



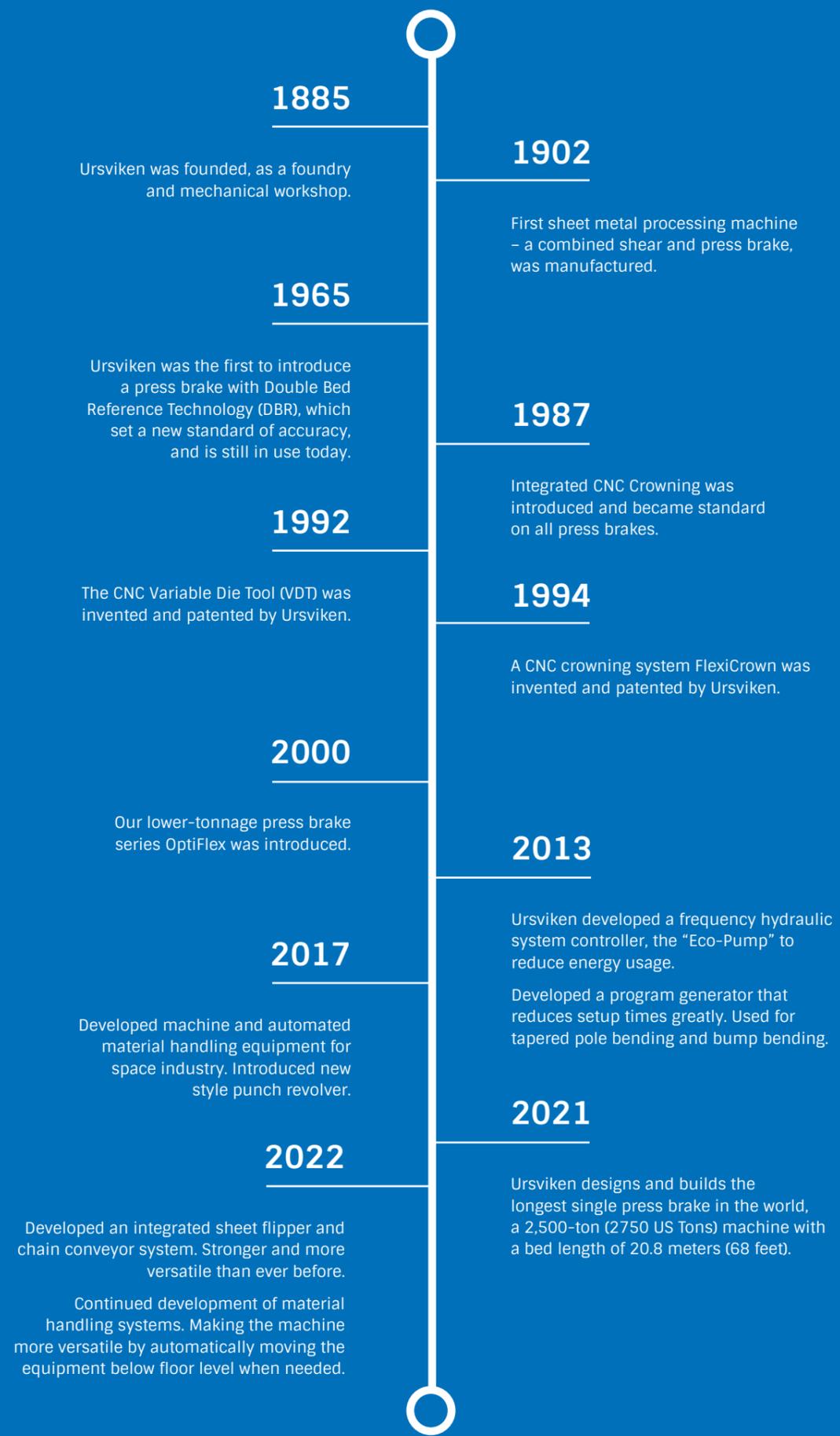
URSVIKEN



**Optima
Series.**



URSVIKEN



➤ About us.

