SAFAN DARLEY®

Bending to better performance

bending to better performance

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SAFAN DARLEY®

Bending to better performance



innovation is in our DNA

Hello,

I am very proud to lead the SafanDarley team!

We have great pride in our highly innovative portfolio of press brakes and shears. The past 3 years we have invested heavily in advancing our core technologies in Electric and (Hybrid) Hydraulic press brakes and providing our customers a complete line of automation. Both technologies lead the competition in performance, energy savings and cycle times. Our solutions allow your business to operate with much less labor. The technology provides the opportunity to pursue a lights out solution to production if you desire.

Give us the opportunity to demonstrate to you the SafanDarley difference!

G. Dekker

Gert Dekker
CEO/Managing Director

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SafanDarley operating for 90+ years!

BENDING TO BETTER PERFORMANCE

The most comprehensive selection of Electronic press brakes and intelligent Hybrid Hydraulic press brakes in the market. Share your product goals, labor concerns and business needs and we will work with you to determine the most effective solution to meet those goals.

Our clients span many industries and include OEM's and Job Shops. Here are just a few of the many areas they focus on:

- AGRICULTURE
- ARCHITECTURAL
- AUTOMOTIVE
- AVIATION
- CONSTRUCTION
- ENERGY
- FOOD
- HVAC
- MARITIME
- MINING
- RECREATIONAL VEHICLES



SAFANDARLEY'S TOP 10 BENEFITS FOR YOUR BUSINESS

Savings
Up to 70% savings in energy

Faster Production
Up to 30% reduction in cycle times

Superior Machine Uptime
Highest reliability available

Higher precision
Y-as 0,005mm repeatability

Simplicity of design
up to 30% less parts required

Innovative Engineering
lowest maintenance costs

Easy to Operate
User screens are the same across our products

Operator Safety
Safest press brake in the market

Lights Out Solutions
Add robotics to any SafanDarley press brake

Sense of Urgency
90+ Service Engineers across North America

electronic press brakes

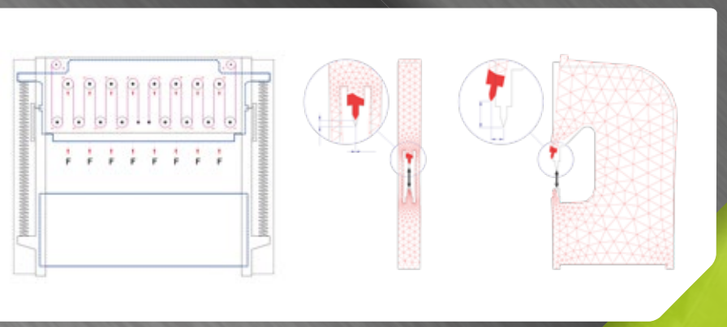
Inventor of the E-Brake

SafanDarley offers the largest range of electronic press brake solutions in the market. With machines available from 35 to 300 tons.

- **Energy Savings** – Up to 70% savings in energy
- **Shorter cycle times** – Up to 30% savings
- **Superior Machine Uptime** - Highest reliability available

- **Higher precision** – Y-as 0,005mm repeatability
- **Innovative Engineering** – lowest maintenance costs
- **Operator Safety** – Safest press brake in the market

Any SafanDarley press brake can be automated with our Robo Mate product for lights out production



E-Brake belt pulley diagram



E-Brake 160-300T
Ultra Dual Drive



E-Brake 50-130T
Ultra



E-Brake 35-130T
Premium



E-Brake 100T
Standard

Bending to better performance

E-Brake 100T Standard

The E-Brake 100T Standard has been a very popular choice for clients making their first move into an electronic press brake. It is our entry level model. The standard comes in 100 ton pressing force and 3100mm working length and is equipped with the basic options.

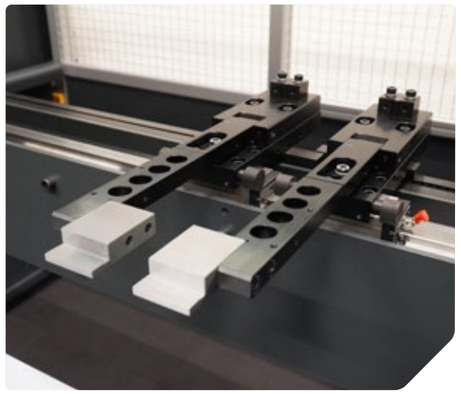


Standard specifications

- SafanDarley E-Control EC10
- Safety light guard, programmable on HMI
- Large daylight opening - Q-dimension 590mm
- Press beam stroke of 300mm
- CNC programmable safety light guard
- Working area lighting on front
- Y1-Y2 adjustment CNC programmable
- CNC-controlled X-axis
- CNC-controlled R-axis
- Z1+Z2-axis manually adjustable
- 2 standard front support arms

Options

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Various NS, ES or AS tool adaptors
- CNC-controlled Z1 + Z2 axis
- Extra back gauge fingers Z0 / Z3
- Lower toolholder with manual crowning
- Movable front sheet support arms
- Other voltages with transformer



E-Brake standard back gauge



EC10 with split screen functionality

Servo-elec-tronic drive system

Short cycle time, up to30% higher productivity

Back gauge available over full working length

User friendly touch screen control

Noiseless operation

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimensions in mm	Approach speed in mm/sec.	Bending speed max. * in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kg	Machine length mm	Machine height mm	Machine depth mm
100-3100	1000	3060	300	590	75	20	75	15	7500	4350	2680	1820

*CE version: Max. bending speed 10mm/sec. Subject to modifications.

E-Brake 35T-130T Premium

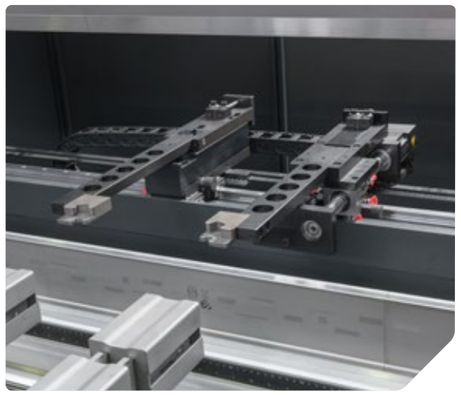
The Premium series of E-Brakes are our most popular sellers in 35 to 130 Tons. The 35T and 40T models can be selected with an Ergonomic package for operators to sit with a built-in table for the parts they are producing.



