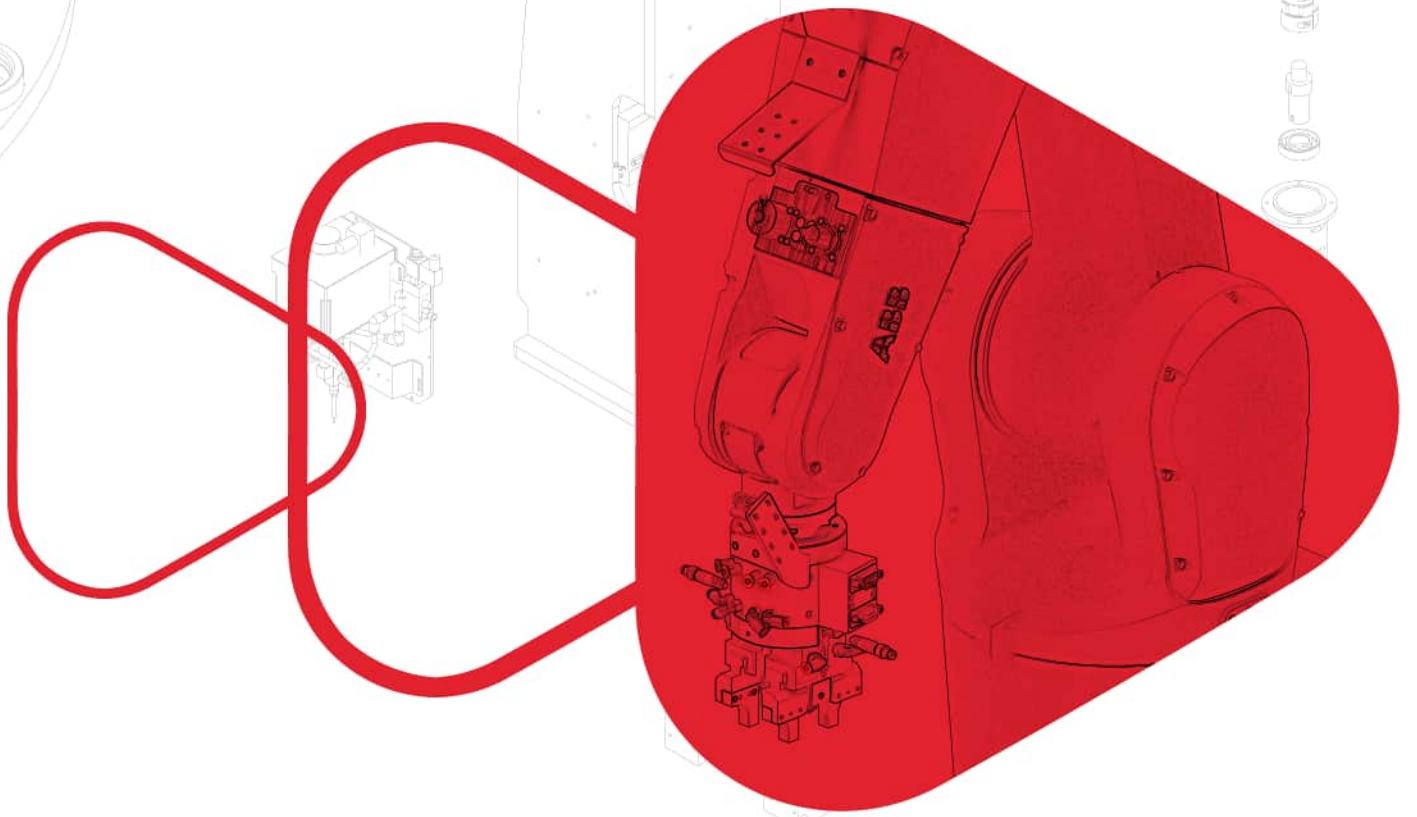


d · mp



Profile

The basic idea of Design MP's presence on the market is to increase the level of automation in production processes and its implementation in various areas in industry. We do design and manufacture devices primarily for the electrical, mechanical engineering, automotive and woodworking industries. But that doesn't mean we can't design a solution for other industries as well. We mainly focus on the realization of prototypes, special devices and production lines according to your requirements and needs. Almost all of the projects we have implemented so far have had a prototype character, which is our strength.

Brief history

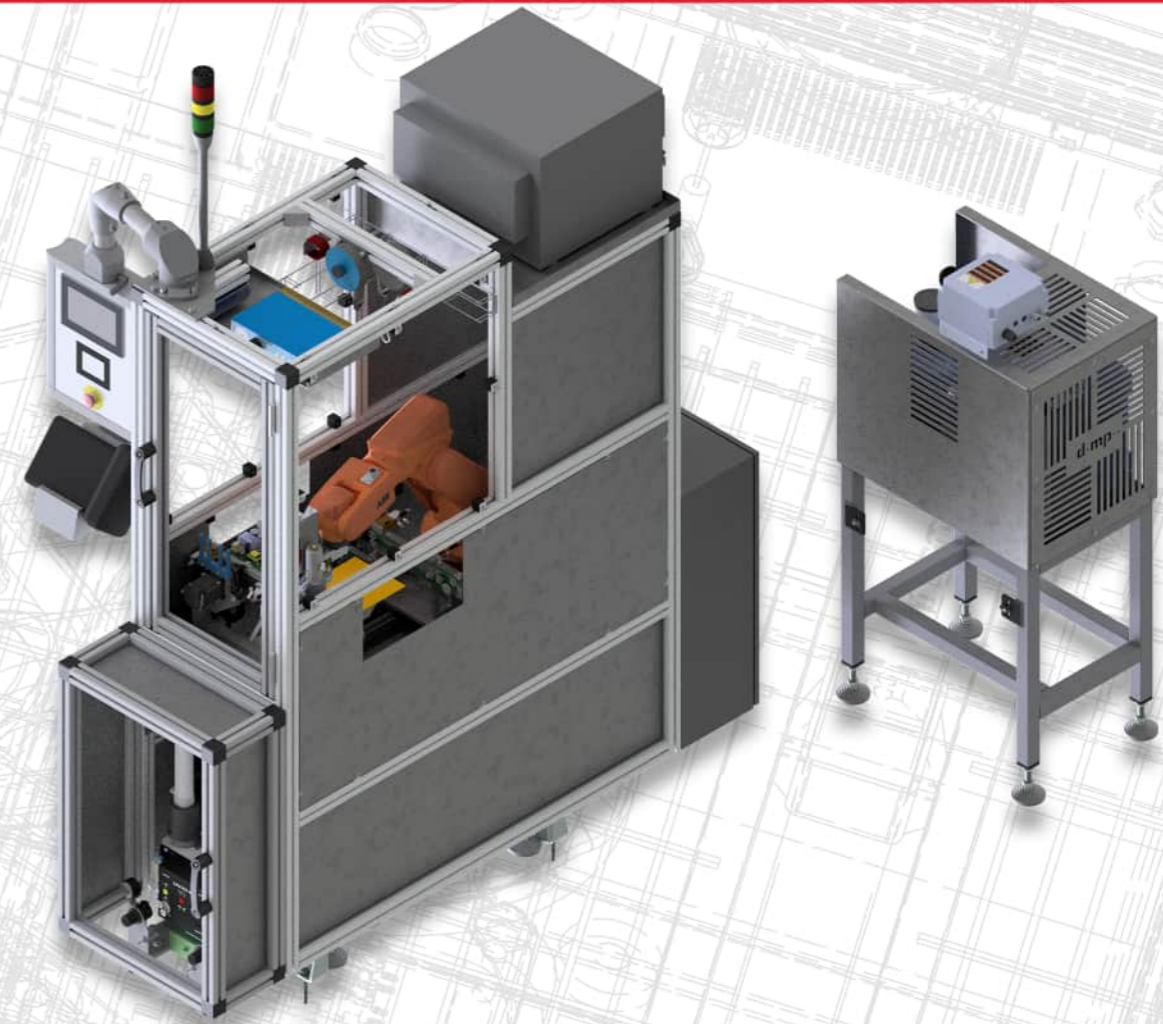
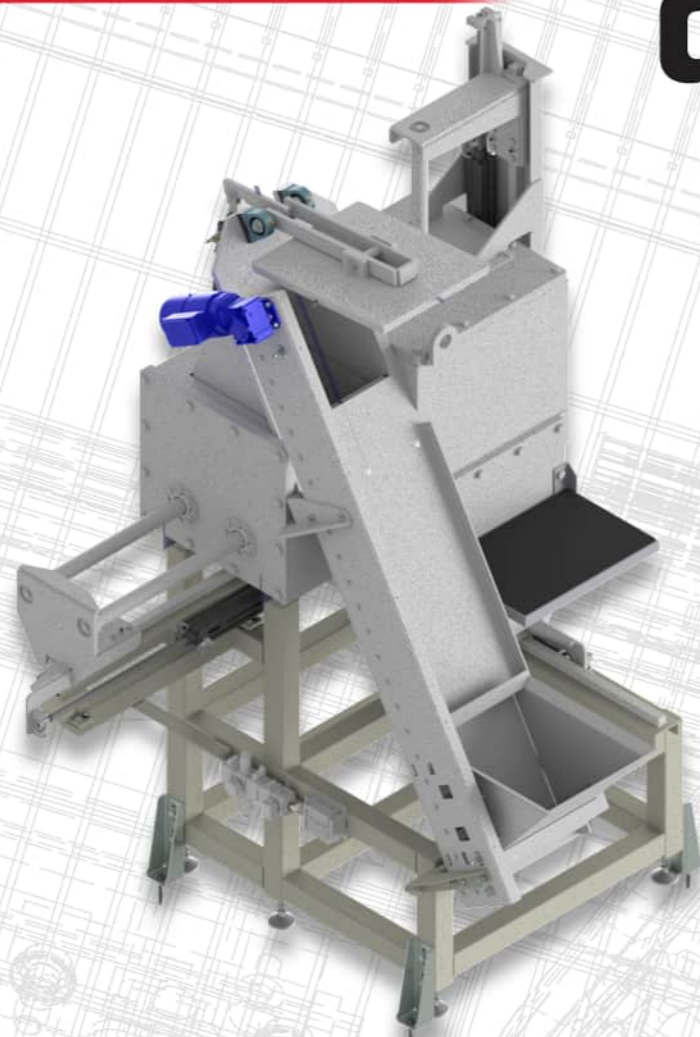
Design MP, Ltd. was established in 2007 as a mechanical engineering office for designing single-purpose devices. A year later, in 2008, the production department gradually began to be created so that we could become suppliers of complex solutions according to customer requirements. Thanks to that and also thanks to our specific mindset, over the following years we have developed into a manufacturing company. As an expanding company with currently 32 employees, we have gradually started to tackle with more and more complex projects. Year 2011 was a breakthrough year for us. Thanks to our way of approaching to the customer and our innovative solutions, as a small company we were able to design and implement a 32 meter long speaker production line including 8 robots. The implementation of this production line has pushed the boundaries of what we can do and what we are capable of to the next level. Challenges are defining us and this is what pushes us forward.