Our machines are designed and built in our factory in Ursviken, located in Northern Sweden, and delivered all over the world. The factory was founded in 1885, and since then we have installed equipment to manufacturers in over 100 countries worldwide.

Today, Ursviken concentrates on heavy-duty, precision press brakes from 400 tons all the way up to 10,000+ tons (440 - 11,000+ US Tons), with a special focus on automated solutions. Accurate, repeatable performance is one of the characteristics of Ursviken press brakes that has made us a global leader in precision metal bending.



➤ Made in Sweden since 1885.



Custom engineered. Every Optima machine is built according to the customer's needs. We offer structural modifications, increased gap and stroke lengths and a variety of productivity boosting options. Don't just "get by" with standard specification machines – get **exactly** what you need to optimize productivity and safety.

High tonnage capacities. We specialize in building high tonnage machines to accurately bend even the toughest materials. Most press brake builders stop at 1,000-tons capacity. At Ursviken, we're just getting started!

Hydraulic system. Optima series hydraulic tanks and piping are made of stainless steel to prevent the inevitable rusting and clogging that occurs over time due to water intrusion.

Longevity. All Ursviken press brakes are built to provide decades of accurate, repeatable performance. Some of our machines are still in operation after 50+ years, and they can be rebuilt to provide like-new performance for a fraction of the cost of a new machine.



Double Bed Reference system. Originally invented by Ursviken in 1965, DBR is based on two independent master cylinders that automatically adjust to individually set the press beam depth, completely independent of frame deflections. DBR set a new standard of press brake accuracy that has changed the face of precision bending.

Specialized tooling options. In addition to the standard tooling options, we offer innovations such as rotating punch tips and special tooling shapes – all made with the finest materials to industry-leading standards of quality and accuracy.

➤ **Optima meets the highest demands when it comes to plate fabrication.**

We have built machines with these specifications:

- **Press force (single machine)**
400-5 000 Tons /
440-5,500 US Tons
- **Bend length**
4 100- 20 200 mm /
13'5"-66'3"
- **Length between side frames**
3 100-17 800 mm /
10'2"-58'4"
- **Tool space**
485-4 000 mm /
1'7"-13'1"
- **Daylight**
485-4 000 mm /
1'7"-13'1"
- **Stroke**
300-1 500 mm /
12"-4'11"

Do you need more press force? Longer bend length? No problem, we can design a machine to meet your needs.



Scan the code to see Optima in action.



➤ Custom is our standard.

➤ Fully automated solution.

