

ROBOTIC BENDING CELLS



PATAGONIA
CNC MACHINES



INNOVATION IN AUTOMATION &
INDUSTRIAL DIGITALIZATION

Why Alien?

- One stop shop, we do it all.

We take care of every stage: from engineering and integration to commissioning and after-sales service.

- Provide optimum solutions at competitive investment costs.

We design each project to maximize performance and efficiency, always taking care of your budget.

- Partner with you over the long.

We build lasting relationships based on trust, continuous support and mutual growth.

- Training and support is available for our customer partners.

We provide technical support and personalized training so that you can get the most out of each solution.



**SALES LEADER
FOR 3 YEARS**
in South America

+10

**OPERATIONS IN MORE
THAN 10 COUNTRIES**

+500

**MORE THAN 500
EQUIPMENT INSTALLED**
in America



BENDING CELL

Small-Sized

Compact flexible bending unit provides high cost-effective solution for smart process of small-sized work piece.



BR45-2200 Manipulation Robot

The BR45-2200 robot offers high-speed performance, reliable payload capacity, and long reach, enabling flexible and efficient material handling.

It supports integration with a wide variety of grippers and end-of-arm tooling, making it ideal for diverse industrial applications.

ESTUN
ARGENTINA

Laser Protective Barrier

Laser safety barriers incorporated to protect the user and the machine.

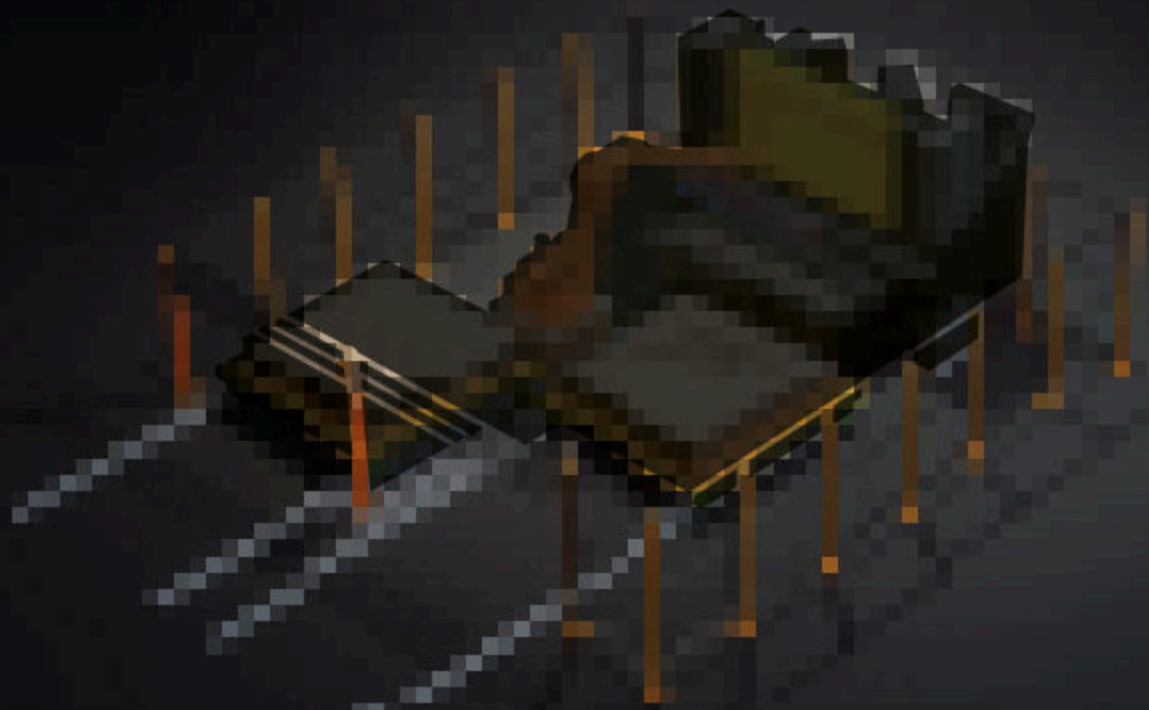
Special focus on safeguarding the laser head, the system's most critical component.