Why us

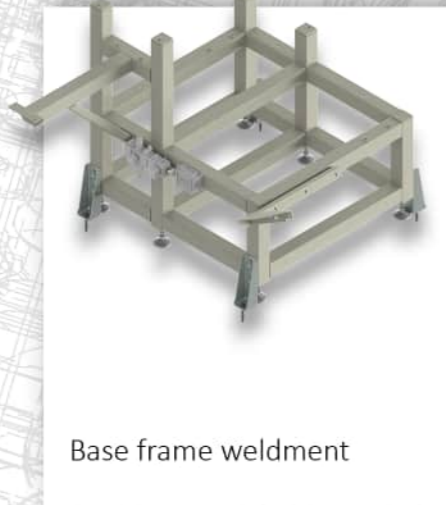
- Devices and production lines according to your requirements
- Already at the quotation stage we offer you a detailed solution
- During creating a solution and price offer for you, we put emphasis on your financial possibilities, and based on this information we optimize the final solution
- In the offers we provide detailed pricing that reflects the proposed solution
- We design compact devices with an emphasis on functionality, simplicity, quality and design. We want our devices to be up and running after a few years in production
- We prefer open communication during working on a solution, we are focused on the details and bottlenecks of individual processes.
- We are a team of people who believe in each other and always bring projects to a successful conclusion
- We are not afraid to implement devices that no one has done before us because they are complicated. For us it is a challenge and a motivation as well.
- Our approach to the customer is specific in that we try to consider all possible obstacles that may appear during the process
- We are detail-oriented.



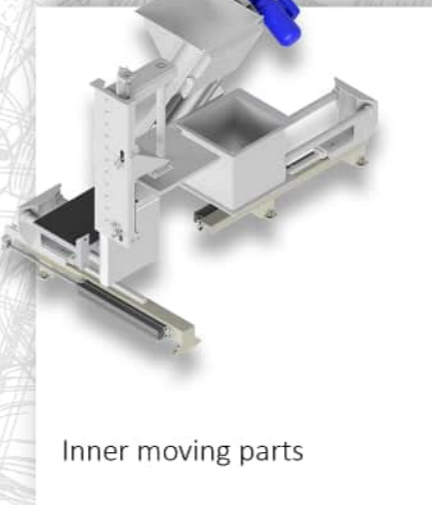
d.mp ▶▶▶



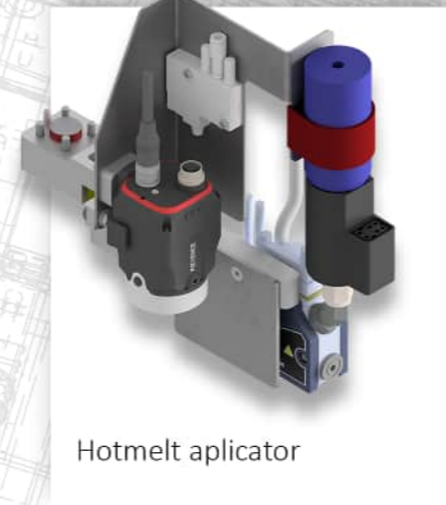
Device in Cut view



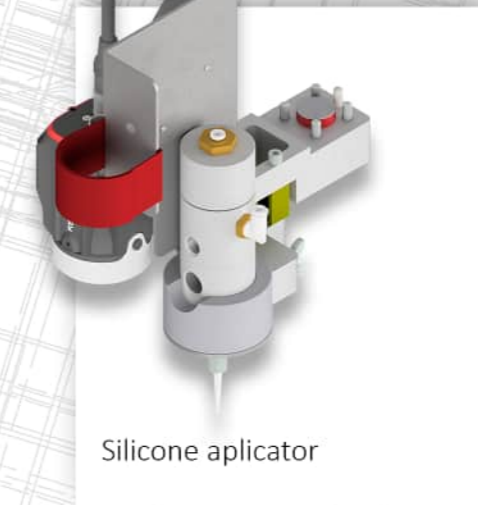
Base frame weldment



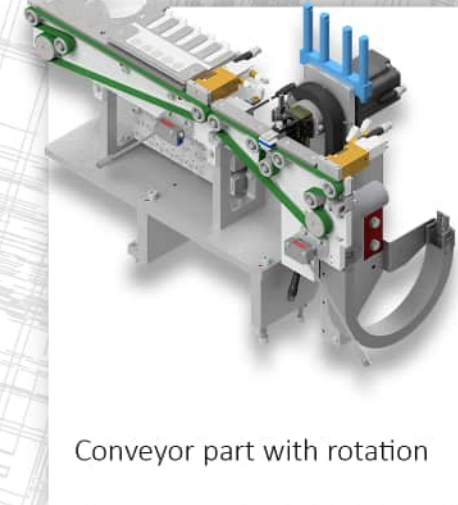
Inner moving parts



Hotmelt aplicator



Silicone aplicator



Conveyor part with rotation

Device description:

The device inserts aluminium sprues from the injection moulding process into the melting furnace

The main benefit for customer

Safety
The device replaced the dangerous work of the operator when manually inserting aluminium sprues into the melting furnace area

DMPs technological know how

During designing and manufacturing the equipment, it was necessary to take into account the inlet temperature of the furnace, which is 800°C, and also the tightness of the moving parts, because the negative impact is the entry of oxygen into the furnace

Device description

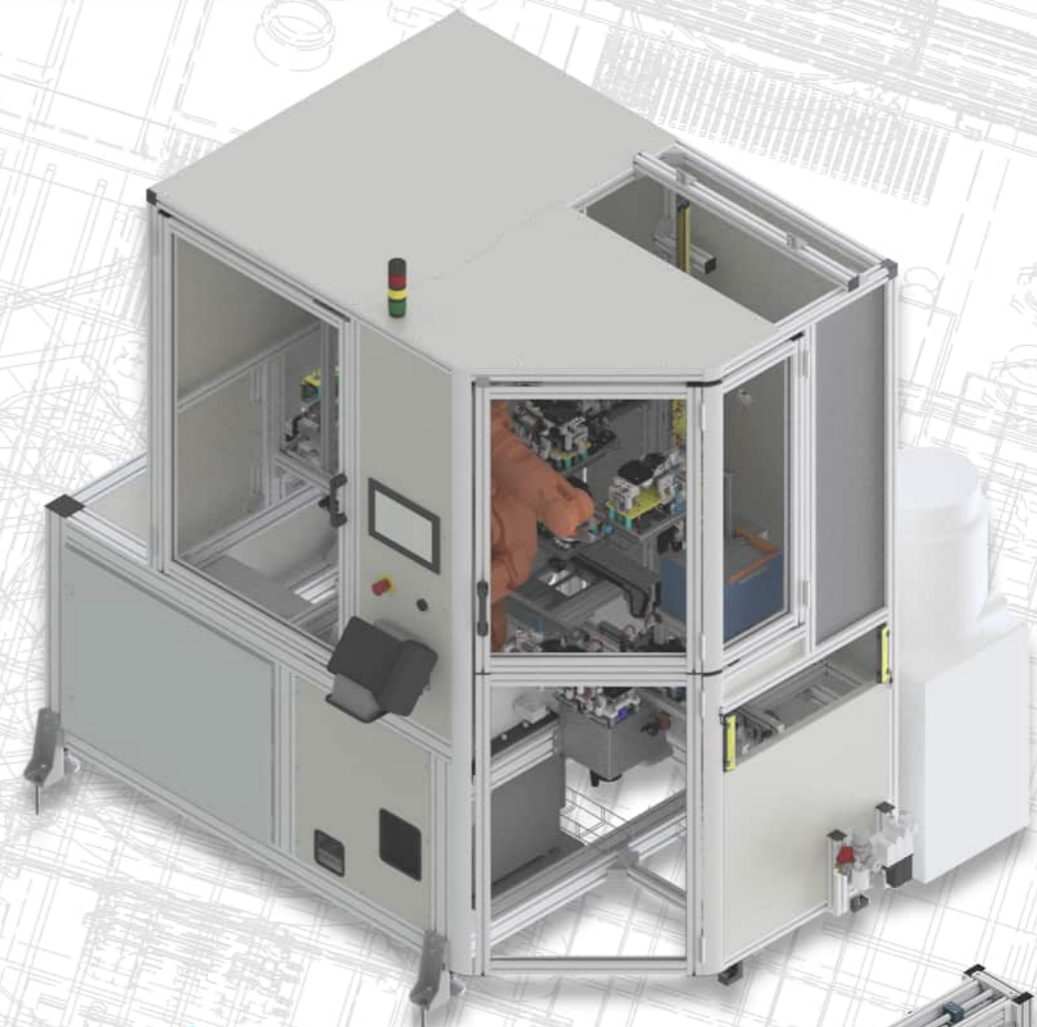
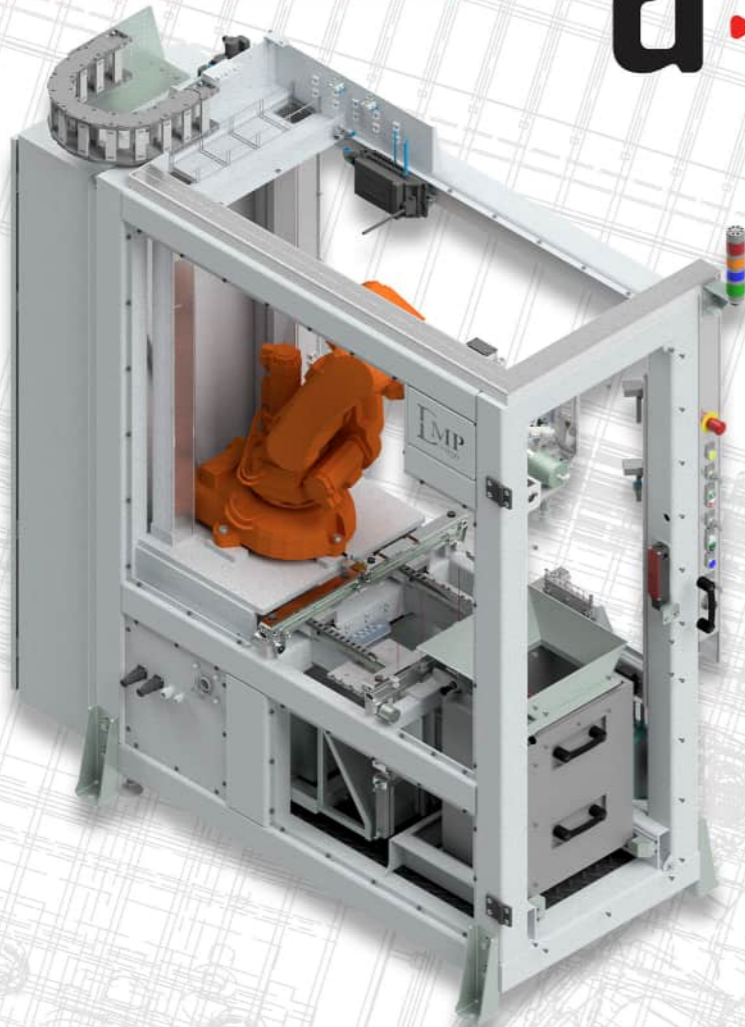
The device applies silicone and hotmelt on the parts placed on the PCB. It depends on which applicator is currently based on.

