



# H-BRAKE HYBRID 110-170T

Hydraulic press brake with innovative hybrid control

Unfold the future

## SafanDarley introduces: the H-Brake Hybrid



Efficient, Energy efficient, Ecological, and Ergonomic: can all of these properties be united into 1 machine? At SafanDarley, we are convinced that they can. We proudly introduce our latest innovation: the hybrid press brake. The H-Brake Hybrid 110-170T is an exemplary model of sustainable thinking in the Smart Industry. Low operational costs and high energy efficiency characterize the new, unique hybrid concept. A superior combination of hydraulics and electronics.

### No continuous control

The hybrid control is only enabled when operating the foot pedal. In the intermediate periods, the pump is at a standstill. Due to its high-dynamic Y-axis control, with lowering and return speeds of 9.05 inch/sec, lower cycle times up to 30% can be achieved versus traditional hydraulic press brakes.

### Reduced operational costs

The control principle also ensures reduced operational costs because the hybrid system lasts longer, the oil only has to be changed after 7,000 working hours and it is less maintenance-sensitive than conventional hydraulic systems. Another additional advantage is that the adverse effect of heating oil is eliminated causing only limited heat generation in the machine.

## Hybrid Highlights



Up to 50%  
energy saving



Quiet operation

# Close hydraulic system

This new electro-hydraulic control is a revolutionary development compared to traditional hydraulic press brakes. This involves an electro-hydraulic system that combines the benefits of both control techniques. A servomotor with direct control ensures the efficiency and speed, and the hydraulics ensures the power and durability. Because all of the components per cylinder in this compact and closed system have been integrated and, therefore, oil pipes and tank are lacking, the risk of oil leakage is extremely limited. Another advantage of this closed system is the fact that the oil does not come into contact with the outside air and, therefore, the system cannot be polluted, which guarantees a long life span of the oil. Hybrid technology: the ultimate combination of ecological and economical.



Close hydraulic system

## Modular back gauge with a wide range

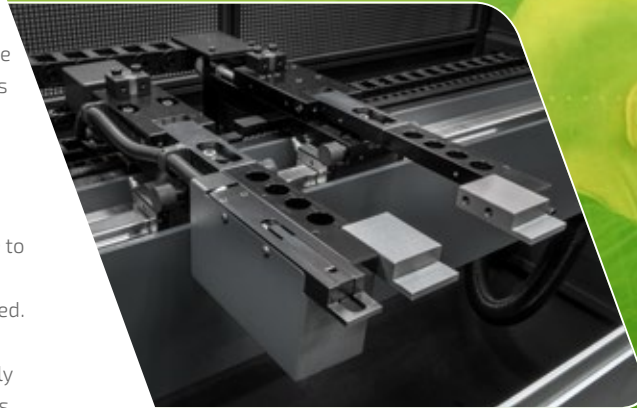
A wide selection of options allows you to customize the back gauge configuration. It is paramount that the back gauge you choose meets all of your requirements. SafanDarley offers a multitude of back gauges, ranging from 2 to 6 CNC controlled axes, so you can choose a back gauge system that fits your manufacturing process best. The application of the most advanced techniques allows high levels of accuracy combined with high transfer speeds. Due to the sophisticated structure of the 6 axis back gauge, the most complex products can be bent by adjusting the gauges through the CNC control.

## E-Control. Control with touch convenience

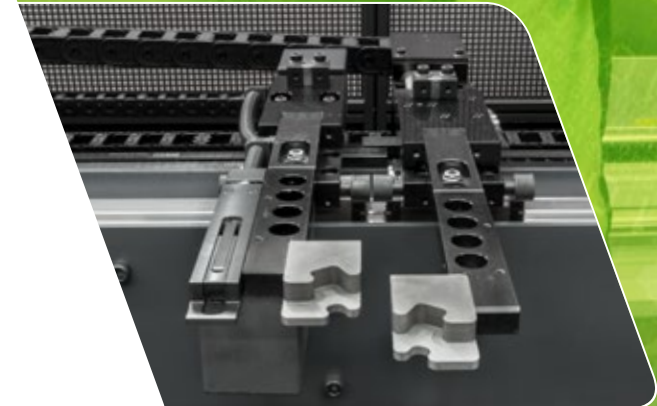
The H-Brake has been equipped with an E-Control touch screen control. Only those buttons on the 17" screen that are needed at the time of operating will be visible. The control is PC based, runs on Microsoft Windows®, and a 100 MB Ethernet UTP network connection is standard on the unit.

## 2D programming

The system can be programmed swiftly and accurately due to a 'self-learning' database in which the data from materials, tools, and earlier, already corrected bending have been saved. The optional EC20-Control allows you to program both numerically and 2D. With the finger, a product can be entirely drawn on a touch screen after which the bending program is generated automatically.