General Characteristics

Protective Enclosure

The bending cell is fully enclosed by a robust metal mesh safety fence that surrounds the machine on all sides. This protective enclosure prevents unauthorized access to the working area, reduces the risk of accidents, and ensures safe operation without affecting process visibility.



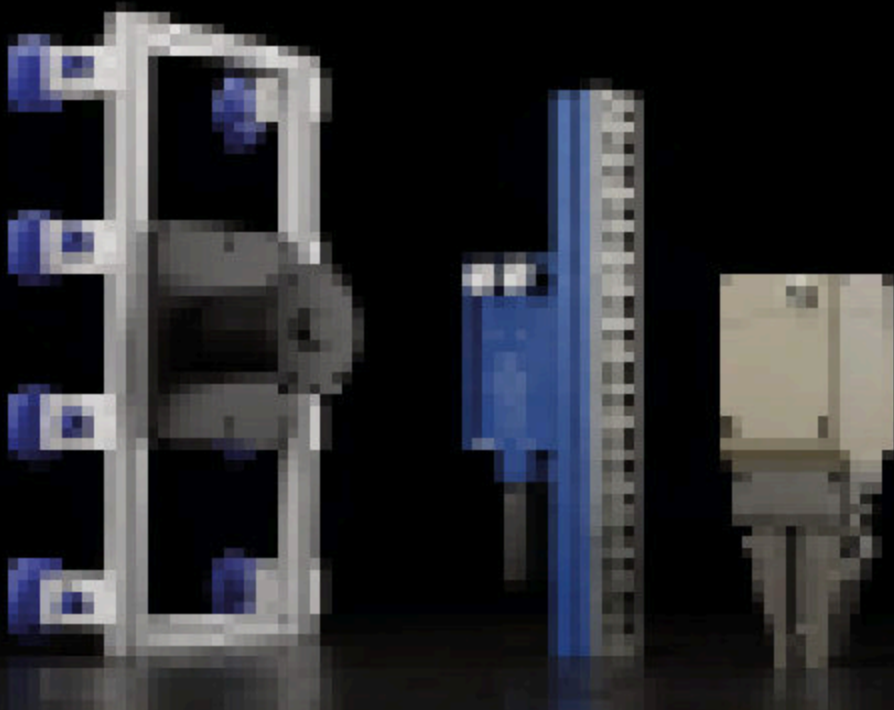
Automatic Gripper Exchange

The automatic gripper change system enables fast and safe tool exchange without operator intervention. This solution minimizes downtime between processes, increases production flexibility, and allows easy adaptation to different part geometries and sizes within the same working cell.



Grippers a medida

Custom-designed grippers are developed specifically according to the geometry and requirements of each part. This solution ensures secure and precise gripping throughout the entire process, optimizing repeatability, reducing errors, and enabling reliable handling even for complex or variable geometries.