More info:

Standard specifications

- SafanDarley E-Control EC10
- Safety light guard, programmable on HMI
- Large daylight opening - Q-dimension 590mm
- Press beam stroke of 300mm
- CNC programmable safety light guard
- Working area lighting on front
- CNC-controlled Y1+Y2 Axis
- CNC-controlled X-axis
- CNC-controlled R-axis
- Z1+Z2-axis manually adjustable
- 2 standard front support arms



5 axis back gauge with CNC DX

Options

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Dual landscape screen
- EC3D powered by AutoPOL control
- High speed execution for Y-axis
- Bend speed optimizer (non-CE)
- CNC-controlled Z1+Z2 axis
- CNC-controlled Delta X-axis
- Daylight size increase up to 650, 690 or 790mm (Q-dimension)
- Various upper and lower tool adaptors
- Robot interface
- Smart tool locator
- CNC controlled laser line projection
- Various bending aids: I-Mate or E-Mate 2000
- SafanDarley E-Bend S sheet thickness measurement system
- Ergonomic package for E-Brake 35 and 40 Ton
- Various support arms: moveable, manual or pneumatic height adjustable
- Extra Hold To Run console (compulsory with 2 machine operators)
- Other voltages with transformer
- Machine lighting
- Tool cabinet

Servo-electronic drive system

Short cycle time, up to 30% higher productivity

Back gauge available over full working length

User friendly touch screen control

Noiseless operation

Ergonomic work position

Adjustable and fully foldable worktable

Demountable pedal enables you to work standing up

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimensions in m	Approach speed in mm/sec.	Bending speed max.* in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kg	Machine length mm	Machine height mm	Machine depth mm
35-1250	350	1275	300	590	180	20	180	11	4900	2500	2680	1820
40-1600	400	1530	300	590	180	20	180	11	5400	2850	2680	1820
50-2050	500	2040	300	590	160	20	160	11	6100	3300	2680	1820
80-2250	800	2550	300	590	90/160**	20	90/160**	11	6900	3800	2680	1820
100-3100	1000	3060	300	590	75/130**	20	75/130**	11	7500	4350	2680	1820
130-3100	1300	3060	300	590	110	20	110	15	9300	4350	2880	1820
130-4100	1300	4080	300	590	110	20	110	15	11200	5350	2880	1820

*CE version: Max. bending speed 10mm/sec. Subject to modifications. **Available in HIgh speed execution.

E-Brake 50–130T Ultra

SafanDarley is the only manufacturer of high tonnage electronic press brakes. We were encouraged by our existing clients to provide them an electronic press brake to meet their higher tonnage needs. They especially love how quiet these high tonnage brakes are for their operator's work environment.

Standard specifications

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Dual screen, adjustable in height
- Safety light guard, programmable on HMI
- Large daylight opening - Q-dimension 590mm
- Press beam stroke of 300mm
- CNC programmable safety light guard
- Working area lighting on front
- CNC-controlled Y1+Y2-axis
- CNC-controlled X-axis
- CNC-controlled R-axis
- CNC-controlled crowning table
- Z1+Z2-axis manually adjustable
- 2 standard front support arms



6 Axis back gauge

Options

- EC3D powered by AutoPOL control
- SafanDarley E-Bend L Blue CNC controlled angle measurement system
- Bend speed optimizer (non-CE)
- CNC-controlled Z1+Z2 axis (horizontal repositioning back gauge fingers)
- CNC-controlled Delta X-axis (horizontal repositioning of one back gauge finger)
- Full 3D 6-axis back gauge type U6
- Daylight size increase up to 650, 690 or 790m (Q-dimension)
- Various upper and lower tool adaptors
- Robot interface
- Smart tool locator
- CNC-controlled laser line projection
- Various bending aids: I-Mate or E-Mate 2000
- SafanDarley E-Bend S sheet thickness measurement system
- Various support arms: moveable, manual or pneumatic height adjustable, optional in HD inox
- Extra Hold To Run console (compulsory with 2 machine operators)
- Other voltages with transformer
- Machine lighting
- Tool cabinet

Servo-electronic drive system

Short cycle time, up to 30% higher productivity

Back gauge available over full working length

User friendly touch screen control

CNC-crowning



More info:

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimensions in mm	Approach speed in mm/sec.	Bending speed max.* in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kg	Machine length mm	Machine height mm	Machine depth mm
50-2050	500	2040	300	590	160	20	160	11	6100	3300	2680	1820
80-2550	800	2550	300	590	90/160**	20	90/160**	11	6900	3800	2680	1820
100-3100	1000	3060	300	590	75/130**	20	75/130**	11	7500	4350	2680	1820
130-3100	1300	3060	300	590	110	20	110	15	9300	4350	2880	1820
130-4100	1300	4080	300	590	110	20	110	15	11200	5350	2880	1820

*CE version: Max. bending speed 10mm/sec. Subject to modifications. **Available in HIgh speed execution.

E-Brake 160-300T Dual Drive

SafanDarley is the only manufacturer to offer high-tonnage electronic press brakes from 160 to 300 Ton. We were encouraged by our existing clients to provide them an electronic press brake to meet their higher tonnage needs. They especially love how quiet these high tonnage brakes are for their operator's work environment.

Standard specifications

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Dual screen, adjustable in height
- Safety light guard, programmable on HMI
- Large daylight opening - Q-dimension 590mm (300T: 690 mm)
- Press beam stroke of 300mm (300T: 400mm)
- 300T: Dual Drive press beam drive
- CNC programmable safety light guard
- Working area lighting on front
- CNC-controlled Y1+Y2-axis
- CNC-controlled X-axis
- CNC-controlled R-axis
- CNC-controlled crowning table
- Z1+Z2-axis manually adjustable
- 2 standard front support arms



Dual drive system is patented by SafanDarley

Options

- EC3D powered by AutoPOL control
- SafanDarley E-Bend L Blue CNC controlled angle measurement system
- Bend speed optimizer (non-CE)
- CNC-controlled Z1+Z2 axis (horizontal repositioning back gauge fingers)
- CNC-controlled Delta X-axis (horizontal repositioning of one back gauge finger)
- Full 3D 6-axis back gauge type U6 (300T: type B6)
- Daylight size increase up to 650, 690 or 790mm (Q-dimension)
- 300T: Daylight size increase up to 750 or 790mm (Q-dimension)
- Various upper and lower tool adaptors
- Robot interface
- Smart tool locator
- CNC-controlled laser line projection
- Various bending aids: I-Mate or E-Mate 2000
- SafanDarley E-Bend S sheet thickness measurement system
- Various support arms: moveable, manual or pneumatic height adjustable, optional in HD inox
- Extra Hold To Run console (compulsory with 2 machine operators)
- Other voltages with transformer
- Machine lighting
- Tool cabinet

Servo-electronic drive system

Short cycle time, up to 30% higher productivity

Back gauge available over full working length

User friendly touch screen control

300T with Dual Drive



More info 160-200T:

More info 300T:

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimensions in mm	Approach speed in mm/sec.	Bending speed max.* in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kw	Machine length mm	Machine height mm	Machine depth mm
E-Brake 160T-200T Ultra												
160-3100	1600	3060	300	590	100	20	100	22	15000	4485	3100	2120
200-4100	2000	4080	300	590	75	20	75	22	18500	5485	3100	2120
E-Brake 300T Dual Drive												
300-4100	3000	4080	400	690	90	20	90	30	22000	5485	3420	2320

*CE version: Max. bending speed 10mm/sec. Subject to modifications.

hydraulic press brakes

SafanDarley recently introduced an exciting new technology in Hydraulic press brakes called H-iBrake. The H-iBrake uses an intelligent design approach to deliver exceptionally fast production while maintaining the high quality we have always been known for. This new technology is available from 125T to 560T with bending lengths from 1600mm to 8000mm.