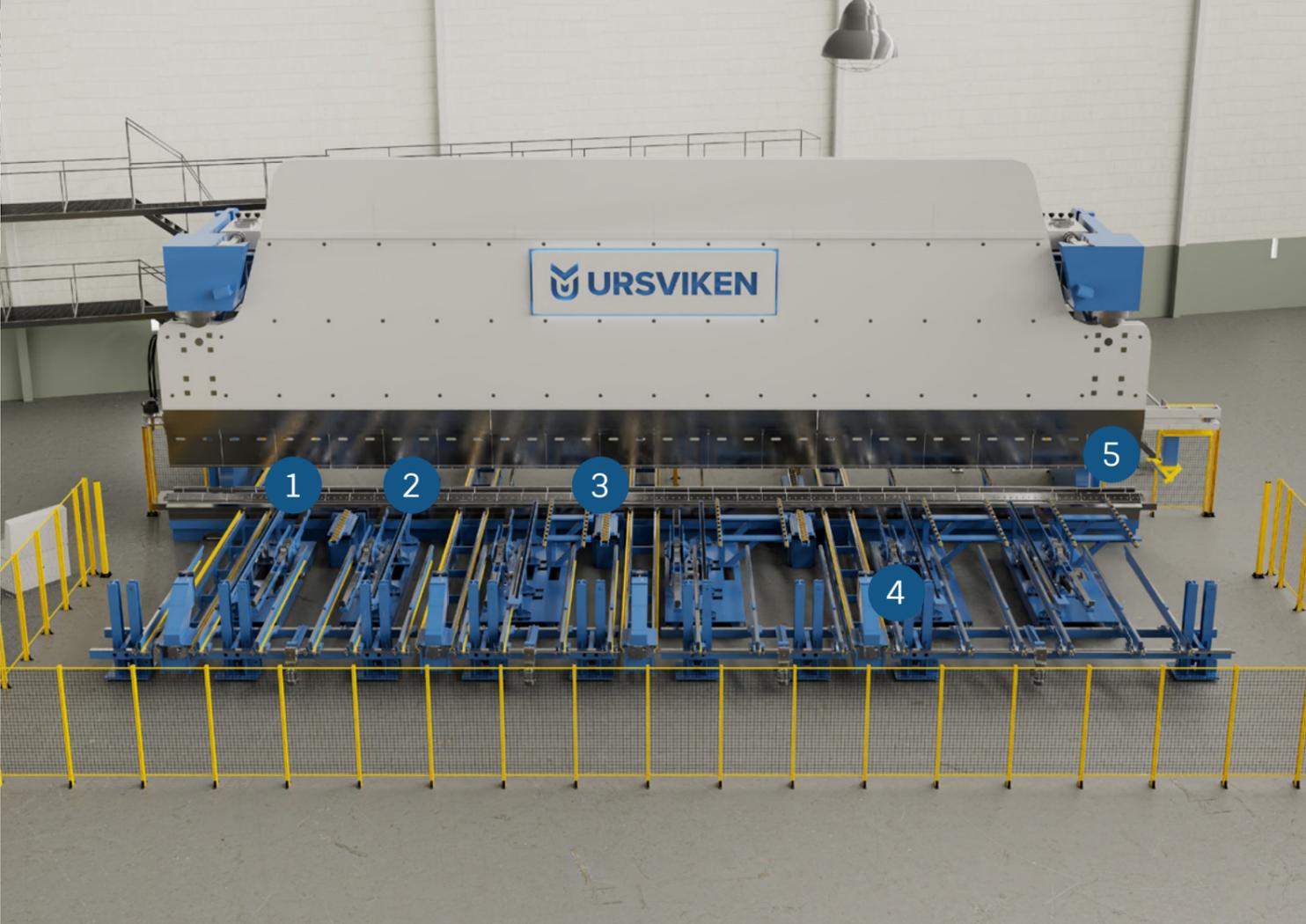
An automatic bending solution allows you to produce particularly cost-efficiently. If necessary, you can have the bending cell producing around the clock. Cycle times are reduced and minimal personnel effort is needed.

We also provide customized options when it comes to system technology and robotics. Whether you need multiple robots, connected handling equipment, or a custom solution for a specific circumstance, we are happy to advise you with the optimal solution.

Every design project starts with the customer's needs.

- 1 FlexiCrown
- 2 Variable die tooling
- 3 Rotating punch tip
- 4 Material handling equipment
- 5 Pole extractor





➤ Steel Service Centers.

Steel Service Centers and Job Shops require maximum flexibility to maximize the wide range of production. We provide a range of options to increase flexibility, including a fully CNC controlled Variable Die Tool, which allows changing die opening to be made directly from the control system within seconds.

Parking stations allow front equipment to be moved to the side to create more space for bending odd shapes and parts with long flanges.

- 1 Variable die tooling with die opening range from 28 to 915+ mm / 1"-36"+
- 2 Parking station for front equipment
- 3 Material handling equipment
- 4 2 000+ Tons (2,200 US Tons) of press force
- 5 Bend length of 14 200+ mm (46 feet)

➤ Infrastructure.

Bending critical components for infrastructure requires a press brake of high tonnage capacity and with a bed big enough to be able to accommodate long parts.

We have built the longest single press brake in the world, to meet the needs of the infrastructure industry.

- 1 Bend length of 20 200+ mm (66 feet)
- 2 FlexiCrown
- 3 Variable die tooling
- 4 Material handling equipment
- 5 Automatic material extractor



➤ Pole processing.

Ursviken is experienced in meeting the unique needs of pole bending applications. Maximum precision is guaranteed when accommodating for long parts with a single machine up to 20 meters (66 feet) or even longer. Our superior precision and repeatability allow you to optimize your pole production.