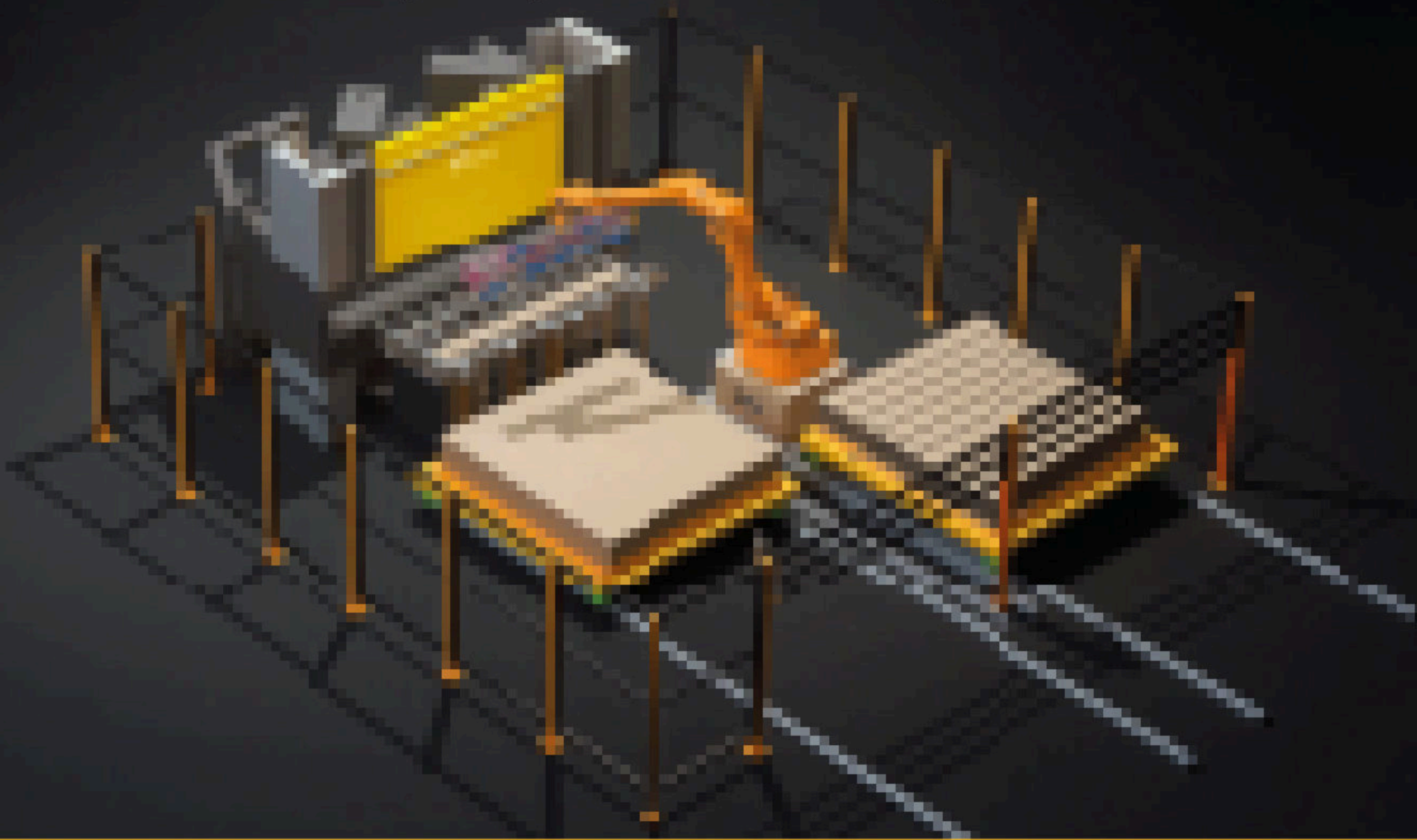
Technical Information

Model	Small - Sized / ER45-2200
Maximum Load Capacity	45kg / 99 lb
Maximum range	2200 mm / 86 in
Repeatability	±0.03mm

BENDING CELL

Medium-Sized

The first 6-axis bending robot in the world, optimized design according to bending working condition, faster and more precise.



BR80-2565 Manipulation Robot

The ER80B-2566 BD robot delivers high payload capacity, extended reach, and reliable performance, enabling flexible and efficient handling of large parts.

It supports integration with a wide range of grippers and end-of-arm tooling, making it ideal for demanding industrial applications and automated cells.

