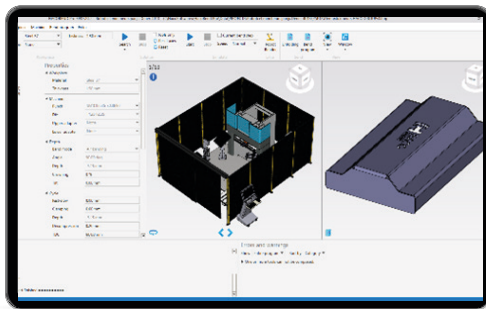
- Safety perimeter, with dimensions 4 m by 5 m
- Fences (colour: RAL 9011 and 1018) with 2300 mm height
- Two sliding doors with 1900 mm wide opening
- Mesh size: 50 x 30 mm
- Equipped Euchner MGB locks with panic handle

Software

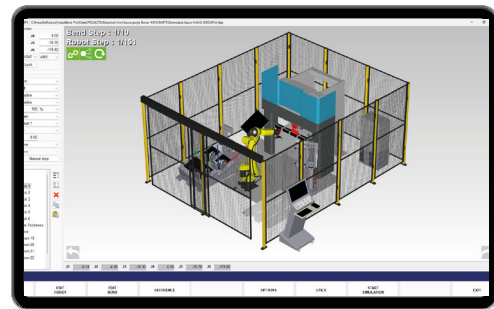
Offline bending software

The software is used for calculating, simulating and adjusting the bending sequence of the products, and also for calculating, simulating and adjusting the robot programs. All bending- and robot programs can be simulated in detail.

HACOBEND Pro



Robotbender



Optional equipment

PRESS BRAKE

- Hydraulic press brake
- Hydraulic clamping
- 5 axes

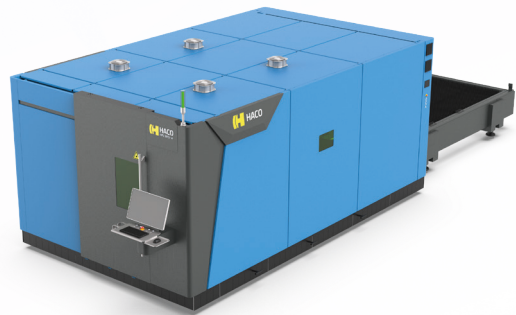
ROBOT GRIPPER

- Automatic robot gripper
- Gripper change system
- Chute to slide pieces into a box

Product Range

With decades of experience and leading technologies, we are known for our high-quality customized solutions for sheet metal fabrication and machining. Whether laser cutting, bending or rolling, at HACO we offer precision, quality and innovation.

- Press brakes
- Fiber lasers
- Plasma cutters
- Shears
- Bending machines





Machinery Masterminds

WWW.HACO.COM

HACO Belgium

Hogeschuurstraat 2
8850 Ardooie
Belgium
+32 (0)51 26 52 00
info@haco.com

HACO India

Plot No. 122A, Sector 6
MT, Bawal, Distt. Rewari Haryana,
India, 123501
+919996246805
sales@haco-india.com

HACO USA

11629 N. Houston Rosslyn Rd.
Houston, TX 77086
USA
+1 281 445-3985
sales.tx@hacoatlantic.com

HACO Slovakia

Ulica 1. Mája 1850
031 80 Liptovský Mikuláš
Slovakia

HACO France

Parc d'activés de la Houssoye
Rue René Laënnec
59930 La Chapelle D'Armentières
France
+33 3 20 10 30 40
commercial@haco.fr

HACO Australia

16 Argong Chase
Cockburn Central WA 6164
Australia
+61 0 8 9414 7382
sales@hacoaustralia.com.au

HACO FLEX BEND /05.2024

This catalog is not a contractual document and only for illustrative purposes. HACO reserves the right to modify any specifications within this catalog without prior notice.