- Energy Savings – Up to 50% savings in energy
- Shorter cycle times – Up to 30% savings
- Superior Machine Uptime - Highest reliability available

- Higher precision – Y-as 0,005mm repeatability
- Innovative Engineering – lowest maintenance costs
- Flexible - Customizable to customer needs

Any SafanDarley press brake can be automated with our Robo Mate product for lights out production

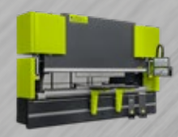


AKAS 5, adaptive safety

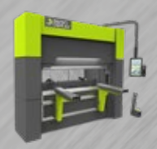




H-Brake HD 700-1000T Ultra



Hi-Brake 170-560T



Hi-Brake 125T

Bending to better performance

NEW

H-iBrake 125T

Where compact sizes meet large capabilities. The H-iBrake 125T is available in two working lengths, 1600mm and 2050mm, constructed in a rigid O-frame. The high tonnage density allows you to bend very thick parts on a small machine footprint.

Standard specifications

- SafanDarley E-Control EC20 - 2D graphic CNC control
- CNC-controlled Y1+Y2 Axis
- CNC-controlled X-axis
- CNC-controlled R-axis
- Z1+Z2-axis manually adjustable
- Light beam safety type AKAS®5 with manual height adjustment
- Working area lighting on front and rear
- 2 standard front support arms
- Lower beam height 1025mm
- Large daylight opening - Q-dimension 650mm
- Press beam stroke of 300mm

Options

- Dual landscape screen
- EC3D powered by AutoPOL control
- Ergonomic package available on 125T - 1600mm
- SafanDarley Adaptive Safety System
- Bend Speed Optimizer (non-CE)
- High Speed back gauge within safety zone (50mm) (non-CE)
- CNC-controlled Z1+Z2 axis
- CNC-controlled Z1+Z2 axis, heavy duty
- CNC-controlled Delta X-axis
- Extra manual back gauge fingers Z0 / Z3
- Smart tool locator
- Various support arms: moveable, manual or pneumatic height adjustable
- SafanDarley E-Bend S sheet thickness measurement system
- Other voltages with transformer
- Robot interface
- CNC controlled laser line projection



Ergo Package



More info:

Maximum energy efficiency with Energy recovery system

Fully modular

Adaptive safety system. 1 break / 2 break functionality

Back gauge available over full working length

Robust O-frame construction

Ergonomic work position

Adjustable and fully foldable worktable

Demountable pedal enables you to work standing up

	Pressing force in kN	Operational length in mm	Stroke in mm	Q-dimensions in mm*	Working height in mm	Approach speed in mm/sec.	Maximum bending speed** in mm/sec.	Return speed in mm/sec.	Regular motor power in kW/ Connected load	Weight in kg	Machine length mm	Working length mm	Machine height mm	Machine depth mm	Noise level in dB
125T - 1600	1250	1530	300	650	1025	200	10	170	15/26	6000	2740	1700	2950	1850	<70
125T - 2050	1250	2040	300	650	1025	200	10	170	15/26	6500	3185	2150	2950	1850	<70

*Q-dim: Optional: 750 or 790mm. **CE version: Max. bending speed 10mm/sec. Subjects to modifications.

H-iBrake 125-560T

Our drive to perform better led us to redefine our range of hydraulic press brakes, giving it a completely new intelligent drive while simplifying it without driving up cost. This results in an even greater variety of possibilities to best serve your needs.

Standard specifications

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Y1/Y2 Axis CNC-controlled
- Standard Stroke 350mm ; (125T: 300mm)
- Standard throat depth 500mm
- Standard Q-size 700mm
- X-Axis CNC controlled
- R-Axis CNC controlled
- Z1+Z2-axis, manually adjustable
- Light beam safety type AKAS®5 with manual height adjustment
- Working area lighting on front and rear
- Standard parking space for 2 support arms outside the working area **(Up to 4200mm working length)*



Heavy duty 6 axis back gauge

Options

- Dual landscape screen on H-iBrake machines
- EC3D powered by AutoPOL
- Extra screen mounted on a moveable arm on the left hand side
- Q-dimension and stroke enlargement
- Extra Hold to Run console
- SafanDarley Adaptive Safety System
- Bend Speed Optimizer (non-CE)
- High Speed back gauge within safety zone (50mm) (non-CE)
- CNC-controlled Z1+Z2-axis, heavy duty
- CNC-controlled Delta X-axis
- Extra back gauge finger, Z0 / Z3
- Full 3D 6-axis back gauge type B6
- Various upper and lower tool adaptors
- Smart tool locator
- Various support arms: moveable, manual or pneumatic height adjustable
- Smart light indicator
- Various bending aids: I-Mate or E-Mate 2000
- SafanDarley E-Bend L Blue CNC controlled angle measurement system
- SafanDarley E-Bend S sheet thickness measurement system
- Robot interface
- CNC controlled laser line projection



See video:

	Pressing force in kN	Operational length in mm	Stroke in mm	Q-dimensions in mm*	Working height in mm	Approach speed in mm/sec.	Maximum bending speed** in mm/sec.	Return speed in min. mm/sec.	Regular motor power in kW/ Connected load	Weight in kg	Machine length mm	Working length mm	iMachine height mm	Machine depth mm	Noise level in dB
170T - 2300	1700	2380	350	700	1025	250	10	250	15/26	11200	3300	1780	3300	2000	<70
240T - 3200	2400	3230	350	700	1025	200	10	200	15/26	17000	4250	2740	3300	2100	<70
320T - 4200	3200	4250	350	700	1025	150	10	170	15/26	24000	5400	3760	3400	2250	<70
400T - 5100	4000	5100	350	700	1025	120	10	180	2x15/46	30500	6150	4360	3650	2200	< 70
480T - 5100	4800	5100	350	700	1100	100	10	160	2x15/46	35300	6200	4360	3950	2200	< 70
560T - 6100	2600	6120	350	700	1025	85	8,5	85	2x15/46	48000	7150	5200	4520	2600	< 70

*Q-dim: Optional: 750 or 790mm. **CE version: Max. bending speed 10mm/sec. Subjects to modifications.

Maximum energy efficiency with energy recovery system

Fully modular

Adaptive safety system 1 break/2 break functionality

A wide variety to tonnages and lengths

Standard large throat depth for maximum bending flexibility

H-Brake HD 700-1000T Ultra

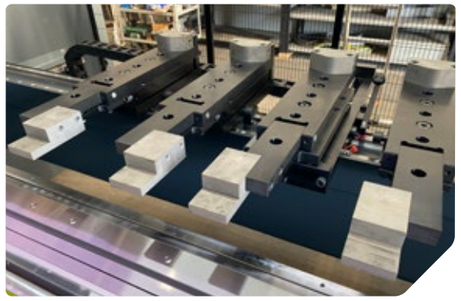
Heavy-duty press brakes designed for robust bending tasks. Featuring reinforced construction, with bending lengths ranging up to 8 meters and bending forces between 700 to 1000 Tons. These machines come equipped with a range of accessories and optional devices to enhance performance and versatility.

