

THE ADVANTAGES



FOR END USERS



Minimize production downtime caused by programming.



Predict and optimize the performance of the bending cell for any product.



Simplify robot programming while maintaining the required tolerances.



Quickly design and manage many palletization patterns.



FOR SYSTEM INTEGRATORS



Improve cell design through process simulation.



Reduce dependency on specific robot or press brake brands.



Easily compare multiple solutions and present them to customers.



Improve customer service by designing new processes at any time.

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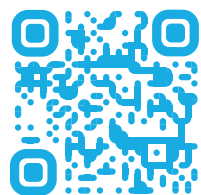
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INDUSTRIAL ROBOTICS GROUP

We are sharing our experience in the field of robotics
in a new online community! Join us!

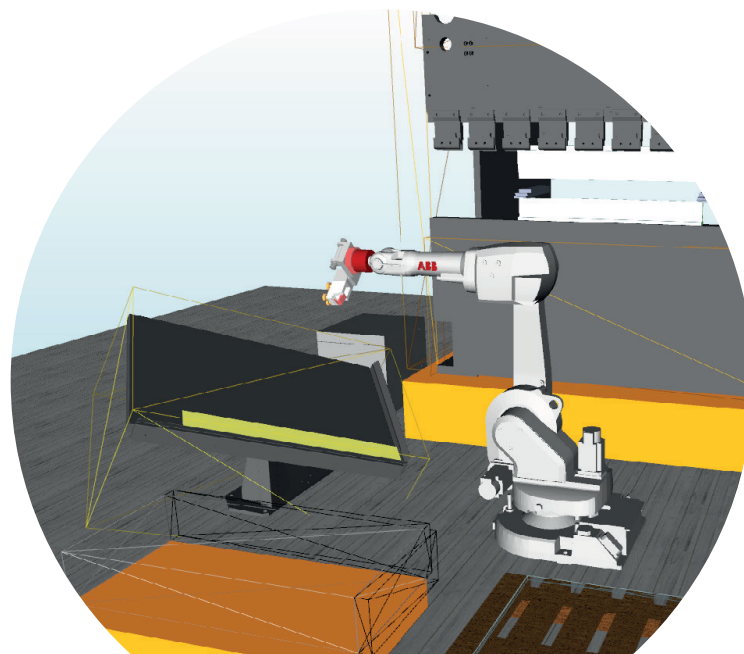


Contact us for a
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in our laboratory!