ESTUN
ARGENTINA

Synchronization with Bending Machine

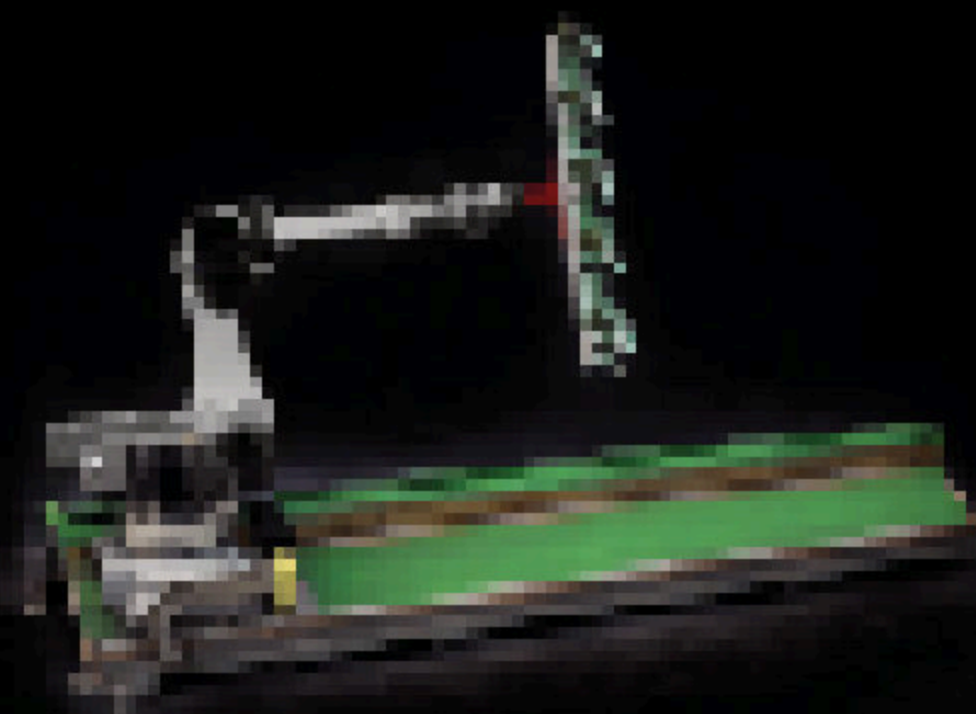
The robot is fully synchronized with the press brake, precisely coordinating each movement throughout the bending process. This integration ensures optimized cycle times, higher repeatability, and safe, stable execution, even in complex or highly demanding bending sequences.