Standard specifications

- SafanDarley E-Control EC20 - 2D graphic CNC control
- Controls mounted on a moveable control arm on the right side of the machine
- CNC-controlled Y1/Y2-axis
- CNC-controlled X-axis
- CNC-controlled R axis
- Z1 and Z2 axis are controlled manually
- Top tool adapter NSCL II MC Premium (manual clamping)
- NSCR II MC Premium CNC controlled crowning table
- Light beam safety type AKAS®5 with manual height adjustment
- Foot pedal including “Hold To Run”-function
- Work area lighting on the front and rear side of the machine
- 2 standard front support arms

Options

- Dual landscape screen on H-Brake HD machines.
- EC3D powered by AutoPOL
- Extra screen mounted on a moveable arm on the left hand side
- Q-dimension and stroke enlargement
- Extra Hold To Run console
- CNC-controlled Z1+Z2-axis, heavy duty
- CNC-controlled Delta X-axis
- Extra back gauge finger, Z0 / Z3
- Full 3D 6-axis back gauge type B6
- Various upper and lower tool adaptors
- Smart tool locator
- Various support arms: moveable, manual or pneumatic height adjustable
- Smart light indicator
- Various bending aids: E-Mate 2000 or E-Mate 7500
- SafanDarley E-Bend L Blue CNC controlled angle measurement system



Heavy Duty Back gauge fingers

Hydraulic driven

Several bending lengths & Q sizes

Start-stop system, lower energy consumption

Versatile bending aids

Flexible tandem solutions possible



More info:

	Pressing force in kN	Bending length inmm	Stroke in mm	Q-dimensions in mm*	Inside frame dimensions towards back guage in mm
HD700T - 4200	7000	4250	450	800	3760
HD700T - 5100	7000	5100	450	800	4360
HD700T - 6100	7000	6120	450	800	5200
HD800T - 4200	8000	4250	450	800	3760
HD800T - 5100	8000	5100	450	800	4360
HD800T - 6100	8000	6120	450	800	5200
HD800T - 8200	8000	8160	450	800	7200
HD1000T - 6100	10000	6120	450	800	5200
HD1000T - 8200	10000	8160	450	800	7200

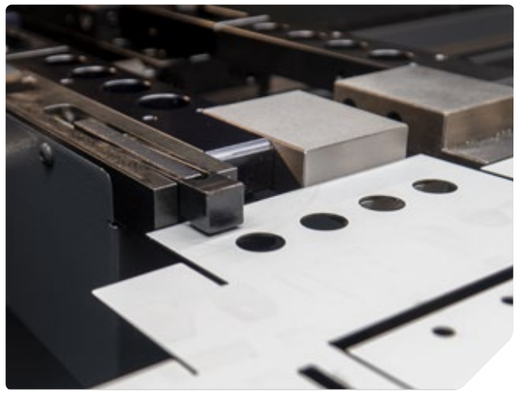
*Q-dim: Optional: 750 or 790mm.
**CE version: Max. bending speed 10mm/sec. Subjects to modifications.
*Note: All stated dimensions and values are indicative only. SafanDarley always designs and builds H-Brake HD machines in accordance with customer requirements.

features and options press brakes

Customize your bending capabilities with SafanDarley's various options to operate with remarkable accuracy and consistency according to your company's specific needs.

MEASURING SYSTEMS

Fast, simple and reliable measurement can be essential for your bending process. The SafanDarley E-Bend systems,electronically linked to the SafanDarley Touch Screen controls, increase your efficiency through exact sheet thickness or angle measurement.



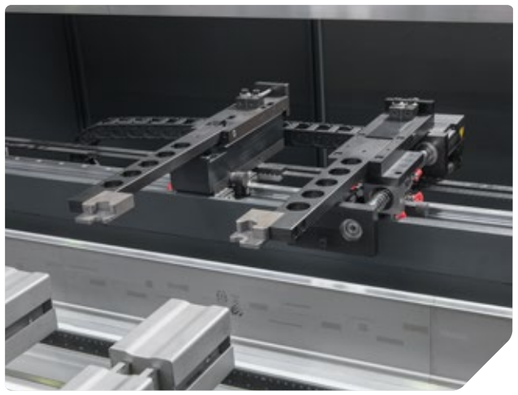
E-Bend S

To prevent angular misalignment due to sheet thicknes difference, E-Bend S measures the plate thickness before a product is bent. During the measurement, the actual sheet thickness is transmitted to the bending program where the bending data (material clamping point) is automatically corrected. The system measures sheet thickness with 0.01mm accuracy.



E-Bend L Blue

CNC-Controlled laser angle measurement system on linear guiding. The system consists of two laser sensors on each side of the table, which are CNC controlled. The system continuously displays and corrects the position of the Y axis based on the actual angle of the product, thus guaranteeing that the end product has the highest degree of angle precision.





Back gauges

- CNC-controlled - 3D back gauge
- CNC-controlled – Delta X
- CNC-controlled - Z1 & Z2

Dual landscape screen

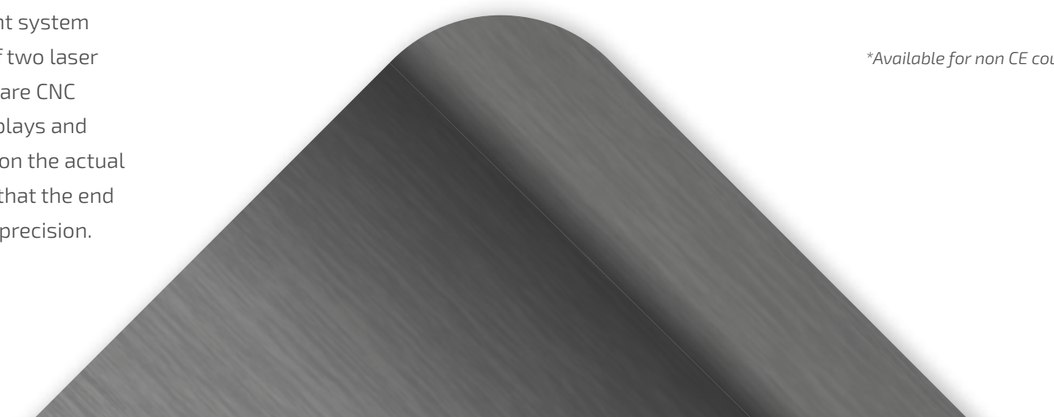
Standard feature on the Ultra and optional on the Premiums and H-iBrake.

Machine interfaces for automation

Safety

- Light guard
  Monitors safety while optimizing your ergonomics and working speed. Programmable per bend step.
- AKAS 5
  Laser safety system ensuring safe operation during bending processes adjustable to different tool heights
- High speed execution upper beam
  Faster approach and return speed of upper beam
- Bend speed optimizer*
- High speed back gauge within safety zone*
  Positioning speed X-axis within safety zone 33mm/sec.

**Available for non CE countries only!*



BENDING AIDS

Using the SafanDarley Bending Aids increases overall production efficiency and reduces the requirement for two operators when handling larger sheet metal parts.





I-Mate

This intelligent bending aid is distinctive because of its' user-friendliness, ergonomics and quality. I-Mate offers automatically calculated sheet support during the entire bending sequence, from flat sheet to the programmed bending angle based on material type, sheet thickness and lower tool parameters. I-Mate has a lifting capacity moment of 750Nm with a maximum plate weight of 100kg.