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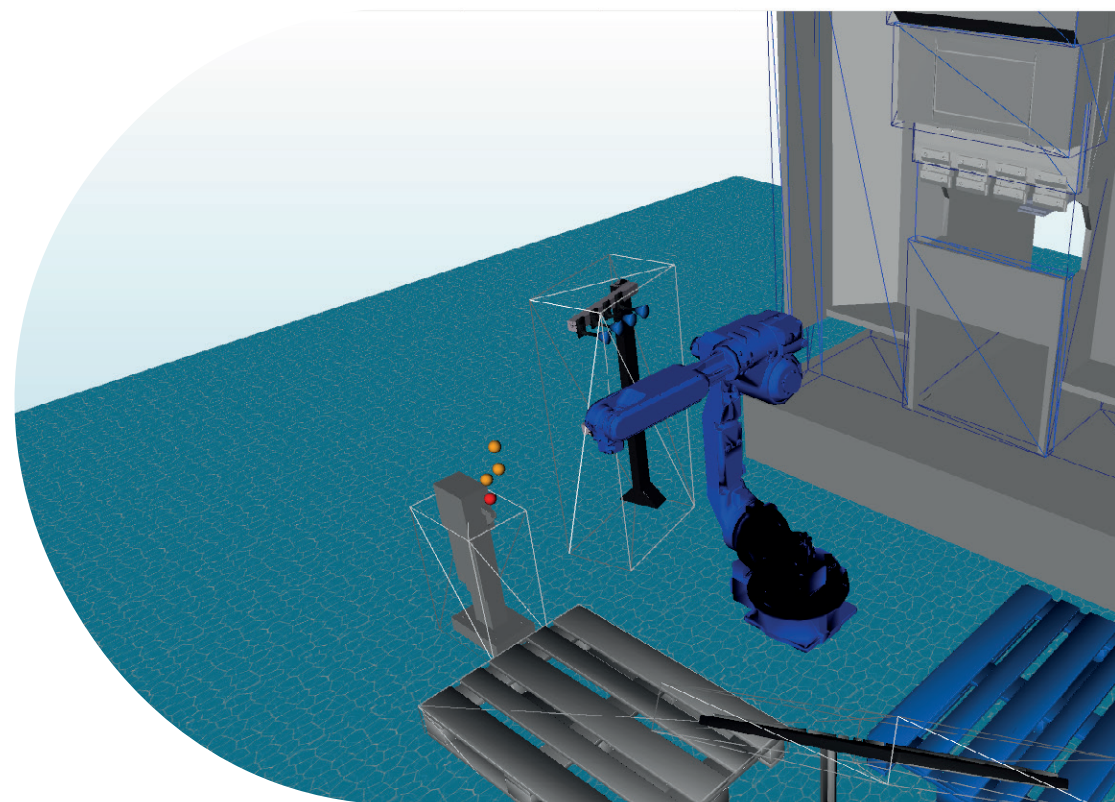
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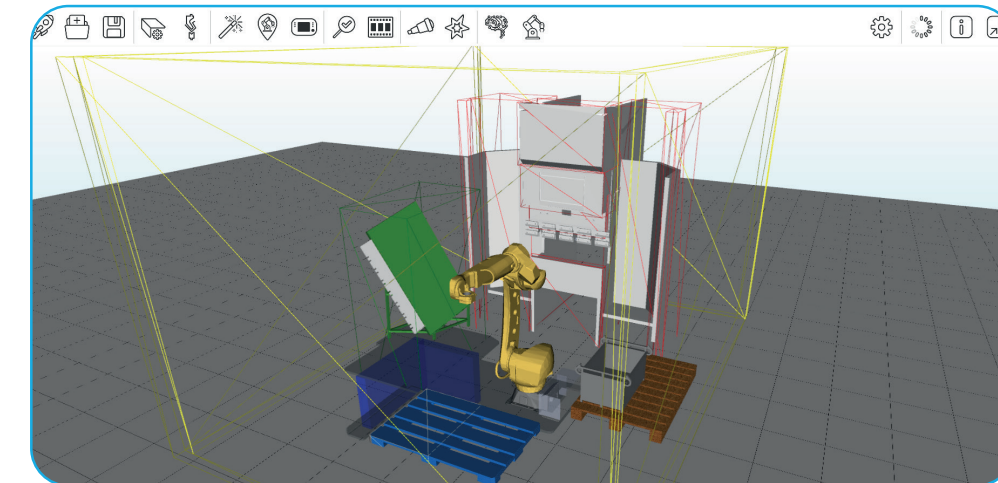
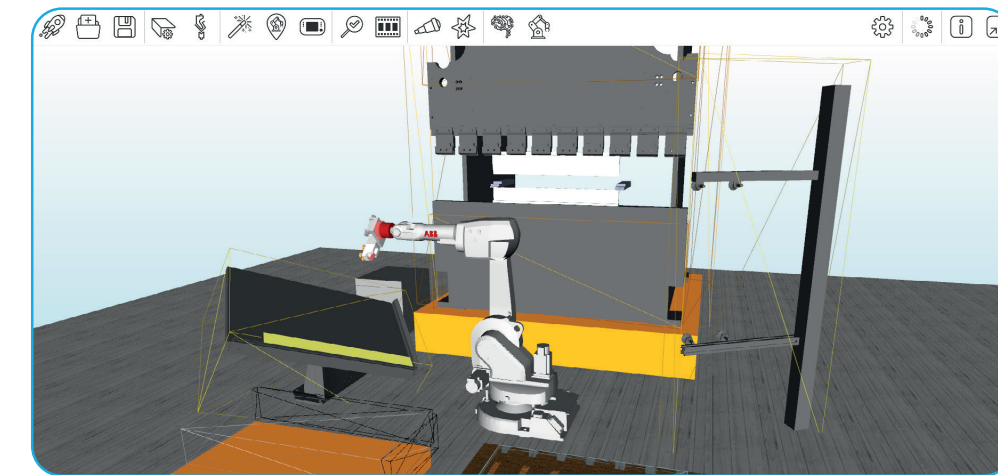
OBELISK