General Characteristics

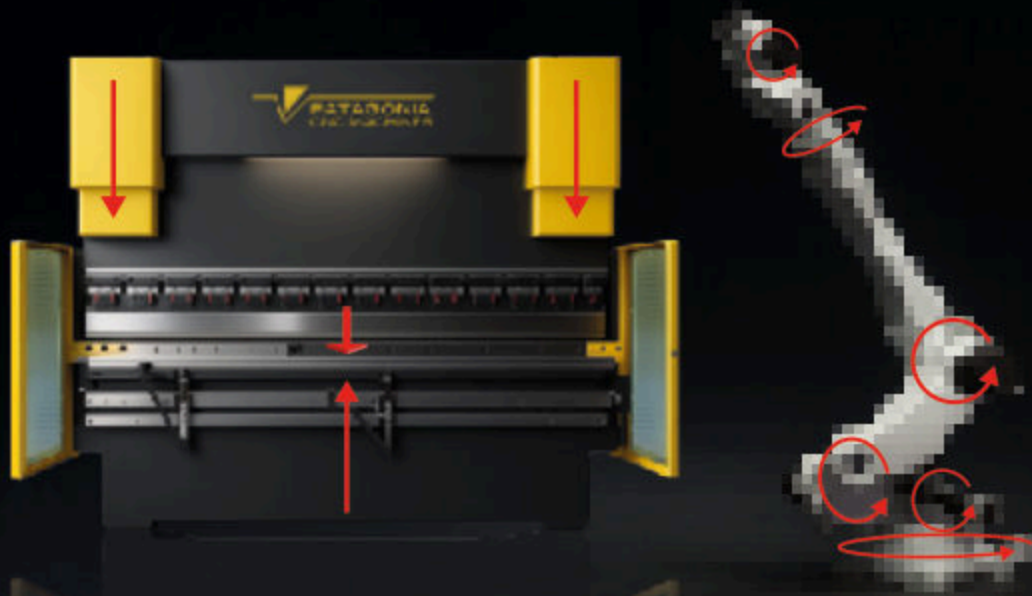
Integration of the 7th axis

The robot can be mounted on a linear track that significantly expands its working range. This configuration allows the robot to serve multiple stations or handle larger parts, increasing cell flexibility, optimizing operation times, and improving overall use of production space.



+10 CNC Synchronous Axes

The CNC system controls more than 10 synchronized axes, coordinating all movements precisely and simultaneously. This capability enables complex sequences with high repeatability, optimized cycle times, and full process control, even in highly demanding bending applications.



Production Flexibility

The cell is designed to provide high production flexibility, enabling efficient operation with low batch volumes and frequent part changes. This capability reduces setup times, allows quick adaptation to new geometries, and supports agile manufacturing, ideal for short runs or on-demand production.



Technical Information

Model	Medium - Sized / BR80-2565
Maximum load capacity	80kg / 175 lb
Maximum range	2565 mm / 86 in
Repeatability	±0.04mm

BENDING CELL

Large-Sized

A specially designed bending robot is perfectly suitable for large-sized work piece, process.



BR130-2865 Manipulation Robot

The BR130-2865 robot delivers high payload capacity, extended reach, and robust performance, enabling efficient handling of heavy parts in demanding industrial environments.

It supports integration with a wide range of grippers and end-of-arm tooling, making it an ideal solution for automation processes, bending applications, and high-demand operations.

ESTUN
ARGENTINA

3D control software

The 3D control software allows process visualization and supervision within a three-dimensional environment, enabling motion validation, collision prevention, and precise operational control.