See video:

E-mate 2000

E-Mate 2000 supports and follows the plate very carefully throughout the entire bending process. The height and V size are variable and can easily be adjusted to the bending aid. The E-Mate 2000 has a lifting capacity of 2000Nm with a plate weight 200kg and is movable on a linear rails and can easily be removed by a single operator.

H-iBRAKE OPTIONS

Front Support arms

- Moveable support arms along the machine
- Moveable support arms along the machine, and the height can be adjusted with a hand wheel
- Moveable support arms along the machine, and the height can be adjusted pneumatically

Q-dimensions / Daylight opening

Depending on the machine type it is possible to increase the Q-dimension to 650, 690 or 790mm. For 300T it is possible to increase the Q-dimension to 750 or 790mm.

Q-dimension: Maximum distance between lower beam and upper beam (without upper tool and lower tool adapter!)
Daylight opening: distance between upper and lower tool
** available for H-iBrake 170-560T*

Upper & Lower tool adapters

SafanDarley is open to work with any type or brand when it comes to tool adapters. In most customer cases we will advise the higher quality systems such as those from WILA or Wilson Tool. We will also fit European Style and American Style tool clamping systems. Smart Tool Locator options are also available.

Laser bending line projection

Accessories:

- Material cabinet
- Tool cabinet

Adaptive safety system

The additional light curtain enables the operator to use and benefit of our tact-cycle operation. Up to 50% less usage of the foot pedal helps your operator to find a better ergonomic position while it will increase your output.

Smart light indicator

Our in house developed Smart Light is programmable per bending step, for showing workpiece position, tool position or back gauge position. The entire system is built into a heavy-duty aluminum extrusion profile to ensure its durable and long lasting.

Modular sheet support arms

The modular set of support arms can be fitted with four different types of inserts. This offers the flexibility to adapt the machine to different applications, ensuring optimum efficiency and precision for every operation. Four types of inserts: Brushes, Roller balls, Anti-scratch material and Stainless steel.

Press beam with Horn

For bending closed contours where the upper flange of the part would cause a collision with the upper beam, SafanDarley offers the press beam with horn. Horns are the only solution for bending in such cases which grants the possibility of getting the bent piece out of the machine. The advantage of a horn on the side of the press brake is that you can work around it. This will give a lot of flexibility in the geometry of the profile to be bent.

** available for H-iBrake 170-560T*

automated solutions

SafanDarley's Automated Press Brake Solutions provide the flexibility of a systems integrator in a OEM solution. Our solutions provide our customers the ability to operate their press brake completely lights out if they choose. Our ASC controller is the key to our flexibility. The ASC will control additional functions like punching, spot welding, etc. as well as the bending process and routing the material throughout the automation cell. The graphical user interface is intuitive and quickly understood by operators.

- Labor Shortage – Extend production hours without adding labor
- Flexibility – OEM solution with the flexibility of an integrator
- Fast Results – Installed and producing parts in days

- Easy Operation – Intuitive Graphic Interface
- Reliable – High uptime and low maintenance cost
- Quality – precise and repeatable



MCM Marknesse. Ready for third-party integration, AGV compatible





Tool Mate



Robo Mate



R-Brake 130T



Mini Cell

Bending to better performance

E-Brake 35T Mini Cell

The E-Brake 35T Premium Mini Cell has the smallest footprint in the market of any automated bending cell. Yet, it contains automatic tool change and gripper change, reversing stations, feed and discharge systems, and can run 8 hours plus without human interaction. E-Brake 35T Premium Mini Cell can be installed at a customer site and producing production parts in 5 days or less. It is perfect for automating the production of small complex products!

Standard specifications

- SafanDarley E-Brake 35-1250 Premium
- SafanDarley E-Control EC10
- CNC-controlled Y1 + Y2 axis
- CNC-controlled X axis
- CNC-controlled R axis
- CNC-controlled Z1 + Z2 axis
- Large daylight opening -Q-dimension 690mm
- Fanuc M20iB25 robot
- Chute for discharge of small products
- 1 disposal pallet 800x600mm
- Controlled by SafanDarley ASC-control

Options

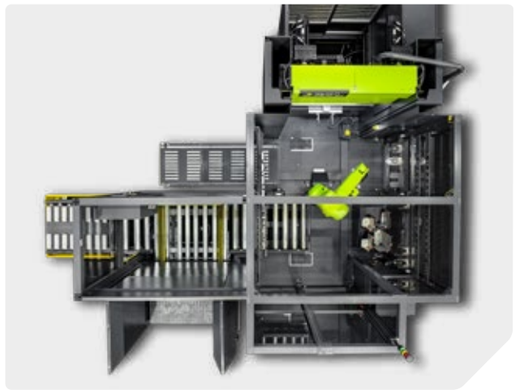
- Programmable offline with RoboBend simulation software
- Sheet thickness measuring system
- Product tables
- Sheet turnover station
- Automatic tool changer
- Tool Flip
- Automatic gripper changer
- Extra tool storage
- E-Bend Check angle measurement
- Prepared for integration with AGV-systems



See video:



Conveyor



Topview Mini Cell

Servo-electronic drive system

Automatic tool and gripper change

100% automatic bending cell with small footprint

Products up to 12,5 kg

AGV ready

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimension in mm	Approach speed in mm/sec.	Bending speed max. in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kg
35-1250	350	1275	300	590	180	20	180	11	4900

R-Brake 130T

The R-Brake is a revolutionary bending concept! It combines one of our most popular E-Brakes, the 130T with a cantilevered robot design that keeps the floor in front of the machine clear.

The robot on the R-Brake automatically changes the tooling and grippers as needed to keep the production flowing. The cell can be equipped with conveyors and pallet dispensers to keep production moving without interruption. The ASC controller provides full control for any third party integrations within the cell as well. The flexibility to quickly move the robot to the side and run the press brake manually for test parts is unique in the market! R-Brake 130T can be installed at customer site and running production parts in 7 days or less.

Standard specifications

- SafanDarley R-Brake 130T-3100
- SafanDarley E-Control EC10
- CNC-controlled Y1+Y2-axis
- CNC-controlled X-axis
- CNC-controlled Z1+Z2-axis
- CNC-controlled R-axis
- M710iC/70 Fanuc robot
- Robot gantry with a range of 6 metre
- CNC-controlled sheet turning station
- Controlled by SafanDarley ASC-control

Options

- Gantry extendable in length
- Double-sheet detection
- Sheet thickness measurement
- Pre-positioner for sheet infeed
- Programmable offline with RoboBend simulation software
- Automatic tool changer
- Automatic gripper changer
- Extra tool storage
- Extra gripperstock
- Prepared for integration with AGV-systems



Referencing table



Thickness measurement



See video:

	Pressing force in kN	Working length in mm	Maximum stroke in mm	Q-dimension in mm	Approach speed in mm/sec.	Bending speed max. in mm/sec.	Return speed in mm/sec.	Motor Power in kW	Weight in kg
130-3100	1300	3060	300	590	110	20	110	15	9300

Servo-electronic drive system

Automatic tool and gripper change

100% automatic bending cell with small footprint

Clear floor area in front of the machine

AGV ready

Robo Mate

Meet the future of automated bending with the revolutionary SafanDarley Robo Mate. An independent gantry that can be placed in front of any SafanDarley Press brake and allows you to switch to automated production at any time. This innovation gives the ability to set up and use a larger, more powerful press brake in the same way an R-Brake would be used, with the benefit of being able to switch back to manual whenever needed.