The main benefit for customer

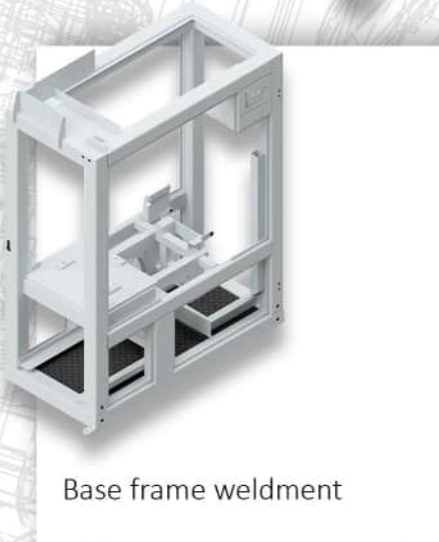
Improving the quality and control of silicone and hotmelt application. Total width of the cell is only 600mm.

DMPs technological know how

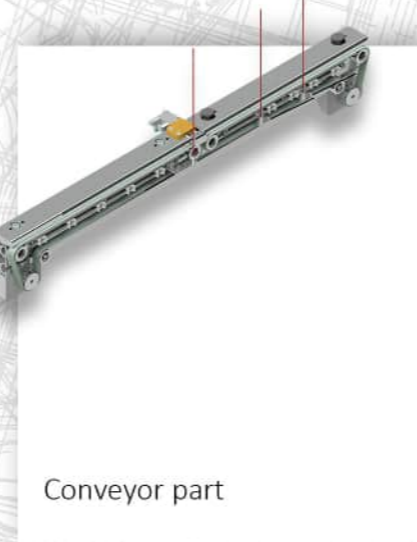
Minimalisation
Placement of many devices + robot in small area.



Gripper of PCBs



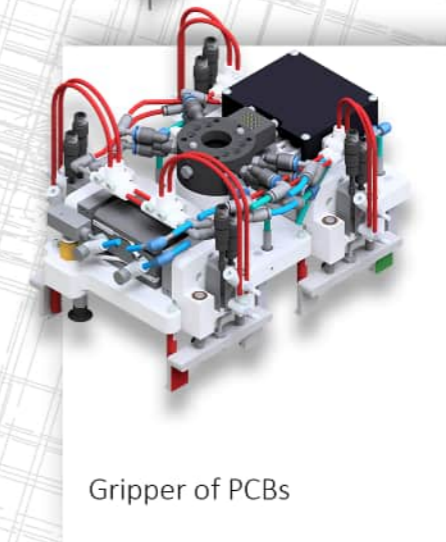
Base frame weldment



Conveyor part



Gripper for frame disassembling



Gripper of PCBs



Frame tray

Device description

The device milles the PCBs

The main benefit for customer

Menšia inštalčná šírka zariadenia, ako majú sériovo vyrábané zariadenia.

Technologické know-how DMP:

Minimalisation
Robot works in cell which has an overall width of 725mm

Device description

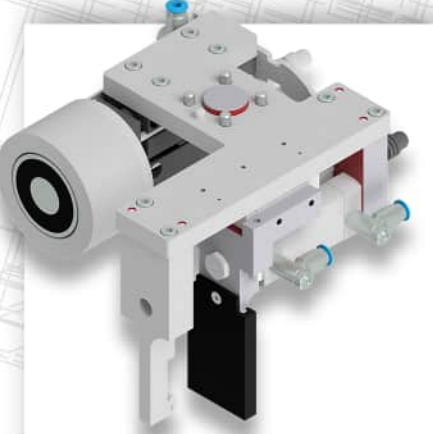
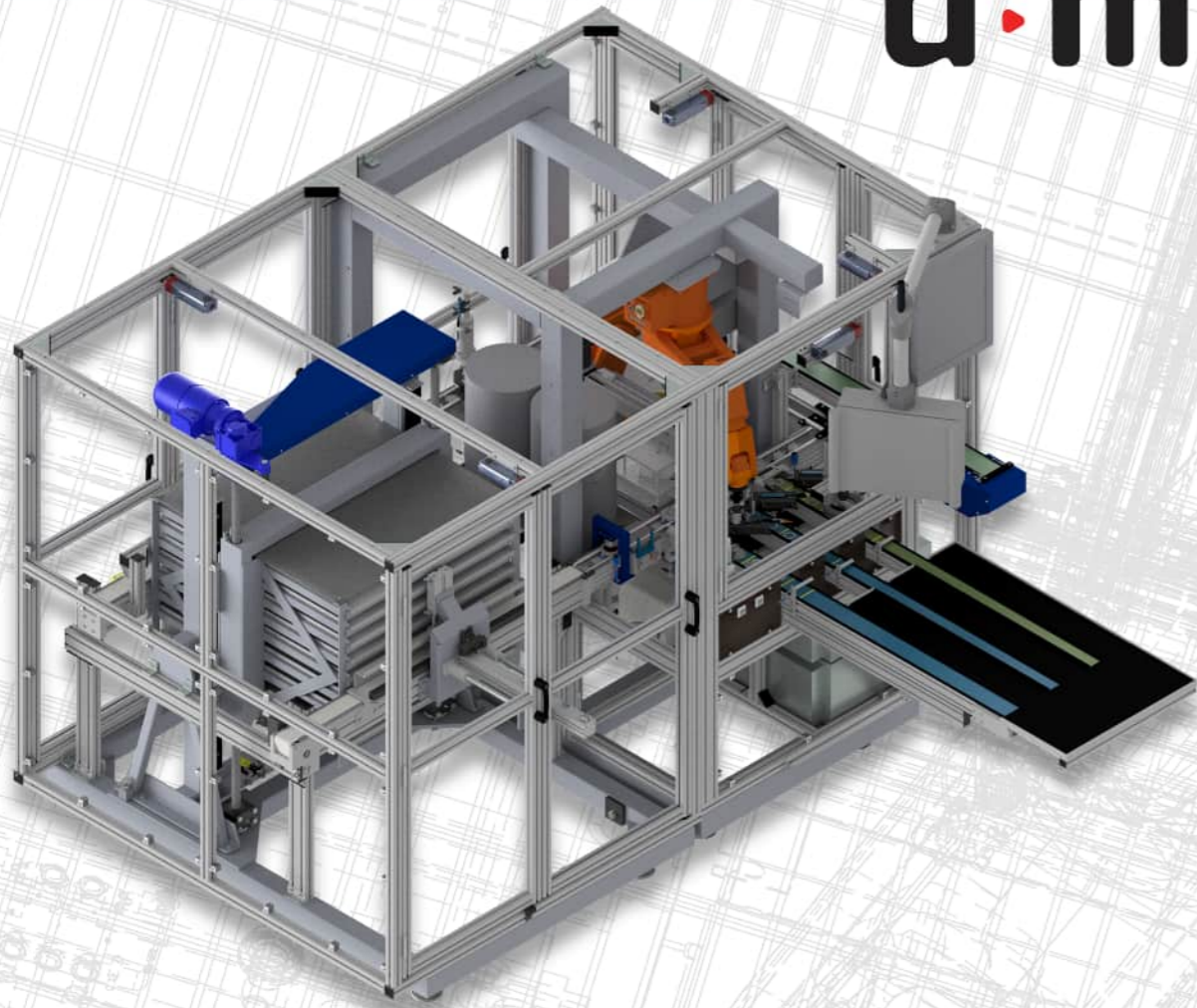
The device stacks, disassembles and assembles soldering frames. PCBs stored in frames are picked and milled by the robot

The main benefit for customer

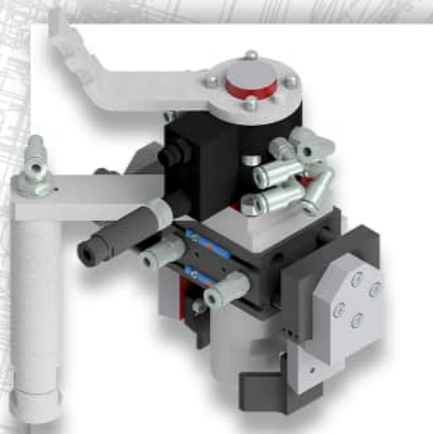
Costs savings
The equipment replaced the operator and at the same time increased the quality of PCB milling

DMPs technological know how

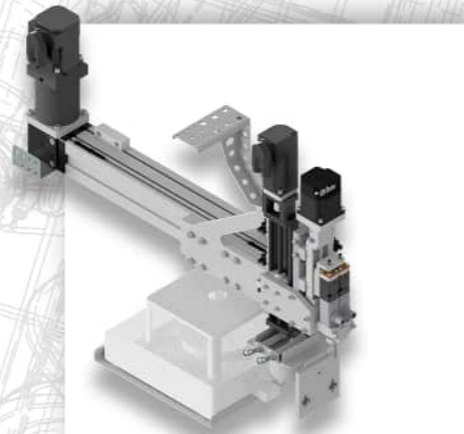
Minimalisation
It was necessary to resolve the space limitations of whole device



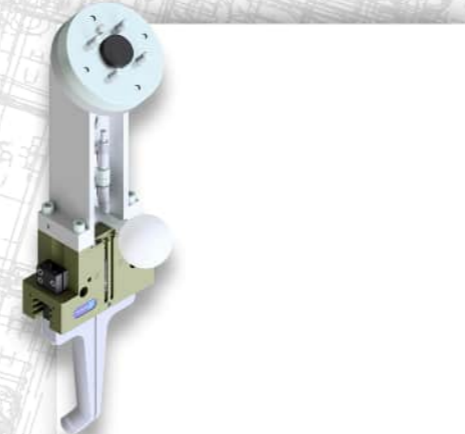
Gripper of insertion the magnets



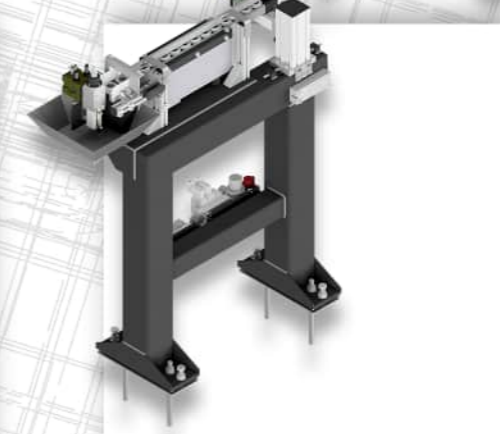
Gripper for magnets assembling



Manipulator for glue application



Gripper for picking the ball stud sockets from crate



Vibration tray



Manipulator for inserting the parts on convoyer

Device description

The production line is designed for the production of several types of magnets for speakers

The main benefit for customer

Design and arrangement of individual structural nodes of the line on a 3x3m space

DMPs technological know how

Minimalisation
Space limitations and application of two-component glue that dries in 30 seconds in a process

