

Hydraulic Press Brakes

# **OptiForm – Efficiency reinvented**

At HACO, we've gone back to the drawing board to redefine what an entry-level press brake should be. The result is **OptiForm** – a machine born from a complete bottom-up redesign, backed by more than 60 years of expertise in engineering, manufacturing, and servicing sheet metal solutions.

#### OptiForm brings together what today's fabricators need most:

- European-built quality and reliability
- · Intuitive, user-friendly operation
- · A budget-friendly investment
- Fast availability with two preconfigured models, delivered from stock

Whether you're upgrading to your first **press brake** or adding extra capacity to your workshop, OptiForm offers maximum return with minimum complexity. It's engineered for efficiency – not just in production, but in installation, service, and everyday use.

Smart choice. Fast delivery. Proven performance. That's OptiForm.

### Intuitive multi-touch control

The **EASYBEND** control sets a new standard in the market for flexible, reliable and high precision sheet metal bending.

Driven by state-of-the-art PC-based hardware, the system allows for very fast data processing and highly accurate calculation of the optimal bending programs for OptiForm hydraulic CNC press brakes.

### > New design

The **OptiForm** features a fresh, modern look with a compact, lightweight footprint – yet it's built on a rigid, high-thickness welded steel frame for lasting strength and precision. Its lean design enhances production and assembly efficiency, improves transportability and reduces space requirements in your workshop.

Designed with ergonomics in mind, it offers a more comfortable operator experience and simplified servicing.

# > Preconfigured

For fast delivery and reliable performance.

At launch, the OptiForm is available in a 3-meter length with a 150-ton capacity.

The **OptiForm 30150** comes standard with a 2-axis X-R backgauge and manual crowning.

The **OptiForm 30150+** is equipped with a 4-axis X-R-Z1-Z2 backgauge and CNC crowning for added precision and flexibility.

### > New backgauge

The motorized backgauge significantly reduces adjustment time, boosting productivity. Its fingers feature three contact surfaces to accommodate a wide range of part shapes while ensuring stable and accurate positioning. The **OptiForm** backgauge is designed to be more rigid and precise, minimizing deflection and flexing. It's also easy to maintain, service and adjust.

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## Top tooling

The **OptiForm** is available with a 100 mm or 150 mm top clamp height. Choose the **ES Quick Clamp** for Europe to access the widest selection of tools on the European market, or opt for the **Universal Fast Clamp** for the U.S., ensuring full compatibility with both the US and European style tooling.

### Table

The OptiForm table is designed to accommodate a wide range of bottom tools. The tools are positioned and clamped easily and precisely every time.

### > Safety

Fully CE-compliant, the OptiForm is equipped with a range of safety components to protect the operator and ensure safe operation at all times.

# **OPTIFORM** Compact by design, solid by nature.

- Maximized strength and efficiency with a rigid welded steel frame.
- Enhanced operator comfort for ease during operation.
- Exceptional flexibility for versatile sheet metal bending.
- Reduced maintenance with a precise, low-maintenance backgauge.
- ✓ Fast, seamless setup for immediate production.
- Intuitive control for effortless operation and precision.

# **EASYBEND** Control



The **HACO EASYBEND** is an advanced control system for press brakes, combining powerful 2D software and PC-based hardware to deliver high precision and flexibility. Programs can be created directly on the machine manually or automatically, or they can be generated using offline software. Designed for reliability, it integrates tool assignment, bending sequences, and CNC programming to ensure optimal performance.

# **Features**

After drawing your workpiece, the software automatically generates a bending sequence and the position of the various axes, making programming your machine simple and quick. The EASYBEND also offers full manual control, including drawing, tool assignment, bending sequences, backgauge settings, and CNC program creation.

## > Bending

- Automatic or manual operation
- 2D workpiece drawing and execution
- Programming bending angle, depth, or pressure
- Automatic force calculation
- Manual angle correction
- Jogging and manual adjustments for TDC, speed changeover point, dwell time, delay, back gauge retraction, clamping point, and auto-up with sync function
- Intelligent copy feature

### > Program management

- Extensive management via Flash Card, USB, and network
- Network connectivity with PC or other networks
- Intelligent copy feature
- Program info and extensive counters (control time, pump time, etc.)
- Metric or Imperial units

## > Advanced functions

- Step Previewer for bending visualization
- Smart Draft drawing method
- Automatic hemming and double bend features
- False bend function
- Stretched length calculation
- Manual and automatic step insertion

# > Axis & control features

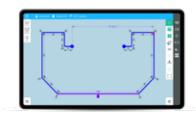
- Graphical axis page
- Programmable Beam Tilt and CNC controlled
   anti-deflection
- Programmable limits and finger
   height adjustment

### > Tool management

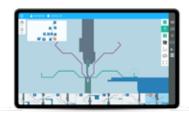
- Editable graphical tool database
- Tool import, editing, and auto-search
- Tool height calibration mode