With only 2 or 3 rail support positions, the Robo Mate offers unprecedented space savings, allowing you to make full use of your entire working space for other cell parts or even stacking products. This results in unrivalled flexibility and efficiency, while keeping your floor space to a minimum.



More info:

Standard specifications

- Electronic cabinet
- Console with ASC-Control software
- Robot
- Connection and integration
- Quick and easy switching to manual bending

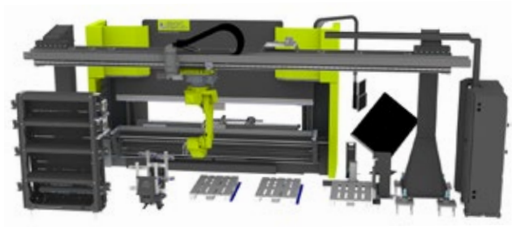
Options

- Automatic tool and gripper change
- Additional tool or gripper storage
- Pre-positioning system
- Pallet conveying system

Technical specifications

Available in three different sizes, suitable for robot loads of 70, 130, or 280 kg and 4 different lengths:

- 7 meter track, total length of 8500 mm
- 9 meter track, total length of 10500 mm
- 11 meter track, total length of 12500 mm
- 13 meter track, total length of 14500 mm





Robo Mate 7 meters



Robo Mate 13 meters

Various machines possible

Various track lengths possible

Various robot capacities possible

Clear floor area in front of the machine

AGV ready

Tool Mate

The Tool Mate can be added to several of the SafanDarley press brakes to automate the tool loading for that machine. The tool storage capabilities of 32, 52, or 60 meters of tooling makes this the biggest tool storage available. It is a perfect solution for the client that caters to high mix, low volume orders with complex tool set ups. A unique option is the SafanDarley Tool Mate Twin solution. This allows you to setup your tools from a single storage compartment into two press brakes, doubling the effectiveness of your investment.

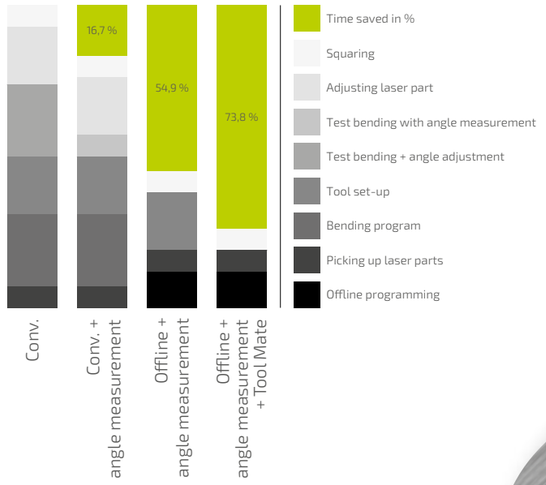
Standard specifications

- Tool Mate 32 meters, incl. 7 tool racks
  - 4 racks for V-dies
  - 3 racks for punches
- Tool Mate 52 meters, incl. 12 tool racks
  - 7 racks for V-dies
  - 5 racks for punches
- Tool Mate 60 meters, incl. 10 tool racks
  - Dies and punches to be placed on 1 rack
- Very fast tool configuration: tool length 20 to 515 mm (max. 40kg)
- Very short changeover times
- Large operating range: V-dies 5 mm to 70 mm
- Automatic tool cleaning before return to storage
- Laser check tool position to minimize risk of errors
- Intelligent tool configuration; reuses previous tool set-up
- Rotation station to rotate tools 180 degrees
- User-friendly and easy programming

How much time can you save?

The Tool Mate enables you to extend the speed and effciency limits of your production.

** The table below shows a calculation of various products for a variety of customers*





See video:

Axes parameters

Axis	Max. Speed (m/s)	Max. Speed (m/s^2)	Max. Acceleration (m/s^2)	Max. Acceleration (in/s^2)
XC	0.57	110	0.3	11.8
RC	0.38	75	0.8	31.5
ZC	3.24	640	8	315
AC	1.19	235	20	787
VC	0.40	80	1	39.4
X2C	0.21	40	1.5	59.0

Loading time for long tools*	4 sec.
Loading time for short punches	8.5 sec.
Loading time for short dies	8 sec.
Unloading time for tools	Loading time + 1 sec.

*punch length >= 125mm, die length >= 250mm.

Fast tool setup

Large storage capacity 32-52-60m

Tool rotation station to rotate upper tools 180 degrees

Use of V-Dies 5 mm to 70 mm

Always the correct tool set-up

features and options automated solutions

Customize your automated solution with SafanDarley's various options to operate with remarkable accuracy and consistency according to your company's specific needs.

Contactless feedforward sheet thickness measuring

The sheet thickness will be measured and forwarded to the E-Control where the correction is automatically applied. Measurement takes place during doouble sheet detection. Min./Max. sheet thickness 0,5/8mm.

E-Bend Check

Angle control system which measures the angle and corrects if necessary. An angle registration table can be sent as output.

E-Bend L active angle measurement

Tool Flip

Automatic tool rotation for the reversed placement of the top tool

Standard and custom-made grippers

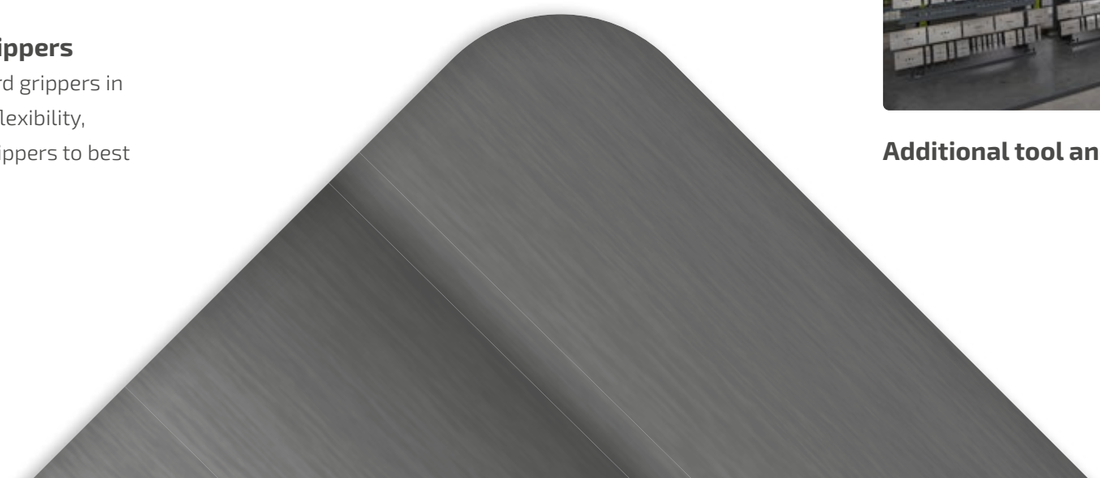
SafanDarley has a database of standard grippers in many different shapes. For maximum flexibility, SafanDarley also offers customized grippers to best suit your production.