Device description

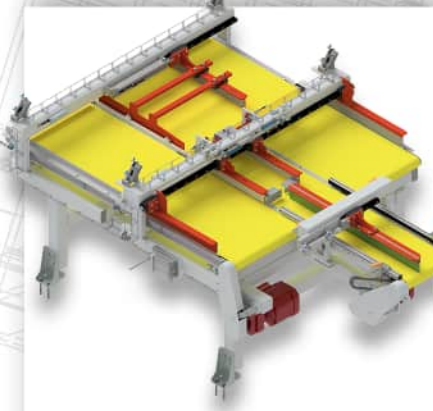
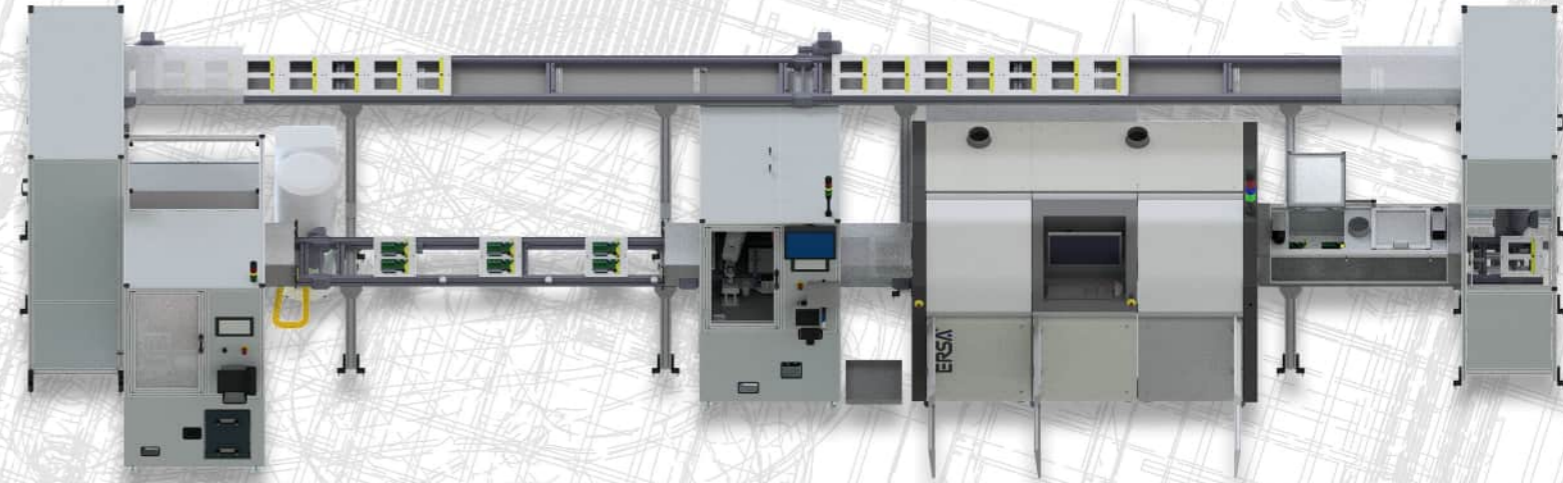
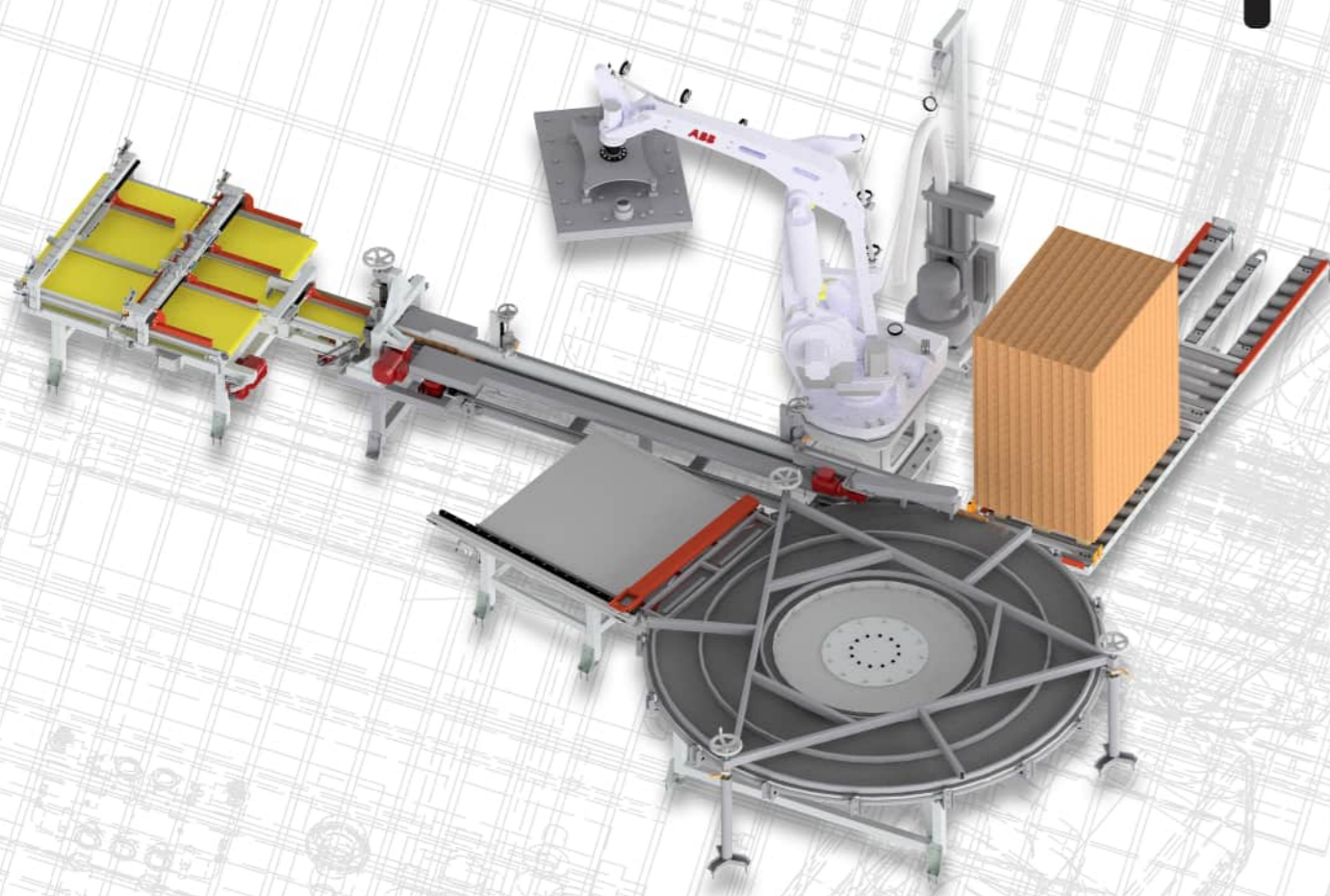
The workstation is designed to place the ball stud sockets into the exact position of the following device, while the ball stud sockets are removed from the crate

The main benefit for customer

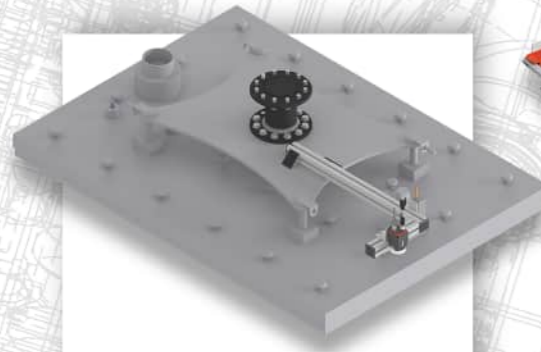
Costs savings.
The device replaced an operator who was doing monotonous work

DMPs technological know how

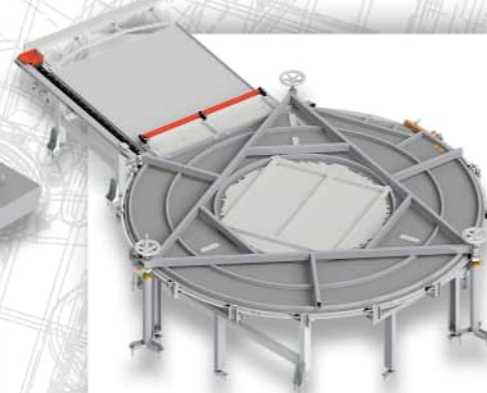
Solution for removing non-oriented ball joint sockets from a crate with using a 3D scanner and subsequent insertion into another



Dosing device



Vacuum gripper



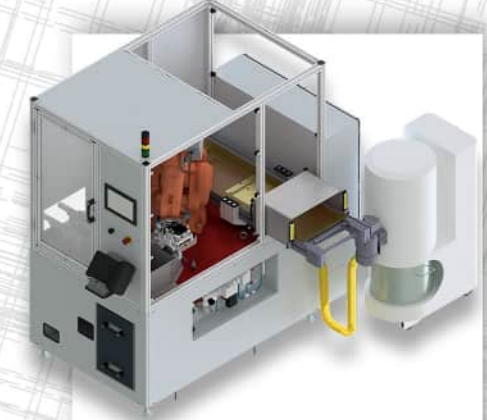
Rotary table for orientation
the wooden prisms



The Silicone cell



Lifter / elevator



The milling cell

Device description

The workstation is used for feeding wooden prisms into the following technology

The main benefit for customer

Costs savings

The device feeds corectly oriented wooden prisms in 0,5 second per 1 piece

DMPs technological know how

The device has replaced the operator who performs monotonous and exhausting work

Device description

The production line is designed for milling, component mounting, siliconizing, cooling and transport of PCBs