Back gauge with X-, R- and Z1 + Z2 axes



Back gauge with X and Z1 + Z2-, R and Delta X-axes



More than 30%  
higher productivity



Deep throat as  
standard for maximum  
bending capacity



High dynamic  
Y-axis control



Considerably reduced oil  
tank volume (up to 95%)



# H-Brake Hybrid 110-170T

## Technical data

### Hybrid Model

	Pressing force in US Ton	Operational length in ft	Distance between the side frames	Stroke in inches	Q in inches	Approach speed in inches/sec.	Maximum bending speed* in inches/sec.	Return speed in inches/sec.	Connected load	Table height	Gap	Weight in lb.	Length in	Width in inches	Height in inches
110.21/15	124			11	22-26	9	0.4	9	15	33	20			3	104
110.31/25	124	10	8	11	22-26	9	0.4	9	15	33	20	19.180	157	3	104
110.37/31	124	12	10	11	22-26	9	0.4	9	15	33	20		184	3	104
110.42/37	124	14	12	11	22-26	9	0.4	9	15	33	20	26.455	207	3	104
170.21/15	191			11	22-26	9	0.4	9	22	33	20			3	104
170.31/25	191	10	8	11	22-26	9	0.4	9	22	33	20	23.149	157	3	104
170.37/31	191	12	10	11	22-26	9	0.4	9	22	33	20	27.117	184	3	104
170.42/37	191	14	12	11	22-26	9	0.4	9	22	33	20	30.865	207	3	104

\*In CE version max. bending speed 24in/min. Except the CE version the bending speed of 40in/min is only possible in combination with a reduced pressing force.

### Standard specifications

- E-Control EC10 control
- Control mounted on rotating arm on right side of machine
- Y1/Y2 axis CNC controlled
- X-axis CNC controlled
- R-axis CNC controlled
- Z1 and Z2-axis manually
- Wila NSCL-I MC PRO top tool adapter
- Wila NSCR-I MC PRO CNC controlled crowning
- Set of 2 support arms (11.81 inch)
- Programmable and integrated safety light screen
- Foot Pedal with "Hold To Run" function
- Electrical installation for power connection 3/N/PE 50Hz 230/400 VAC

- Machine equipped in accordance with the applicable CE standard

### Accessories and options

- EC20 2D graphics CNC control
- CNC controlled Z axis
- Back gauge finger with dX-axis adjustment
- Various tool adapters with hydraulic clamping
- Mobile support arms
- CNC controlled bending aids
- E-Bend L Blue angle measuring system
- E-Bend S sheet thickness measuring system
- LED workspace lighting at the front and rear of the machine



Standard unloading of 20.08 inch



SafanDarley, the inventor of the electronic press brake, has set a worldwide evolution in sheet metal processing in motion. Each day, we develop innovations that will lift your efficiency to an even higher level and that will surely get you started on industry 4.0. With SafanDarley, you will always get on board at the top level and you will gain from the highest standard in integrated sheet metal processing.

#### SafanDarley's E-standards

SafanDarley offers innovative solutions for all sheet metal processing, with groundbreaking electronic or hydraulic techniques. Thus, we are unfolding a challenging future in which you can manufacture more Efficiently, Economically, Ergonomically and Ecologically. Complex products, larger and smaller series: process optimisation is a fact, lean manufacturing with zero defects is a given and just-in-time manufacturing is guaranteed.

## Smart manufacturing in the Smart Industry

With new technology, SafanDarley paves the way to smarter, more efficient, and more flexible manufacturing at higher quality in the Smart Industry. This is a contemporary method of working that gives industrial companies more clout by maximizing the use of the latest technological developments.

#### Overall better performances

Smart manufacturing is an integrated method of manufacturing, aided by far-reaching digitization and linking of devices, production resources, and organizations. Specifically, we can ensure your Overall Equipment Effectiveness (OEE) to show an increase of no less than 30%. We can do this by incorporating our machines into your production as best as possible.



the future unfolded



#### Efficiency

The comprehensive solution for faster production



#### Ergonomics

Full control of the process operations with one finger



#### Ecology

Maximum CO2 and oil reduction



#### Economy

Maximum return on your investment



Watch our  
corporate  
movie here:



E-Brake Ergonomic



E-Brake 35T-200T  
E-Brake B 20T-100T



E-Brake Ultra 50T-130T



E-Brake 300T Dual Drive



E-Brake ATC



H-Brake 175T-400T



H-Brake Hybrid 110T-170T



H-Brake HD 500T-1250T



R-Brake



B-Shear & M-Shear



Special cutting lines

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