# EASYBEND CONTROL - Intuitive power, the HACO way

- ✓ Effortless visual programming with the trusted HACO intuitiveness operators love
- Automatic program generation save valuable time on both single parts and batch work
- Accurate, flexible, and reliable for optimal results, every time



Point-to-Point drawing method, real-time bending solution calculation during building-up workpiece design



Step Previewer: ability to visualize bending steps



Intuitive Interface combining numerical and graphical elements



Smart Draft: innovative drawing method for 2D workpieces



Combined Icons: multiple functions on a single icon



Intuitive Interface with an overview of the program and the possibility of messages for the operator

# **Hardware specifications**

Display	18.5" MULTI TOUCH screen, 16:9 (1366 x 768 pixels)		
Housing	HACO aluminum with glass front and practical handle (IP65)		
Processor and OS	High-performance, PC-based hardware with Microsoft Windows 10 IoT E LTSB		
Storage	80GB SSD		
Memory (RAM)	4GB DDR3L		
Control and connectivity	<ul> <li>Servo multi-axes backgauge control</li> <li>Incorporated proportional valve drive</li> <li>Integrated parking position for peripheral axis</li> </ul>		

# Table

**OptiForm** has a 60mm groove to accommodate European Standard type bottom tools referred to as 'ES'.

## OptiForm 30150

#### Key advantages:

- Quick and precise positioning of tools.
- Compatible with 60mm tang width bottom tools.

#### MANUAL CROWNING

The manual anti-deflection table crowns the table along the full bending length to compensate for the deflection of the frame and beam. It consists of a system made up of sloped wedges that are drawn or pushed using a crank. This results in a part with a constant angle along the entire length of the machine.

#### Additional advantages:

• Precise and consistent bending angle



#### MOTORIZED CROWNING

The motorized Anti-Deflection table operates in the same way as the manual device, with the only difference being that the crank is replaced by a motor. The crowning device is directly linked to the EASYBEND control unit, and the choice of material, thickness, and length will automatically adjust the device.

#### Additional advantages:

- Precise and consistent bending angle with no setup time
- Fully automatic

# **Top tool clamping**

#### THE QUICK CLAMPING SYSTEM

**OptiForm** can accommodate standard European-type top tools known as 'ES'. This clamping system gives you access to a very wide selection of top tools. Thanks to its groove, the top tool is held in the clamp even after being loosened, ensuring the operator's safety. The system allows for the attachment of standard length tools of 835mm, 415mm, or sectionalized lengths.



#### Key advantages:

- Wide variety of top tools
- Quick top tool clamping without the use of hand tools

# Backgauge

# OptiForm 30150

#### BACKGAUGE X-R (2 AXES)

The XR backgauge of the OptiForm is made up of a rigid beam and two fingers. The depth (X) and height (R) are motorized and controlled by the CNC.

#### Stroke X: 600 mm, speed 400 mm/s Stroke R: 200 mm, speed 62,5 mm/s

The fingers are manually adjustable along the length of the machine from the front. The fingers are equipped with 3 contact/support surfaces and are tiltable.

Х

Z1

Х

71

#### Advantages:

- Finger adjustment time is significantly reduced
- Possibility of setting finger positions easily, so you can bend an entire workpiece without having to shift the fingers

# OptiForm 30150+

#### BACKGAUGE X-R-Z1-Z2 (4 AXES)

The backgauge X-R-ZI-Z2 has 4 motorized axes. In addition to depth (X) and height (R), the two fingers move independently along the length axis (Z). They are named ZI and Z2.

#### Stroke X: 600 mm, speed 400 mm/s Stroke R: 200 mm, speed 62,5 mm/s Stroke Z1-Z2 axes: 1.000 mm/s

The fingers are manually adjustable along the length of the machine from the front. The fingers are equipped with 3 contact/support surfaces and are tiltable.

#### Additional advantages:

- There is no longer any setup time for the backgauge.
- It is now possible to bend on tool sections of different lengths distributed along the length of the machine

R

# Safety

## **OptiForm standard equipment**



#### DSP SAFETY LASER

Multiple lasers observe the tip of the tool. If an obstacle stands between the laser emitter and receiver, the descent of the beam is interrupted. For OptiForm CE-compliant machines, the laser is essential for operating at high speed. Its mutation point is located between 14 and 23 mm.

#### Advantages:

- · Increased operator safety
- Increases bending speed



**3-POSITION SAFETY PEDAL** 

The safety pedal has 3 positions as well as an emergency stop. If the lowering pedal is fully pressed, the descent of the beam is interrupted.



#### SIDE DOOR

Two integrated doors are located on either side of the machine. They ensure that no one is behind the machine during the bending phase. The doors open to facilitate the extraction of top tools and deep workpieces. An electromagnetic switch ensures that the door is properly closed during operation.