Pre-positioners

Product conveyors

For discharge of the products outside the cell. Automatic Start/Stop is controlled by ASC-Control

Extensions for roller conveyor
Pallet dispenser





Automatic product gripper and tool change

The correct gripper or tool is detected and will automatically be changed for each product by the ASC-Control.



Standard or customer specific product tables

If the cell is equipped with automatically controlled sliding doors and area scanners, it is possible to change the product tables automatically by means of a self-driving vehicle (AGV).



Additional tool and gripper storages



Palletiser systems

Pallet dispenser with storage for empty pallets. Automatic output and discharge of pallets.

M-Shear

A cut above the rest

SafanDarley builds the premier shear on the market. Our hybrid drive system makes this machine very precise, while also providing significant reduction in energy costs.

The M in the M-Shear stands for multifunctional. The advanced hybrid drive system consists of servo electronic motors and a hydraulic pump which produces a remarkably quiet machine that is very energy efficient. This machine is designed with some extremely valuable features such as:

- Programmable start and stop position of the knife bar
- Automatic X-axis compensation when adjusting the cutting gap
- Automatic correction of the stroke length of the knife bar when adjusting cutting angle

Standard specifications

- Touch Screen control on movable control arm
- CNC-controlled back gauge
- CNC-controlled clearance and cutting-angle adjustment
- Automatic retraction of the back gauge for narrow strip widths
- Programmable start and stop position for the entire length of the cutting beam
- Blades with 4 cutting edges
- Cutting line lighting with cutting line indication
- 2 adjustable support arms
- 2 squaring guides, on the right and left side of the table
- T-slots and hand-slots spread across the width of the table
- Finger guard

Options

- Extra (replacement) blades 450 or 750N/mm2
- Extended squaring guides with or without hardened edge
- Adjustable angle guide
- Safety light guard instead of mechanical finger guard
- Moveable finger guard
- Roller balls in table
- Scratch preventing table cover
- Extended back gauge range
- Pneumatically hingeable back gauge
- Pneumatic sheet support equipment
- Scrap separator (with or without sorting flap)
- Scrap removal bin (with or without moveable bottom)
- Return to Sender function
- Sheet hold down pressure regulator
- Transformer for variable voltages
- Clamping support torq-free cutting
- Camera observation system on the back



More info:

	Cutting capacity	Cutting length in mm	Main motor power in kW	No. of strokes/min. (stroke length max. cutting edge)	No. of strokes/min. (stroke length min. cutting edge)	Cutting angle 0.5° -max. (°)	Backgauge reach in mm	Backgauge speed in mm/sec.	No. of hold-down pads	Weight in kg
125-4	4	1250	11	48	110	2	1000	200	10	4000
205-6	6	2050	11	32	84	2	1000	200	14	4200
310-6	6	3100	11	24	80	2	1000	200	20	6200
610-6	6	6100	15	12	30	1,5	1000	200	36	18800
430-8	8	4300	15	13	30	1,5	1000	200	26	14500
310-10	10	3100	15	12	30	2	1000	200	20	9800
610-10	10	6100	18,5	5	16	2	1000	200	36	28000
310-16	16	3100	30	12	34	3	1250	125	20	12500
430-16	16	4300	30	8	26	3	1250	125	26	21500

(Subject to modifications)

Up to 50% energy saving, low CO2 emissions

Return-to-Sender sheet support

Torsion free cutting of small strips

Scrap separation

Fully automatic adjustment of cutting angle and clearance

specials

Does your business require a custom solution? SafanDarley has produced many customized solutions for our customers over the years and we are very open to discuss your needs. SafanDarley has developed turn-key solutions for bending, cutting and robotized bending cells including software and with guaranteed cycle times. We will work closely to clearly specify your requirement and identify a solution together to achieve the best results for your business. We are proud to show you some of our many successful solutions. Be inspired!

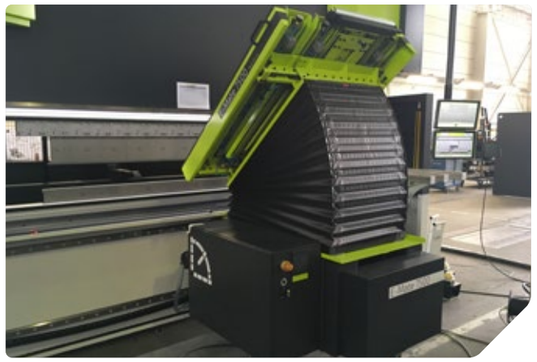


Cutting center for optimized cutting

SafanDarley is the market leader in high quality hydraulic and hybrid guillotine shears and offers a variety of smart solutions for cutting sheet metal. The fully automatic cutting center is one of these innovations that contributes to customer-specific productivity and efficiency.

The cutting center can be used for:

- High demands on repeat accuracy
- Cutting pre-punched plates into components
- Clean and square cutting of single pieces from large sheets
- Precise cutting of individual pieces
- Easy handling of thin sheet material and support during the process
- Automatic discharge functionality



E-Mate 7500 for support heavy and large products

To support complex products weighing up to 500kg, SafanDarley developed the E-Mate 7500. A special, belt-driven bending aid with a torque of 7500 Nm. During the bending process, the bending aid can hold the product firmly with vacuum cups and during the return stroke, the product can be removed by manually operating the E-Mates movement to even unload advanced parts securely.



H-Brake Tandem for long parts and productivity

SafanDarley also offers a wide range of flexible solutions to enable the tandem use of press brakes. A combination of 2 press brakes that have been mechanically aligned and can run in perfectly synchronized fashion via a tandem connection. This approach provides flexibility by allowing two press brakes to work perfectly in sync, enabling longer products. You can also use both press brakes independently, doubling the capacity for shorter product lengths. Additionally, depending on capacity, a specially-made foundation is often unnecessary.



R-Brake 130T with extended productivity

During high-volume production or when bending large products, it may be desirable to have more floor space available for stacking these products. The R-Brake with a custom-made extended traverse can provide you with this space. An additional benefit is that you then also have the option of installing multiple additional tool stations for added flexibility to bend different types of products.



E-Brake 35T for bending deep boxes

This powerful, compact machine has a special frame with an enlarged daylight opening. This makes it possible to bend products such as enclosures & cabinets with high side panels.

software

super charge your production results!

SafanDarley's software tools focus on automating difficult and mundane tasks, reducing cycle time and improving the quality produced. All with little or no effort from the operator. Whether you are increasing the hours your machines are actually producing parts with our offline 3D programming software or programming your robot to minimize the cycle time and improve quality, software is where the magic happens.

In the following pages you will see brief descriptions on four of our most impactful software tools we have developed and continue to add feature sets to: AutoPOL, RoboBend, ASC-Control (Automated Solutions Cell-Control) and E-Control



AUTOPOL ROBOBEND ASC-Control E-CONTROL

AUTOPOL

Smartbending

The AutoPOL sheet metal software concept is a modern 3D system for off-line press brake programming and unfolding of 3D CAD files. Smart Bending with the innovative AutoPOL guarantees full, fast and reliable process control.