General Characteristics

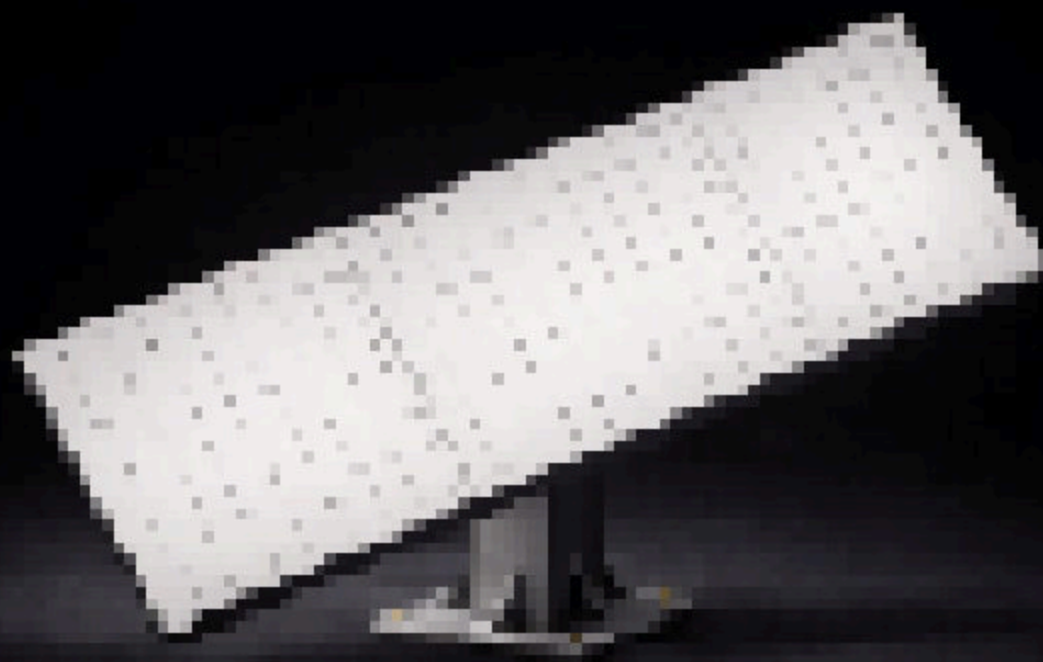
No Folding Movement Programming

The system allows bending operations without the need for manual motion programming. The control automatically manages the trajectories, simplifying operation, reducing setup times, and minimizing process errors.



Automatic Sheet Metal Centering

The automatic part centering system ensures precise alignment before the bending process. This function reduces manual adjustments, improves repeatability, and delivers consistent results, even in low-batch production or frequent part changes.



Allows Manual Use

Below the cutting area, the machine is equipped with refractory bricks that efficiently dissipate the heat generated by both the laser and the cut pieces. This system prevents the heat from being transmitted to the main structure, protecting the internal components and ensuring greater durability and thermal stability of the equipment during long working days.



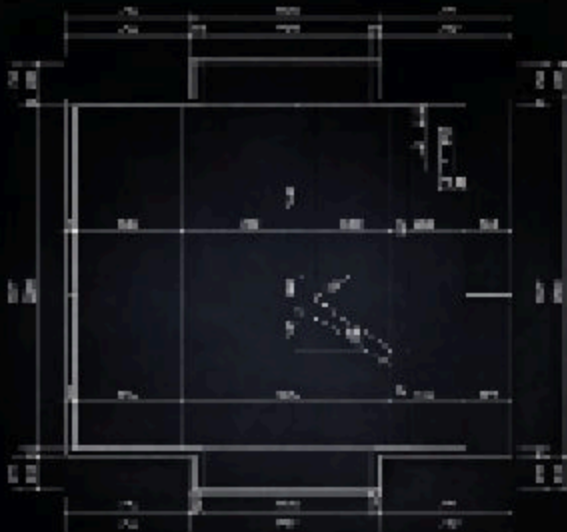
Technical Information

Model	Small - Sized / ER130-2865
Maximum load capacity	130kg / 286 lb
Maximum range	2865 mm / 86 in
Repeatability	±0.04mm

Bending Software



Our advanced software ensures perfect synchronization between the robot and the bending machine, significantly improving both efficiency and precision. It enables real-time monitoring of bending machine signals, tooling parameters, and bending speed, allowing precise tracking of each bending movement. The system also supports direct import of drawings, automatically converting them into robot bending programs. High-precision displacement sensors ensure accurate feeding and consistent bending results.