#### SAFETY LIGHT CURTAIN AT THE BACK

Light curtains facilitate access to the backgauge while ensuring safety during the bending phase. A simple push button allows the light curtain to be reset to resume bending.

# Accessories

#### **NEW OPTIFORM FRONT SUPPORT ARMS**

It is possible to add front support arms of 430 mm in length to the machine to facilitate the handling of workpieces. The support arms are movable along the entire length of the machine and can be easily adjusted in height.

#### Advantages:

- · Facilitates the handling of workpieces
- Easy to adjust and secure the height and the position due to strong but light weight construction and ergonomic clamping elements



#### **OTHER ACCESSORIES**

- · Air-conditioned electrical cabinet
- 220V transformer

# **Offline software**

## **Optional equipment**

## **HACOBEND Pro 2D**

The HACOBEND Pro 2D software allows you to create 2D bending programs for your machine remotely on a computer.



#### WORKPIECE DESIGN

You choose the material, thickness, and bending length. You simply draw the workpiece to be made point to point, indicating the various dimensions and angles. Assists in programming specific bends: stepped bends for radius, hemming, etc.

#### **PROGRAM CREATION**

Tools are offered based on your usage habits. You can modify them. The software automatically calculates a bending sequence based on your workpiece. The sequence is calculated to avoid collisions and minimize workpiece reorientations. For each step of the bending sequence, the software programs the descent and the position of the backgauge axes. Easily change the bending sequence and the position of the fingers.

#### PRODUCTION

You can open the program directly from your machine to start production.

#### **OTHER FEATURES**

- Automatic calculation of unfolding and DXF export feature
- Ability to print a manufacturing range in PDF or paper

#### ADVANTAGES

- Masked time programming
- Significantly reduced programming time
- · Make the machine accessible to an unskilled operator by programming in the design office
- No need to calculate the unfolded sheet dimensions
- Test the feasibility of bending before the production phase

#### SPECIAL LAUNCH OFFER

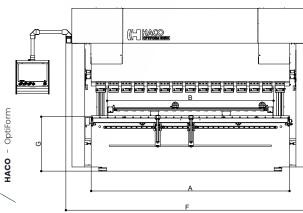
# 6 months free HACOBEND Pro 2D license

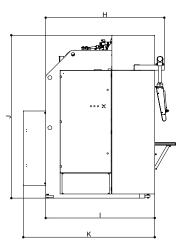
- Exclusively for OptiForm orders placed in 2025
- Offer subject to local availability and conditions
- Contact your local HACO representative for full details

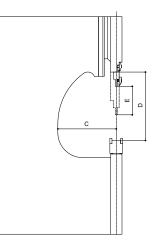
# Technical specs OptiForm 30150+

Machine			
Press force	1500 kN		
Bending length	3100 mm	А	
Distance between side plates	2600 mm	в	
Maximum open height	480 mm	D	
Effective open height	380 mm		ES intermediate 100 mm
Table height	850 mm	G	
Throat gap	400 mm	с	
Main motor power	15 kW		
Crowning	CNC		
Control unit			
Control system	EASYBEND		
Speed			
Y-axis fast down	180 mm/s		
Y-axis work	10 mm/s		
Y-axis return	125 mm/s		
X-axis	400 mm/s		
R-axis	62.5 mm/s		
Z1/Z2-axis	1000 mm/s		
Maximum axes travel			
Y-axis	200 mm	E	
X-axis	600 mm		
X-axis max. gauging distance	1000 mm		
R-axis	200 mm		25 mm – 225 mm
Dimensions			
Width	3795 mm	F	
Height	2545 mm	J	
Depth	1705 mm	I.	Without rear light guard
Depth	1855 mm	н	With control arm
Depth	2055 mm	к	With rear light guard
Weight	8300 kg		

HACO reserves the right to change any specifications without prior notice.







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# **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 shearing, at HACO we offer precision, quality and innovation.

OptiForm SynchroMaster EuroMaster-S PressMaster



#### THE HACO SHEARS RANGE

- TS(X)
- GSX
- HSLX HD





#### FLEX BEND AND ROBOT PROJECTS

THE HACO PRESS BRAKE RANGE \*

At HACO, we specialize in delivering robotic solutions that combine automation with efficiency. Our HACO Flex Bend Robot bending cell is a compact and cost-effective system for bending small to medium-sized parts with top precision. Thanks to offline programming, it eliminates the need for robot teaching at the machine, enabling fast and seamless operation.

#### THE HACO FIBER LASER RANGE\*

- HFL-C
- HFL-CE(W)
- HFL-CEG

\* Available in a selection of countries





#### **ADVANCED TECHNOLOGIES, SINCE 1965**



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 shearing, at HACO we offer precision, quality and innovation.







**Global reach** 



Local focus

Customized solutions

Made in EU

Find out how we can take your bending projects to the next level and view our extensive portfolio of success stories.



# **Machinery Masterminds**

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