AutoPOL BendSim Pro

BendSim is software for programming and simulating press brakes to maximize production efficiency.

- Reduce machine downtime using offline programming.
- Decrease scrap with confirmed manufacturability.
- Better “first part right” success.
- Reduce lead times by improving efficiency.
- Increase flexibility of your production.
- Minimize set-up times with clear operator instructions.
- Enable less skilled operators to work with the press brakes.
- Program all press brakes from the same software.
- Work with Industry 4.0 integrations

Add-on: AutoPOL Batch & Remote

Enables automatic processing of multiple parts and interfacing with external software systems.

- Reduce programming time and costs.
- Save production time with optimized production queues minimizing tool changes.
- Integrate with your other systems.



E-CONTROL

SafanDarley has once again shifted the standards with the E-Control as the latest generation touch screen controls. Since the introduction in 1995, the SafanDarley E-Controls have been the international standard for ease of operation. The touch screen concept is therefore the most functional and intuitive Man-Machine interface in the sheet-metal working industry.

- Complete Touch Screen convenience
- Web-based communication and support
- Split screen enables paperless working environment.



EC20

EC3D ‘Powered by AutoPOL’ software

The functionality of EC3D allows the user to work with both numeric and 2D-graphic programming and has the ability to import 3D sheet metal models and automatically generate a complete bending program by means of the touch screen control directly at the machine. Any machine with the Dual Screen option can be fitted with EC3D.



EC3D

EC20

The E-Brake Ultra and H-iBrake press brakes are fitted as a standard with E-Control EC20 software on a Dual-screen. This functionality allows the user to work with both numeric and 2D-graphic programming. It is possible to draw a complete product by means of touch screen and then automatically generate a bending program.
EC20 includes viewers for graphic for AutoPOL, Radan and Metalix files.

EC10

The E-Brake Standard and Premium press brakes are fitted as a standard with E-control EC10 software.
The digital split screen functionality allows users to run two applications on a single display, enabling to create a paperless working environment using the EC10 control.

NEW

ASC-Control

Next level in programming robotic bending processes

Achieve the shortest possible changeover times with ASC control, SafanDarley's software platform for automated bending systems. ASC-Control is a user friendly and flexible management platform. It makes it possible for employees with little experience to effectively operate automated machines.

- Easy to operate by low-skilled staff
- Easy production of small batch sizes
- Production time registration and quality report
- Quick remote support

Without operator intervention, several products can be queued by the product engineer and then processed one by one by the operator. Between multiple jobs, the ASC-Control automatically feeds the new programs into the robot and the press brake and initiates automatic tool and gripper changes.
Simple operation, optimal ease of use.

Highlights:

- Easy to program
- User friendly HMI
- Different user levels
- Status notifications in a single view
- OPC UA supported
- Remote access available
- Production flow control
- Flexible design, customization possible



ASC-Control

More information?
Scan the QR code

ROBOBEND

Automated flexible production

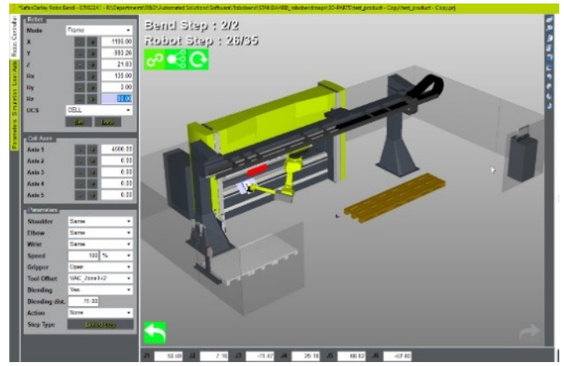
Experience unparalleled efficiency and flexibility in automated production with SafanDarley RoboBend, the offline software solution designed for seamlessly integrating a SafanDarley press brake with a robotic system. This comprehensive software empowers users to program both bending and robotic operations efficiently, streamlining production processes.

- Complete offline preparation of the programs
- Automatic product and machine configuration
- Time saving through automatic generation

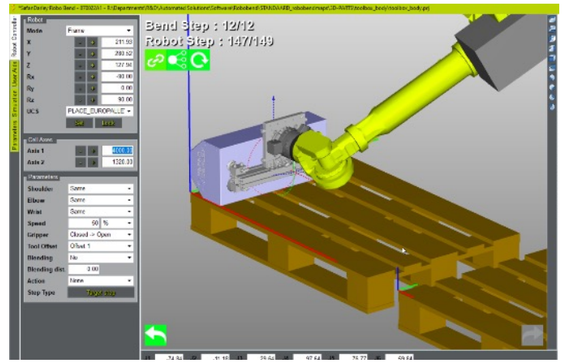
RoboBend significantly reduces programming time through a range of features, including:

- Automatic determination of bending sequences
- Precise coordination between bending and robot programs
- Utilization of pre-defined routines
- Simulation with collision detection
- Simplified stacking with intuitive visualization

Moreover, every step of the process remains customizable, allowing users to easily tailor the software to their specific requirements. This inherent flexibility enables intervening production, seamless resumption of tasks and integration of external devices into the workflow.



SafanDarley RoboBend: bending



SafanDarley RoboBend: stacking

service and training

"Customer service isn't a department. It is the responsibility of the entire company."

- Tony Hsieh





Customer Services

At SafanDarley, we know that sales build the relationship, but it's our service after the sale that keeps customers returning. Great service is the responsibility of every person that touches the clients in any capacity.

DON'T DWELL ON WHAT WENT WRONG. INSTEAD FOCUS ON WHAT TO DO NEXT TO CORRECT THE ISSUE AND GET THE CUSTOMER OPERATING EFFECTIVELY AS SOON AS POSSIBLE.

Field Service Team

Our front-line support is provided by our professional network of business partners and our factory certified Service Engineers. This model allows us to have trained personnel located close to our customers all over the world.
To compliment this team of professionals we employ a team of trained engineers on our help desk located in Lochem and Eijsden.
For the most immediate service, please contact your local SafanDarley Distributor.

If your local Distributor is not available, please contact SafanDarley Service at **+31 (0) 573 222 211** (Lochem) or +31 (0)43 409 74 09 (Eijsden) or send an e-mail to **helpdesk@safandarley.com**.

SERVICE ENGINEERS ALL OVER THE WORLD

Parts Team

While our machines are known for their high-quality standards and reliability, we still have occasions where we need to respond quickly with parts and service. The SafanDarley office manages a large inventory that allows us to respond quickly for our customers should a failure occur.

97% OF ALL PARTS REQUESTS DELIVERED PROMPTLY FROM OUR WAREHOUSE

Training Programs

Our Product Support conducts training classes for our business partners, customers and employees. We pride ourselves on the hands-on approach that our courses contain. Every program contains both classroom training and hands on training on the machines in our showroom. Our students are taught how to install and service our machines including how to program and operate the software tools associated with each product. We also offer some of our operations and software training online for those who are unable to travel or prefer to be trained remotely.

HANDS ON TRAINING INCREASES RETENTION BY 30% OR MORE!