The press brake can be installed with a pole extractor with simultaneous in- and outfeeds to reduce cycle times and improve the ease of handling.

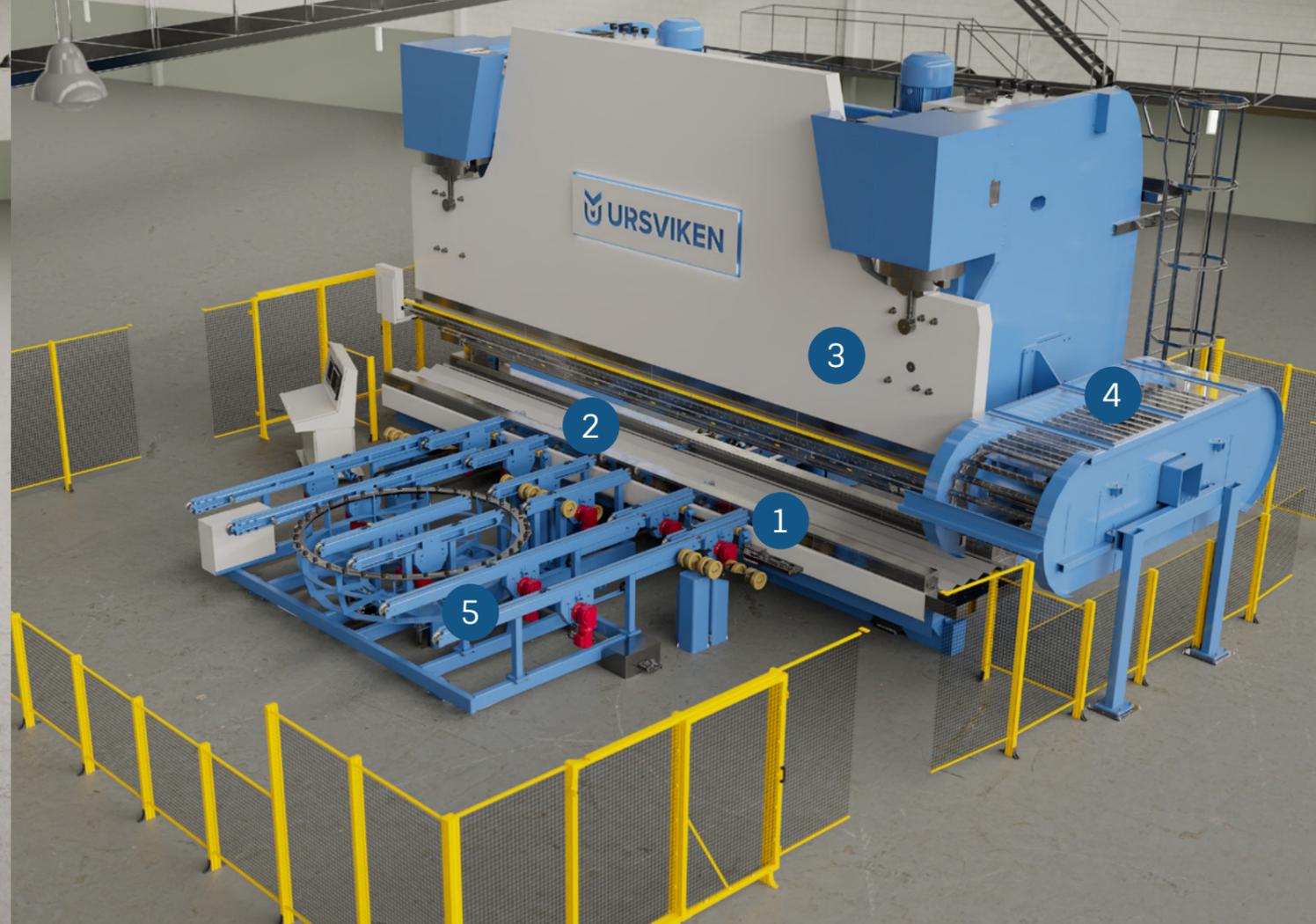
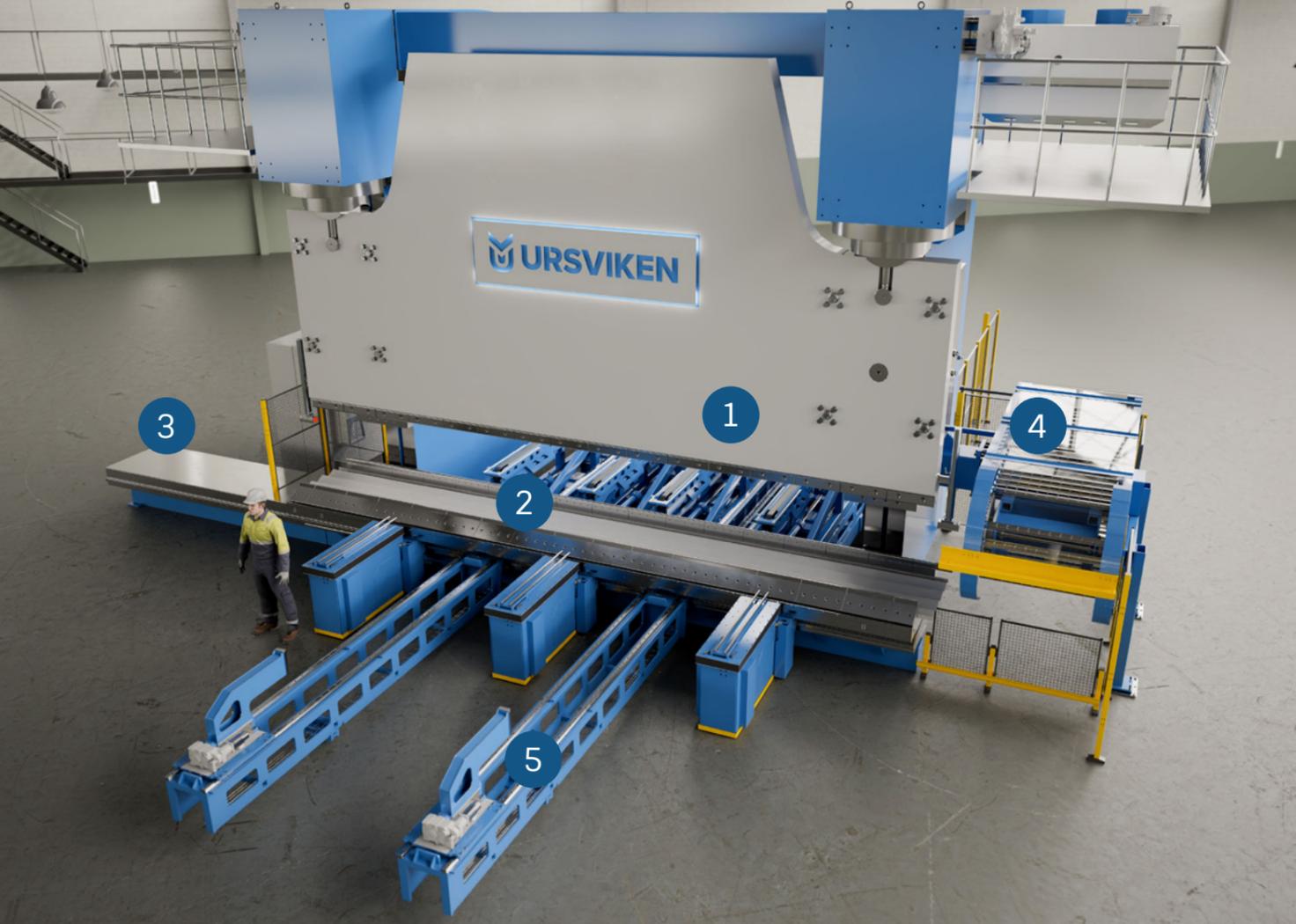
- 1 Tandem solution – but building it as a single machine is always an option!
- 2 FlexiCrown
- 3 Tool magazines
- 4 Blank feeder and pole extractor
- 5 Variable die tooling

➤ Crane arms.