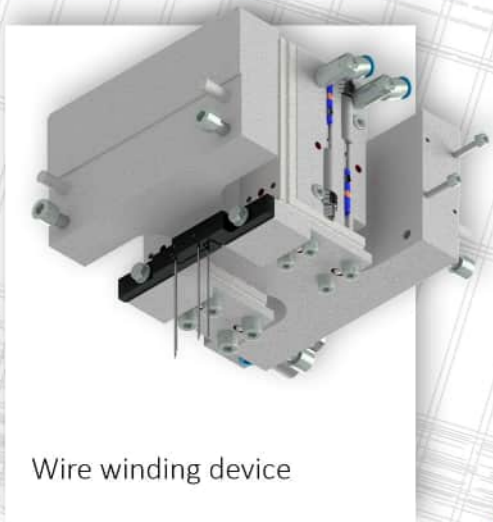
The main benefit for customer

New product process automation

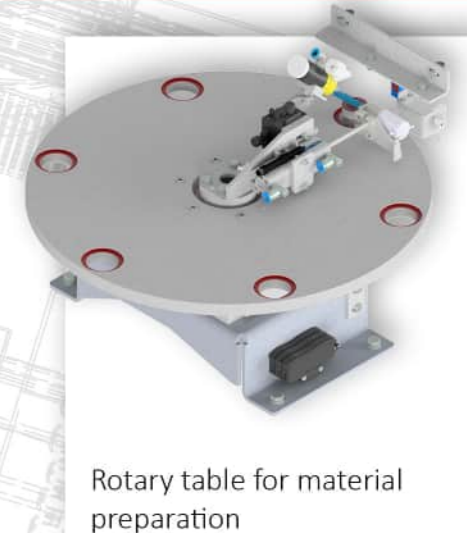
DMPs technological know how

Production line layout optimisation





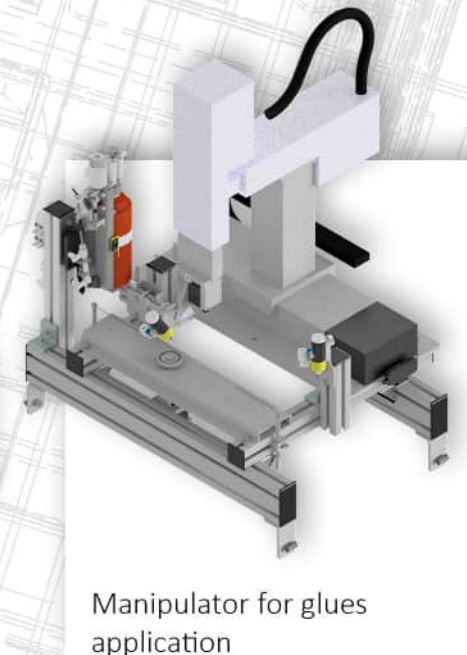
Wire winding device



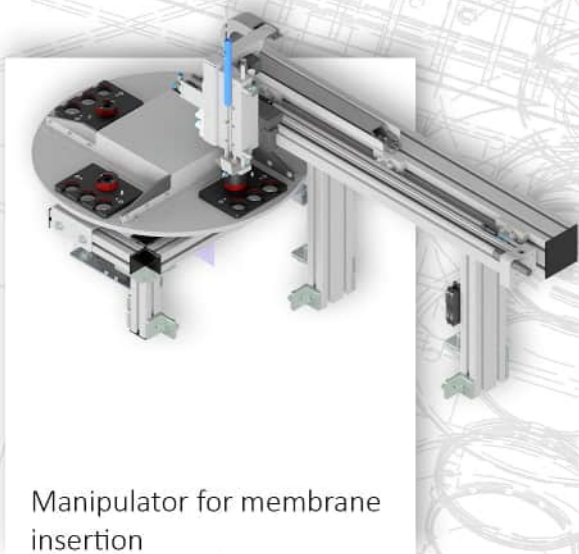
Rotary table for material preparation



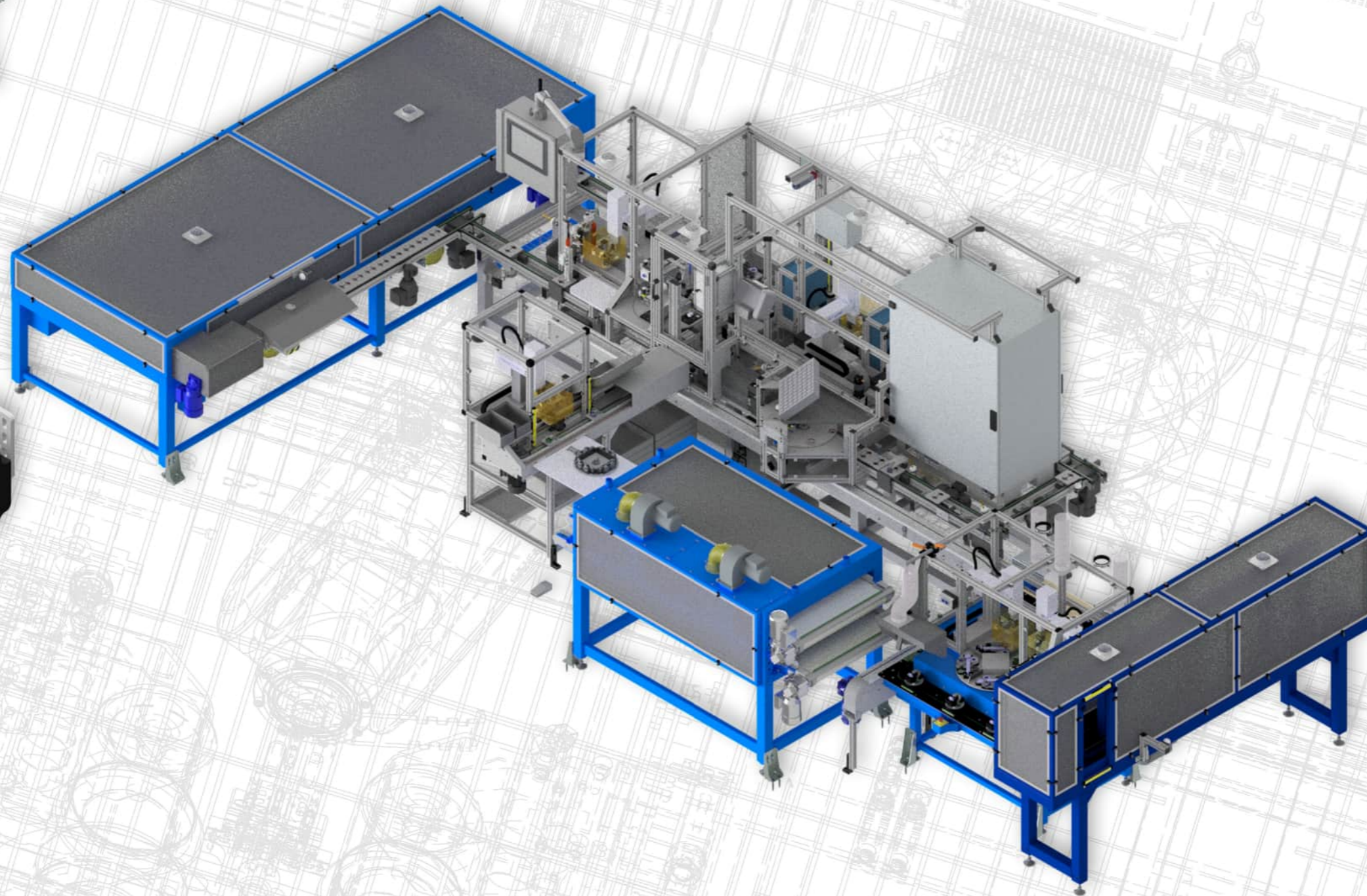
Gripper for glue application



Manipulator for glues application



Manipulator for membrane insertion



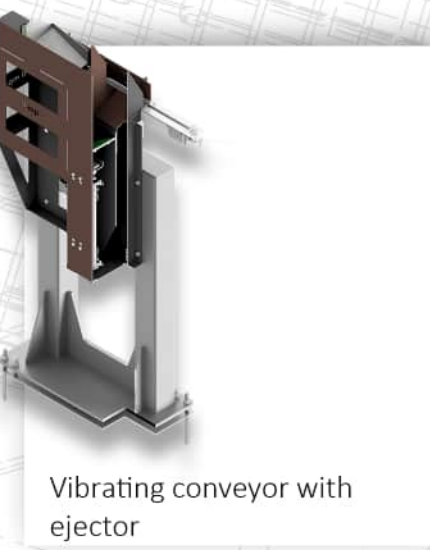
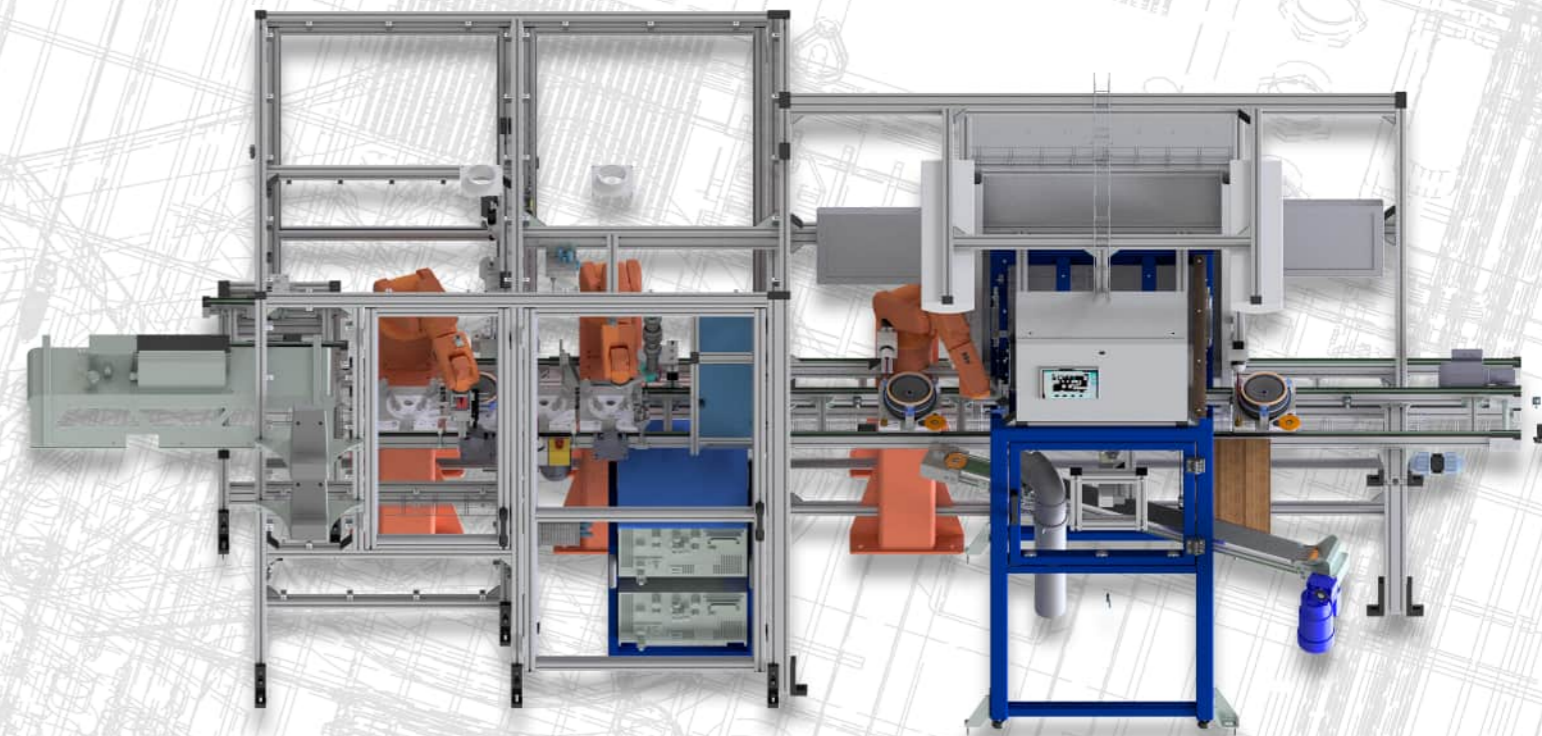
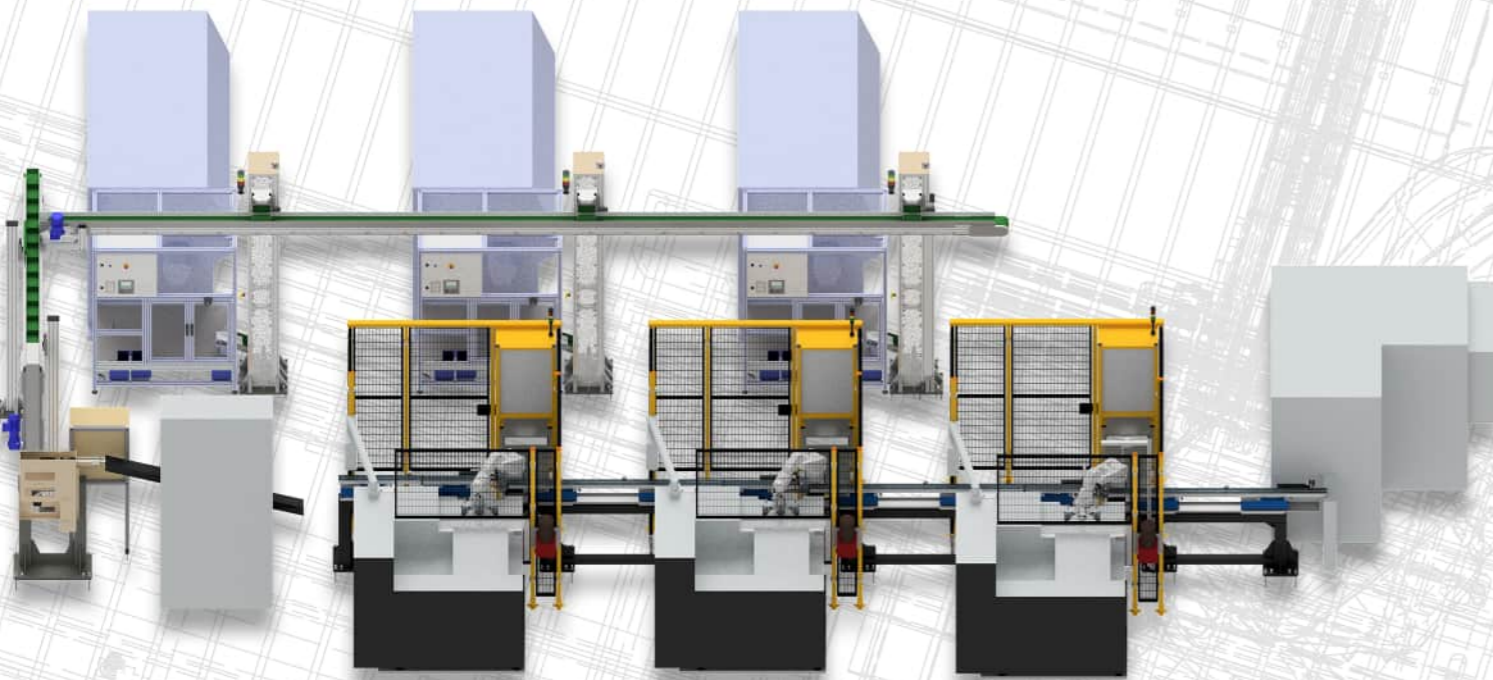
Device description
The production line is designed for the production of several types of small tweeter loudspeakers