OFFLINE SOFTWARE FOR ROBOTIC BENDING WORKCELLS



WHAT IS OBELISK

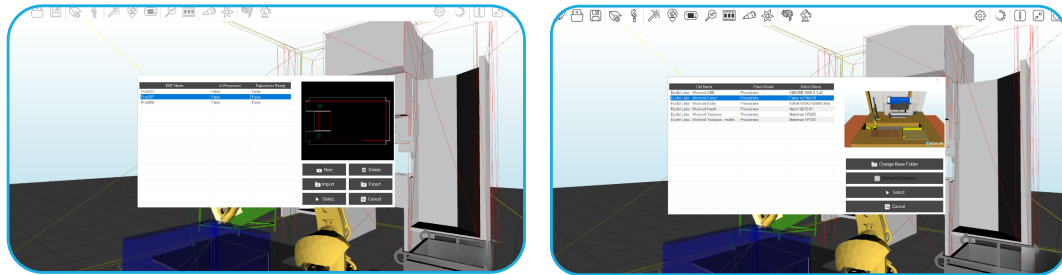
Obelisk is the offline programming software for robots and press brakes that allows you to **simulate the entire bending process, from layout definition to machine program generation**. With Obelisk, you can increase the efficiency of your bending cell, reduce machine downtime caused by mechanical setups and robot programming, and ensure a higher level of precision and reliability.



START A PROJECT WITH OBELISK

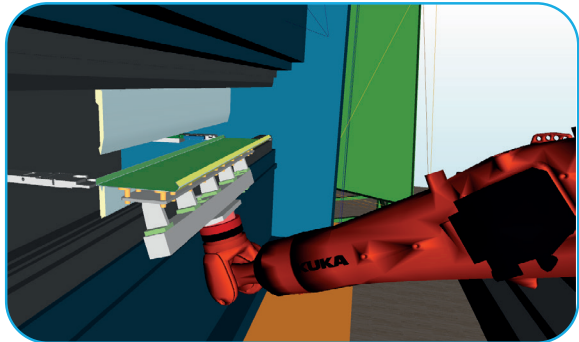
01 CELL DEFINITION AND PRODUCT CATALOG

- Select the robotic cell you want to work on, define the product to be processed, and import the DXF file to start the project.



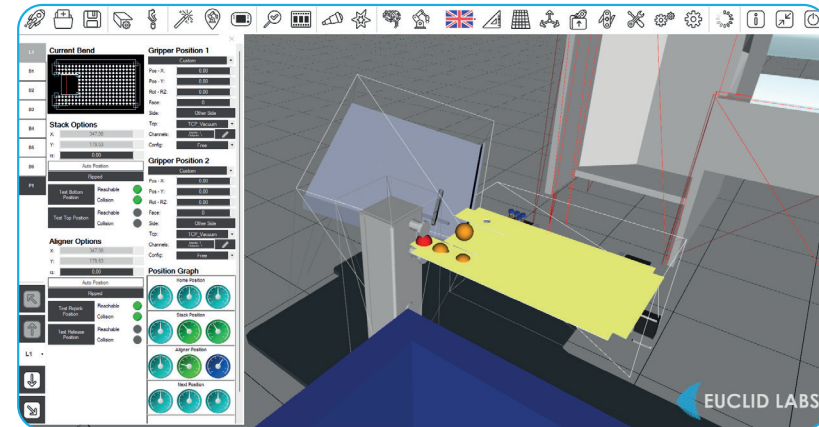
02 WORK CYCLE DEFINITION

- Set the final bending geometry (angles, directions, sequence).
- Define the gripper, thickness, weight, and loading/unloading systems.
- Configure the press brake tool stations and the positioning of the back gauge.
- When using external software for offline bending design (e.g., Autopol, Lantek, etc.), it is only necessary to define the gripper and the loading/unloading operations.



03 3D ENVIRONMENT SIMULATION

- Simulate the behavior of the robotic cell in a 3D environment that accurately reflects the real plant.
- Validate every stage of the production cycle before going into production.
- Analyze collisions and optimize robot kinematics and reachability throughout all operations.
- Define and manage customized palletization patterns.



04 TRAJECTORY AND PROGRAM GENERATION

- Calculate robot trajectories and complete the work cycle.
- Generate machine programs for the robot and press brake, and export them directly to the production system.
- Compatible with the leading brands (ABB, FANUC, KUKA, Yaskawa, ESTUN, Stäubli, etc.).

ADVANCED FEATURES



Multi-component management (stacks, centering devices, pallets) up to ten per type.



Multi-TCP management (grippers, repositioning supports, back gauges).



Advanced interpolation engine for robot trajectories that accurately replicate real execution.



Automatic calculation of **bend deduction** for realistic simulation.



Insertion of intermediate points to perform additional operations before and after bending.

OTHER FEATURES

- ✓ Quick modification of press brake tools and back gauges using drag-and-drop.
- ✓ Full support for orthographic view.
- ✓ Simulation and management of vertical stacks on jigs.
- ✓ Palletization-only mode (without bending).
- ✓ Fully customized software interface colors.