Maximum precision and accommodation for bending long parts. FlexiCrown can compensate for local thickness deviations in the metal and uneven wear on the upper and lower tools.

Maintaining full-length bend accuracy on telescopic crane arm components is a big challenge. Count on Ursviken for repeatable accuracy, increased productivity, and lower cost of manufacturing.

- 1 Long bend length
- 2 FlexiCrown
- 3 Special tooling shapes – Gooseneck punch holder
- 4 Revolving punch magazine
- 5 Material handling equipment



➤ Military.

We have built machines with up to 5000 Tons (5,500 US Tons) press force. Bending armor-grade steel for military solutions requires a press brake of high tonnage capacity, capable of bending even the toughest materials. We also provide high quality tools to withstand those forces.

- 1 5000+ Tons of press force (5,500 US Tons)
- 2 Variable die tooling able to withstand the extreme press force
- 3 Parking station for front equipment
- 4 Tool magazine
- 5 Material handling equipment

➤ Aerospace.

Ursviken has the experience and know-how to build large bed, high-tonnage press brakes for the precision forming of large panels of exotic and expensive materials. Our custom-engineered automation and tooling solutions help manufacturers of these super-critical, high-cost space components to make complex parts correctly every time.

Our various material handling equipment allow secure positioning and supporting of the plate when bending, flipping and turning.

- 1 FlexiCrown
- 2 Variable die tooling
- 3 2500+ Tons of press force (2,750 US Tons)
- 4 Revolving punch magazine
- 5 Material handling equipment

➤ Features that maximize your productivity.



Variable Die Tool (VDT)

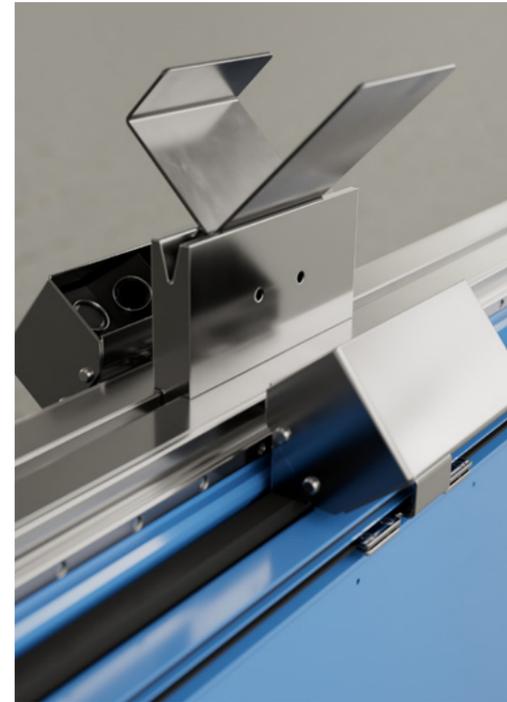
Dramatically increase your productivity by adding an Ursviken VDT to your machine. Combining accurate bends with fast changes to bend radius will help you maximize your capabilities.

The VDT will eliminate the massive amounts of wasted time spent changing large pieces of tooling manually. The VDT can withstand extremely high loads, much higher than single v-dies, and offers unlimited bending length.

The VDT can do non-symmetrical bends for offsets and has an opening range of 28 mm to 915+ mm (1 to 36 inches). Our customers have achieved a return on investment for the VDT in a very short time.

CNC controlled – Allows you to adjust the V-opening from the control panel in seconds.

Automatic setting of V-openings
– The different openings of the die along with contours are stored in the CNC die register, enabling a computer simulation of the bending sequence and automatic setting of selected die openings in the program.



Angle Control System

Mechanical Angle Control allows the programmed angle to always be retained irrespective of material quality. The system traps deviations both in sheet thickness and different spring backs.

Optical Angle Control measures the bending angle by scanning the projection of the laser beam on the surface of the sheet metal and the integrated camera. It enables an exact determination of the bend angle with an accuracy of better than $\pm 0.3^\circ$, irrespective of the variable properties or thickness of the material.