The main benefit for customer
Complex line design for different types of loudspeakers, which have different technological production processes and thus different production procedure

DMPs technological know how
Multi-process line design. Working with quick-drying adhesives



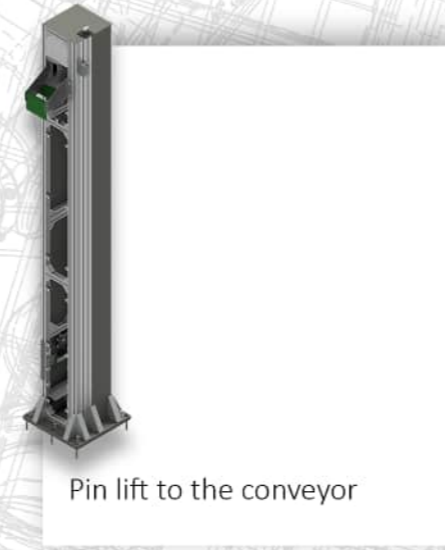
Dispenser for silicone application



Vibrating conveyor with ejector



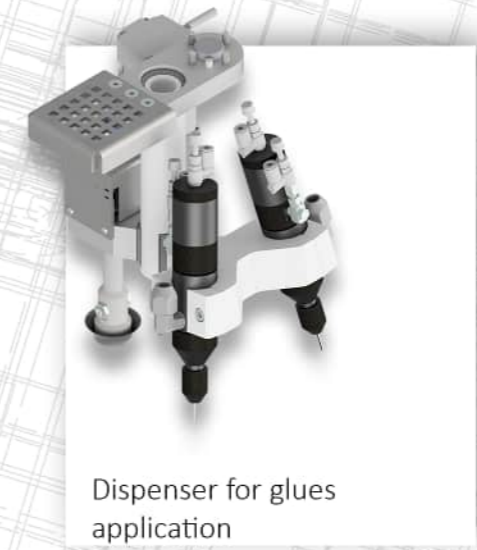
Gripper for inserting the parts into rolling mills



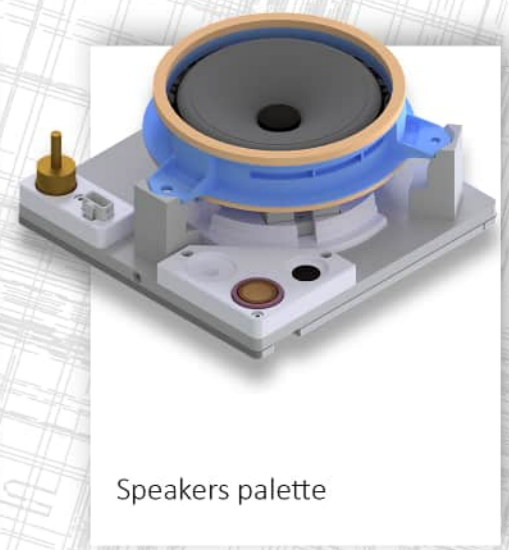
Pin lift to the conveyor



Glue application device



Dispenser for glues application



Speakers palette

Device description
Fully automatic line with robotic operator for pin production

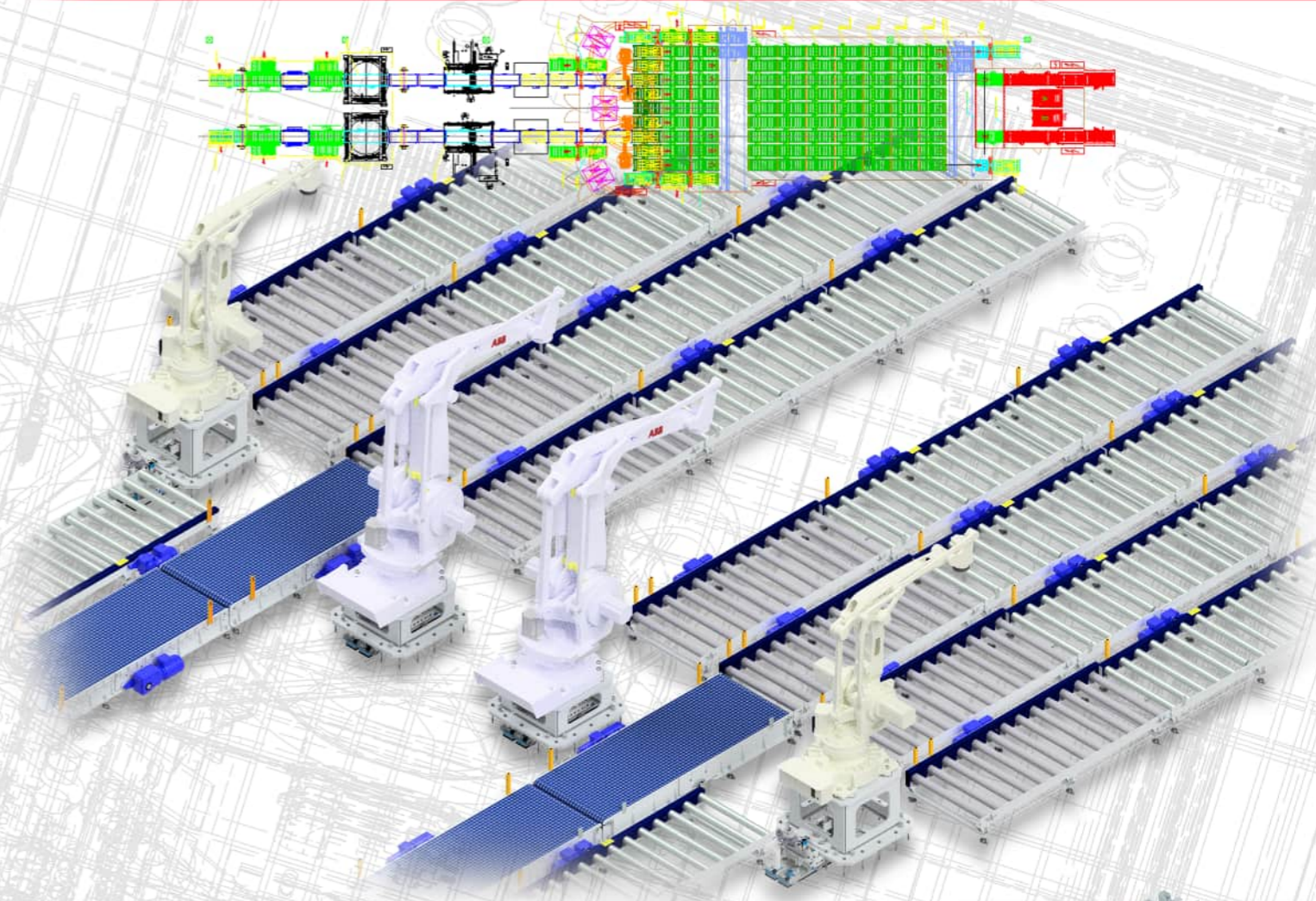
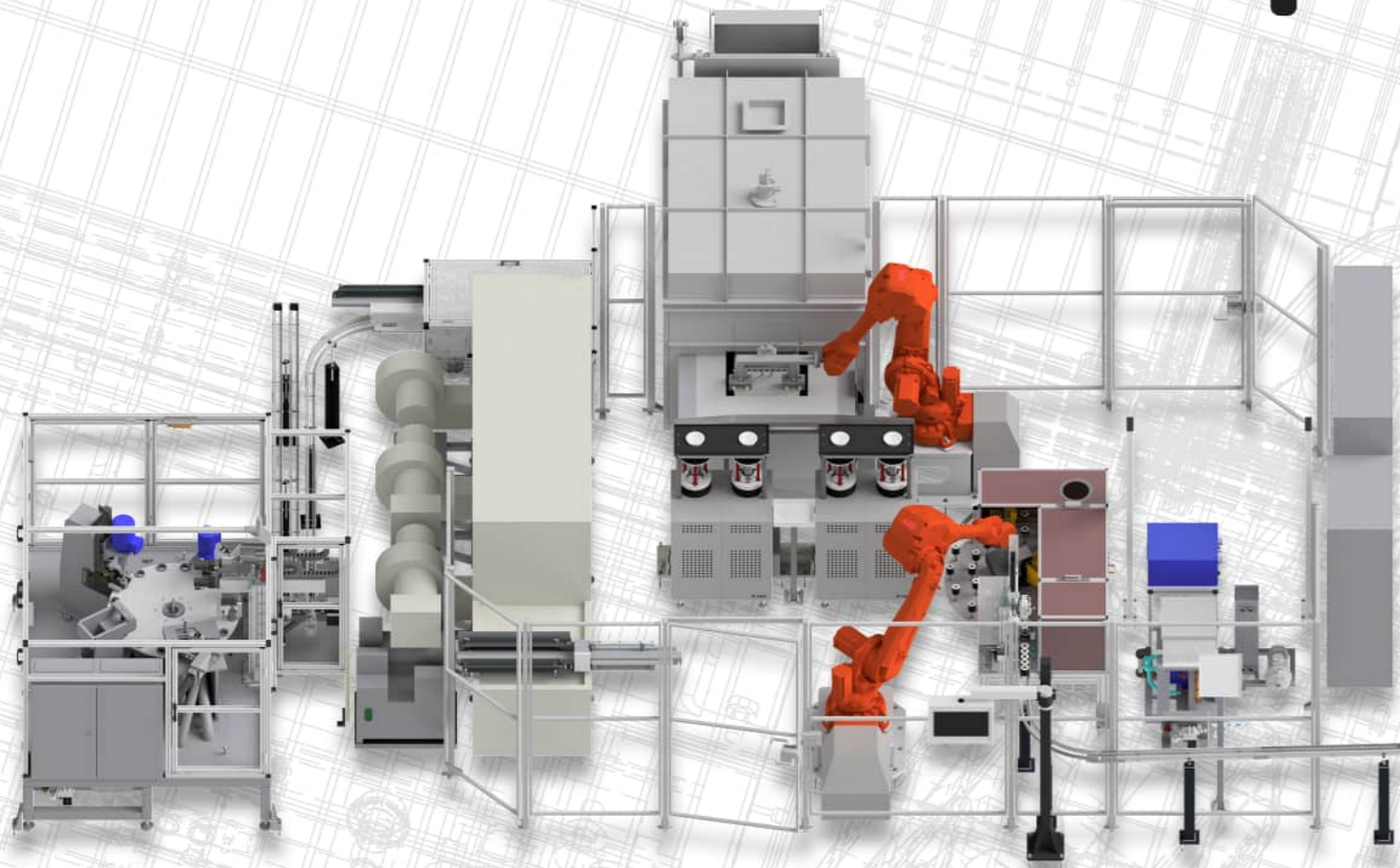
The main benefit for customer
Automation of the new product production process with a 4.5 seconds cycle