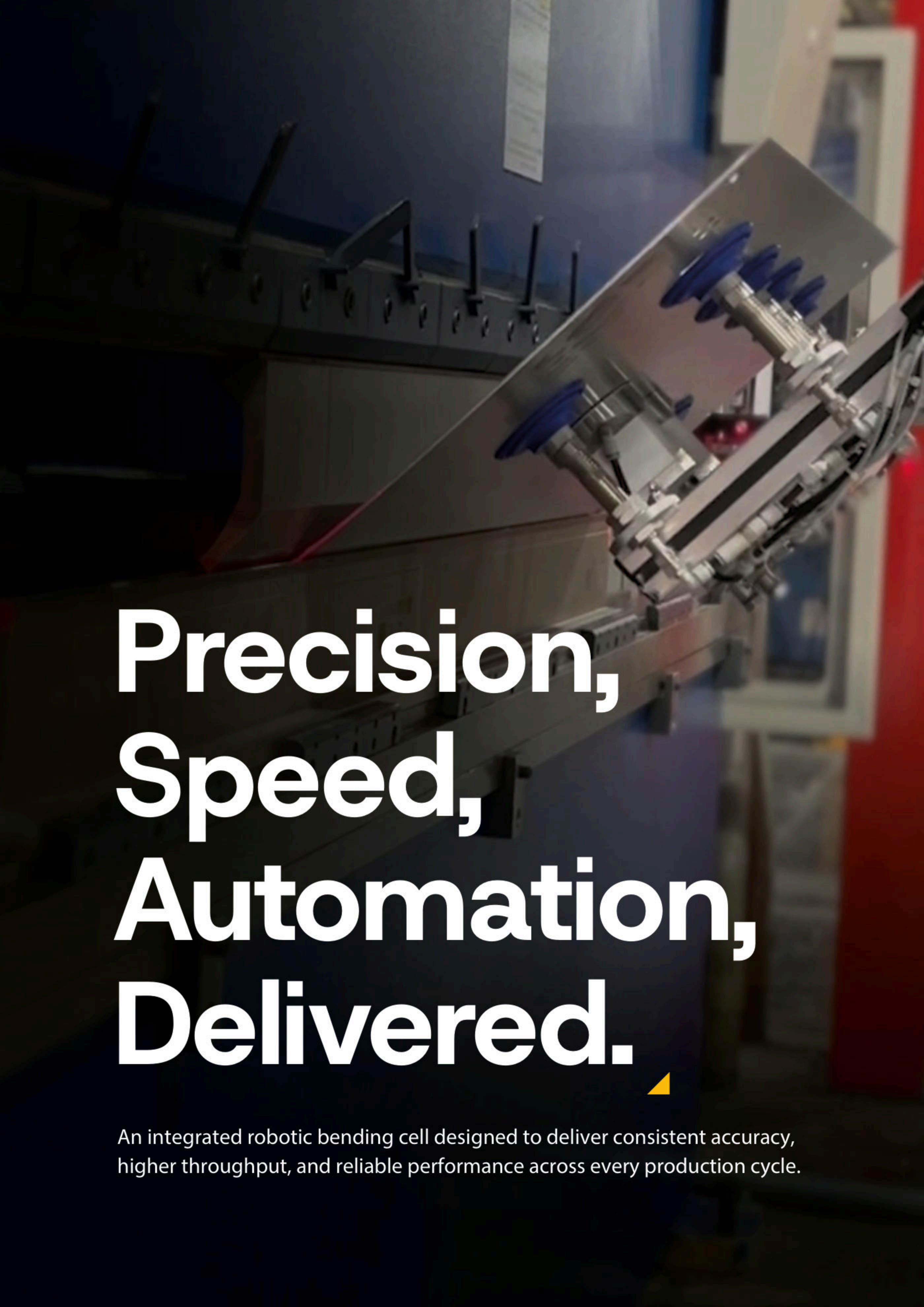
Import Drawings To PC



Program Automatically



Automatic Robot Bending

A close-up, low-angle shot of a robotic bending cell. The machine is constructed from polished stainless steel and features several blue-handled adjustment knobs. It is positioned in a factory environment with blue and red structural elements visible in the background. The lighting is dramatic, highlighting the metallic surfaces and the precision of the machinery.

Precision, Speed, Automation, Delivered.

An integrated robotic bending cell designed to deliver consistent accuracy, higher throughput, and reliable performance across every production cycle.



Alien Industrial Solutions and Patagonia CNC Machines, Your global partners in industrial automation

We are leaders in industrial automation, operating the largest plant in South America in Argentina, where we design and manufacture CNC machines, robots, production lines and cells, customizable routers and laser cutting machines, and provide bespoke integrations for the automotive, MIG/SPOT welding, and general industry sectors.

We know manufacturing: we are your one-stop shop, we do it all, from engineering through commissioning to after-sales service. We provide optimum solutions at competitive investment costs and partner with you over the long run; our solutions meet all your requirements. Training and support are available for our customer partners, we design and integrate standard and customized systems, and we have facilities in four countries and distribution partners globally.