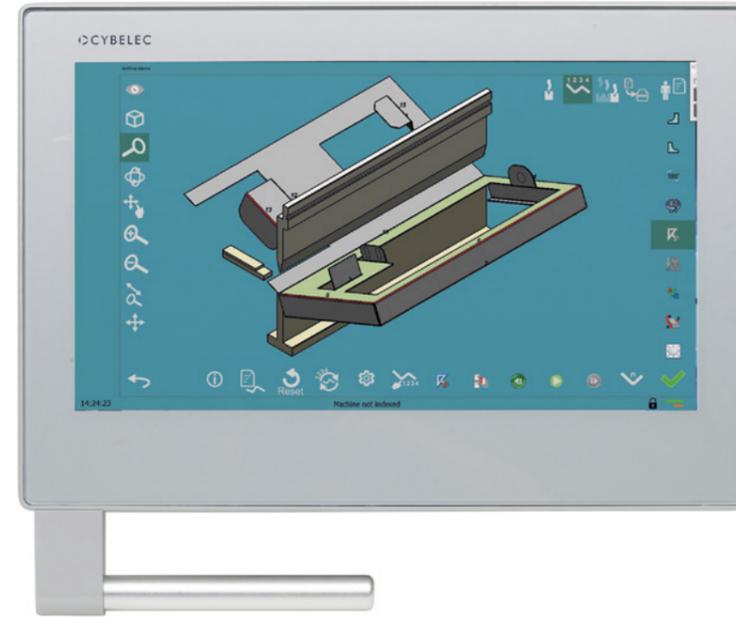
FlexiCrown

The unique Ursviken FlexiCrown can correct more than just the natural deflection of the upper and lower beam. It can compensate for local thickness deviations in the sheet metal and uneven wear on the upper and lower tools. This results in a more accurate bend angle across the whole length of the machine.

The crowning wedge is divided into segments, that can be independently positioned without interference from other segments. FlexiCrown adjustments are spaced at 600 mm (2 feet) intervals to provide the ultimate precision. The wedges are made by high strength cast iron which is very wear-resistant.

If the part is a reoccurring product, it is possible to save the corrections on the FlexiCrown unit. The saved corrections will then automatically be applied when the Cybelec program is loaded for that product.





3D Bending Software

Increase productivity and reduce scrap with a 3D bending software. Import the product, simulate bending, and export the flat pattern to get it right the first time. The software can be used on the machine controller and/or on a PC.