DMP's technological know how
Quick change of pins in rolling mills
Optimisation of the spatial layout of the line

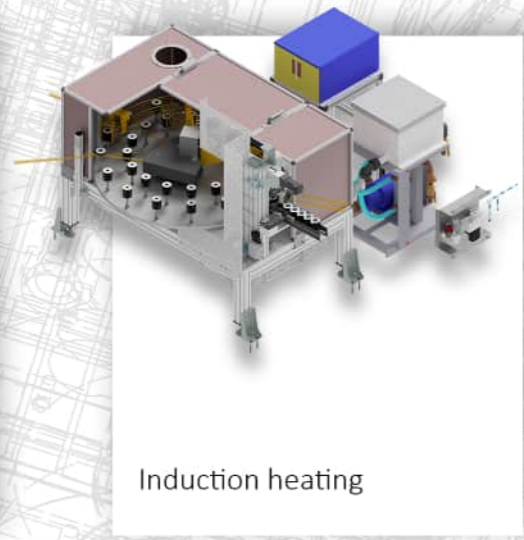
Device description
The production line is designed to produce three types of loudspeakers in 5.5 second cycles

The main benefit for customer
The benefit to the customer was the access, communication and involvement in the offer. Together, the initial customer concept was innovated and improved

DMPs technological know how
Work with adhesives that dry in 30 seconds. Tweaking robot cycles in 5.5 seconds top. Automatic process control mechanisms



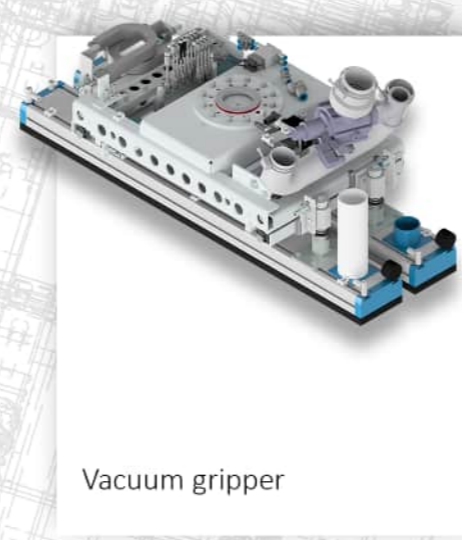
Finishing station



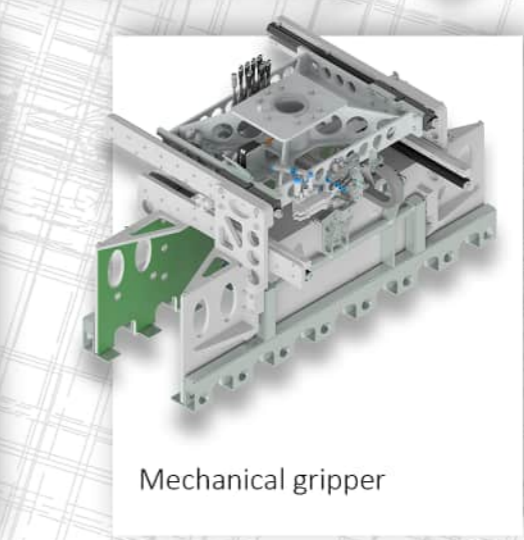
Induction heating



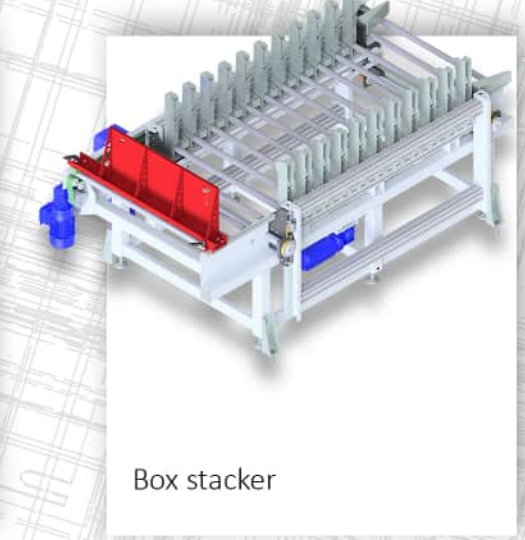
Centrifuge



Vacuum gripper



Mechanical gripper



Box stacker

Device description
 The production line is designed to produce rotors for compressors using centrifugal casting technology at a cycle time of 6.8 seconds per rotor

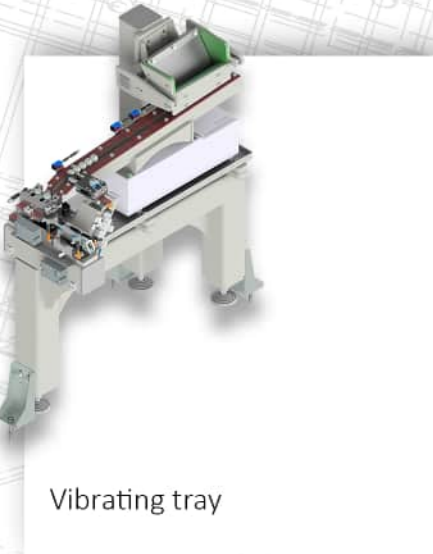
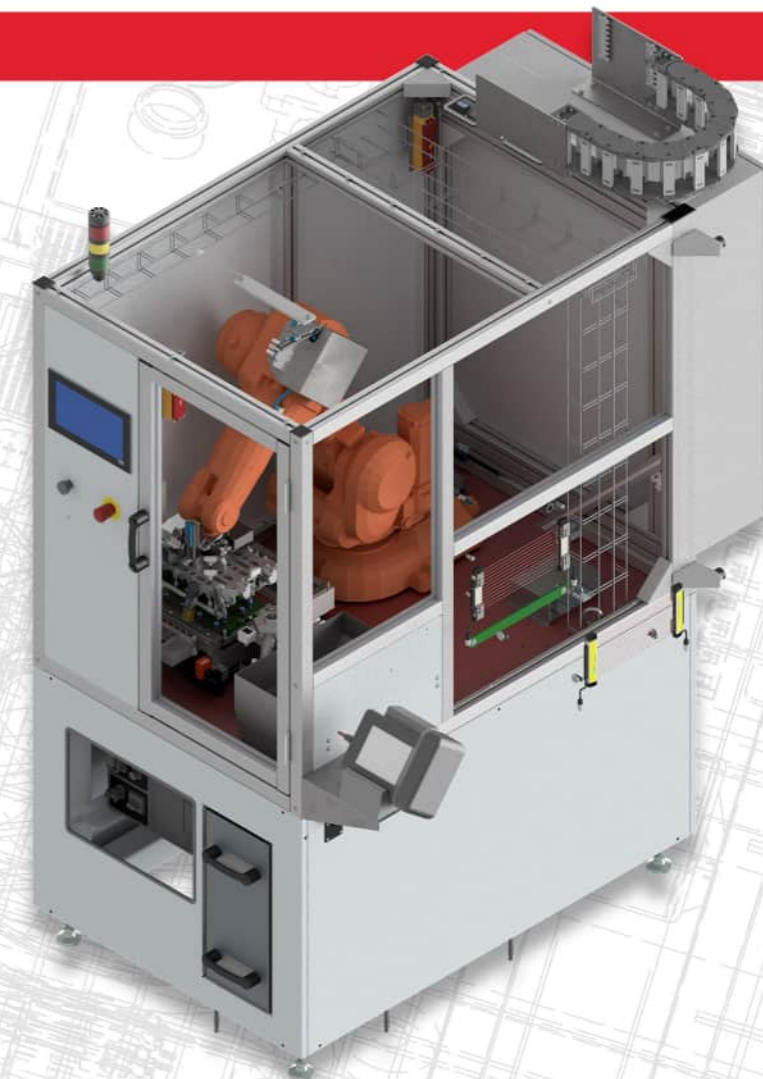
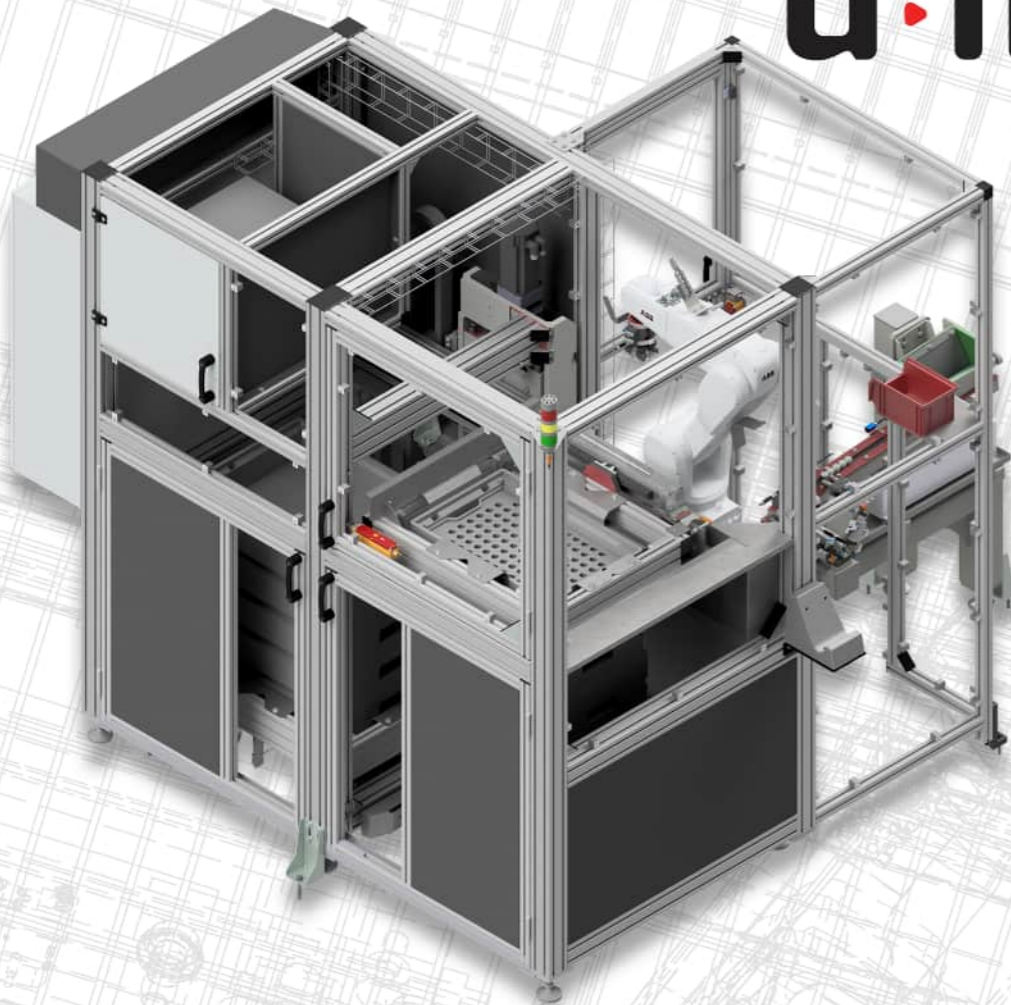
Hlavný prínos pre zákazníka:
 Design of a new production line concept with robots
 First requirement was to make a product line based on the original technology

DMPs technological know how
 New prototype of centrifuge. Working with rotors heated to 400°C and working with melted aluminium

Device description
 The line is designed for palletizing and packaging of combi products

The main benefit for customer
 Saving on human resources. Increase in production capacity. Efficient use of space.