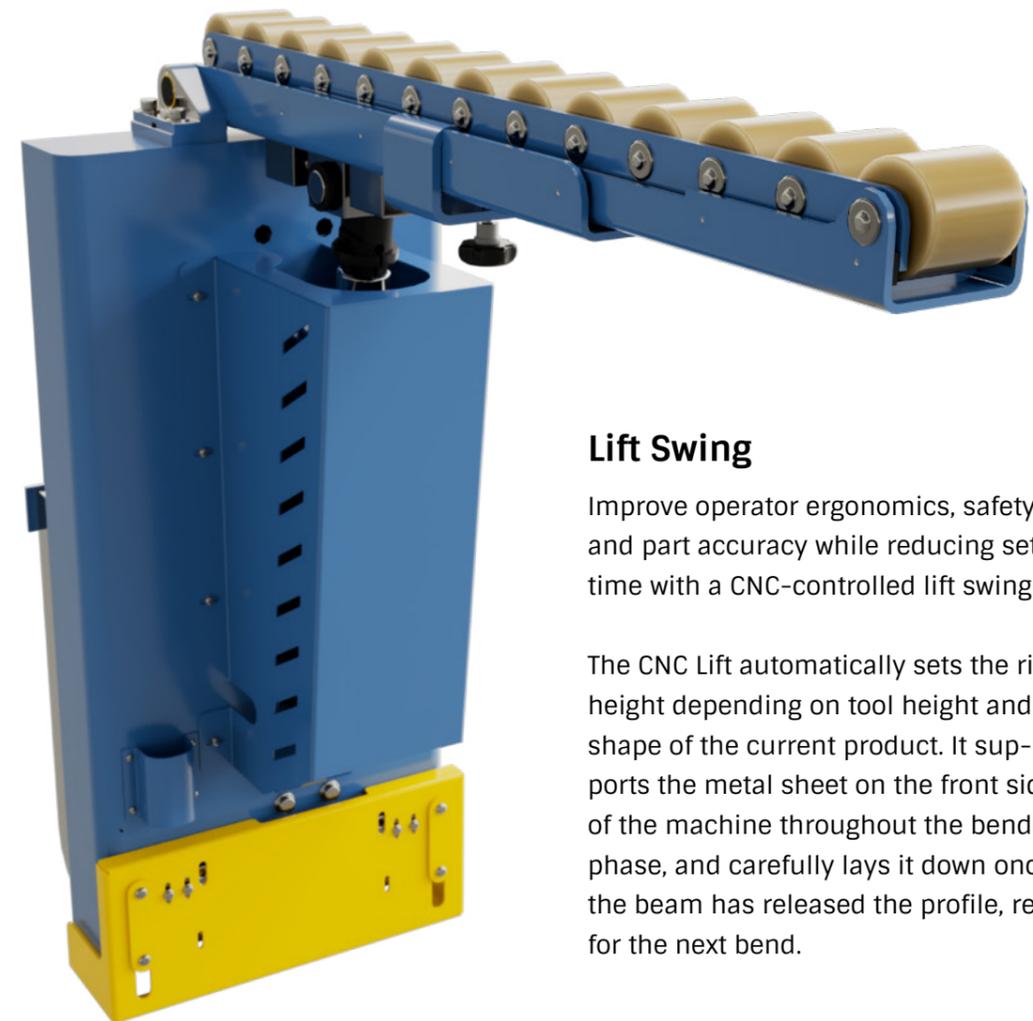
Tool Magazine

The Ursviken tool magazine will reduce unwanted pauses in production and improve operator working environment by making it easy to access and change the necessary tools quickly.



EcoPump

As energy prices are increasing, the Ursviken EcoPump will decrease your energy usage by up to 95% by allowing you to set the power consumption of the motor by bending cycle. Other benefits include reduced wear on the hydraulic pump and motor, decreased noise level and oil temperature as well as extended oil life.



Lift Swing

Improve operator ergonomics, safety and part accuracy while reducing set up time with a CNC-controlled lift swing.

The CNC Lift automatically sets the right height depending on tool height and shape of the current product. It supports the metal sheet on the front side of the machine throughout the bending phase, and carefully lays it down once the beam has released the profile, ready for the next bend.



› Custom Tooling solutions.

Take maximum advantage of all the great features that come with a custom-engineered Ursviken Optima press brake. Consult with our experts and let us show you how Ursviken's custom tooling solutions can boost your productivity and profits.

In addition to a variety of standard tooling and holders available with European, American and Wila-style mounting we offer innovations such as rotating punch tips and special tooling shapes – all made with the finest materials to industry-leading standards of quality and accuracy.

Rotating punch tip /Tool tip rotator

The revolving tool changer allows fast tool change of up to 3 tool tips. The cylinders lift and lower the pivot shaft where the tool tips are mounted, while the motor rotates the shaft. Tool selection is made as usual from the control panel and the system automatically changes to the right tool.

Special tooling shapes

We can adapt our tools to accommodate your product and material used. Some examples of special tooling we offer are a gooseneck shapes, a round tapered tool ideal for pole production or tooling to form corrugated metal. Let us know your needs and we can design custom tooling to fit your product.

Let us know your needs and we can design custom tooling to fit your product.

› Our service offering.

We at Ursviken are dedicated to providing support during the entire life cycle of your machine, so you can rest assured your operations will run safely and efficiently. Our goal is to help you maximize uptime, extend lifetime, enhance performance, and boost energy efficiency of your machine. Our service team consists of highly skilled technicians who specialize in servicing press brakes and shears.



Planned services

Protect your investment and avoid costly downtime efficiently and effectively with yearly safety checks and preventive maintenance.



Recovery

Our service experts are at your disposal, on-site or remotely, to ensure a fast recovery back to production.



Many of our machines are still in operation after 50 years.



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