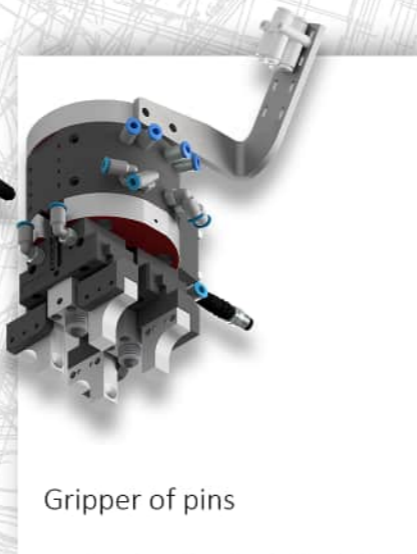
DMPs technological know how
 Streamlining the packaging process and warehouse management
 Production of 30 different types of products



Vibrating tray



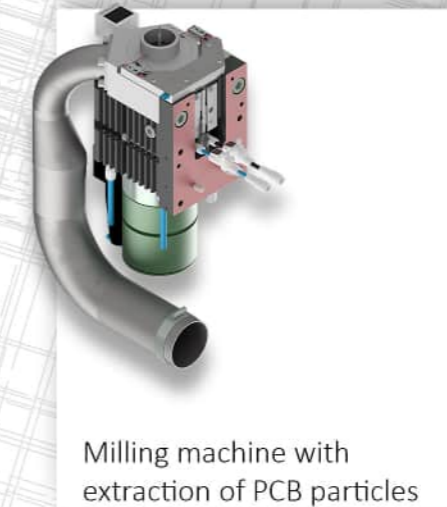
ABB Robot



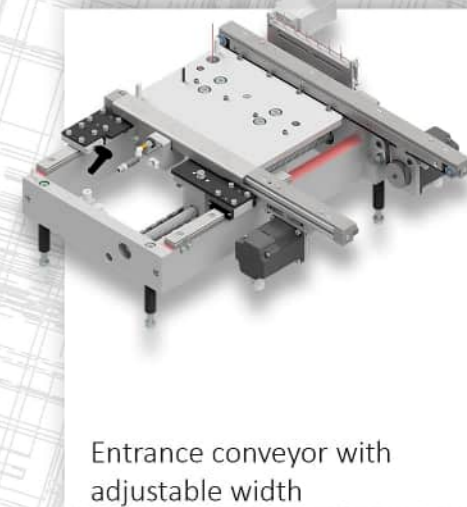
Gripper of pins



PCB's gripper for milling



Milling machine with extraction of PCB particles



Entrance conveyor with adjustable width

Device description

The device is designed for orientation and palletisation of pins on the HOCH5 line

The main benefit for customer

Saving human resources
Increasing production capacity

DMPs technological know how

Accelerated cycle speed and trouble-free, stable operation compared to competing solutions

Device description

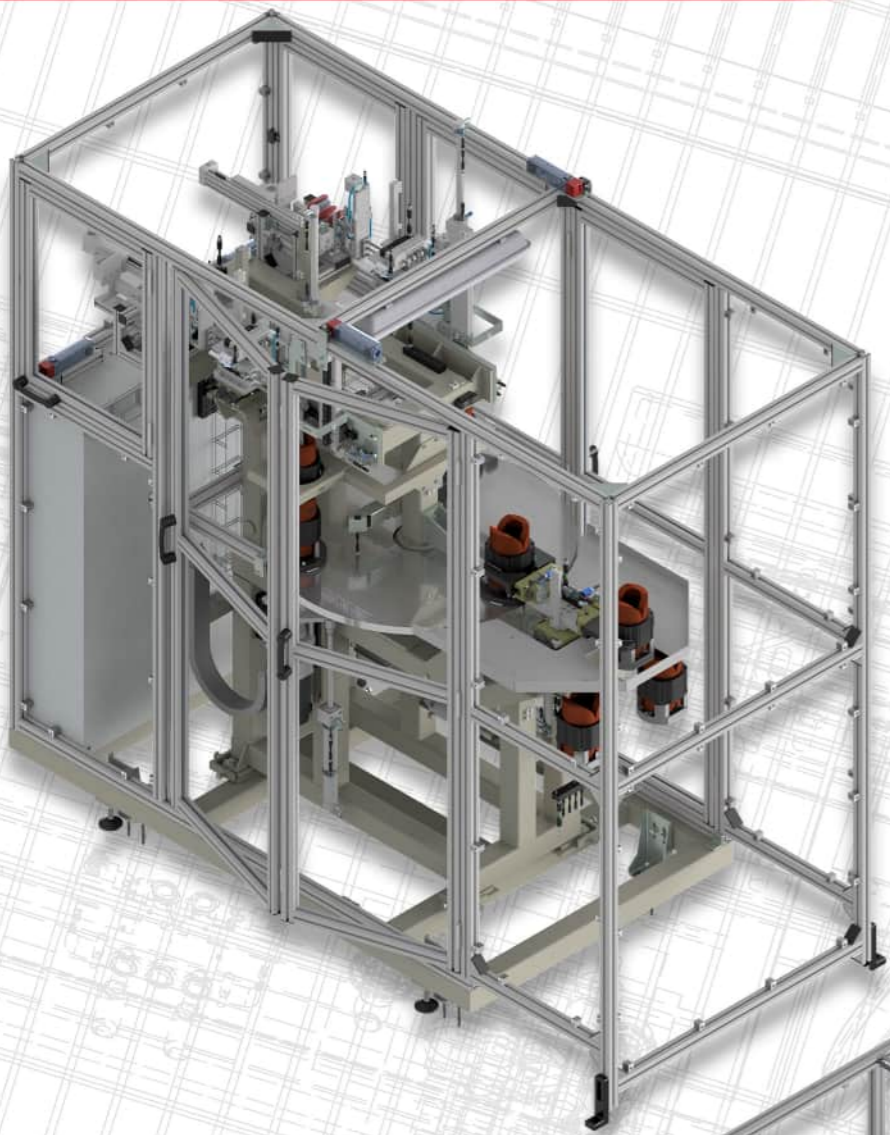
The device mills PCB

The main benefit for customer

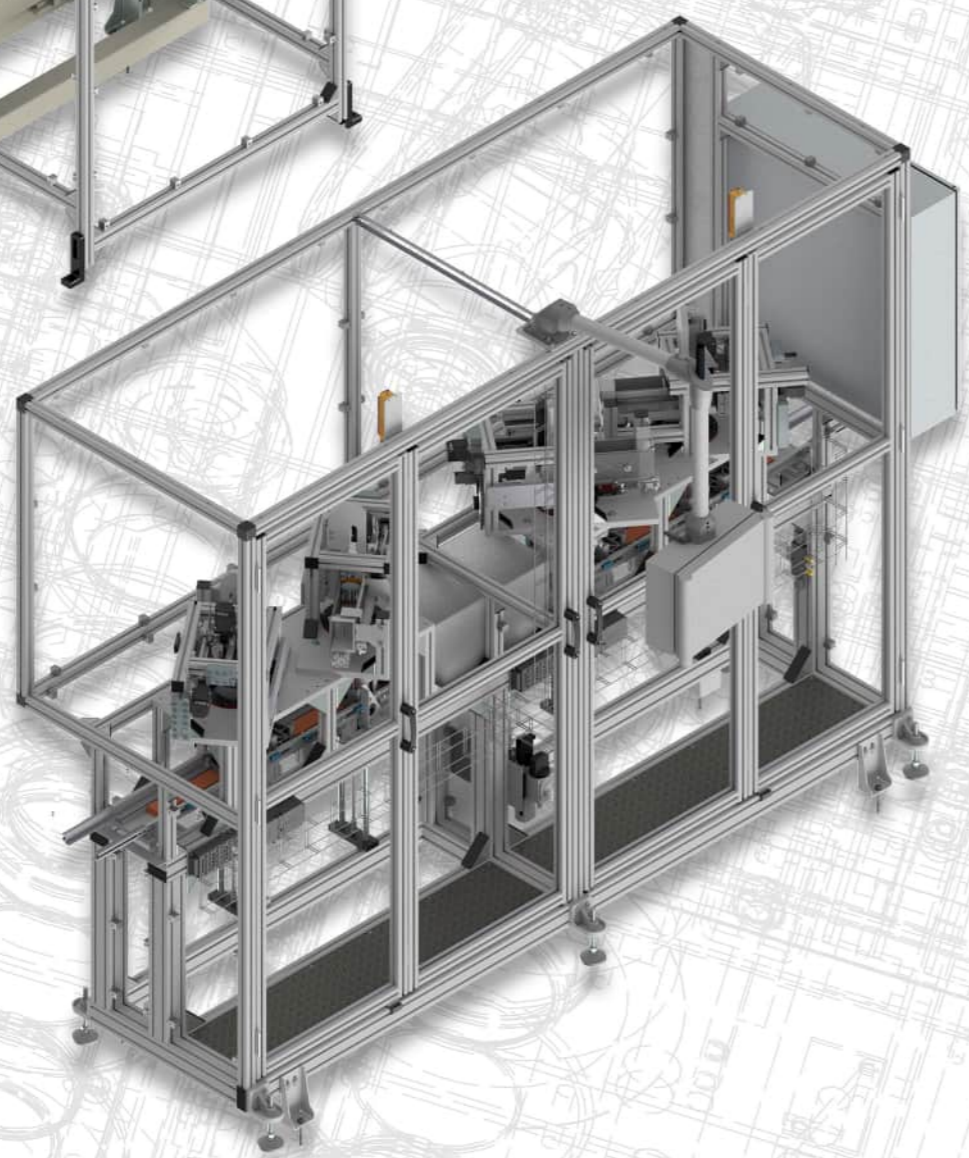
Smaller installation width than mass-produced devices
Device versatility for multiple PCB models

DMPs technological know how

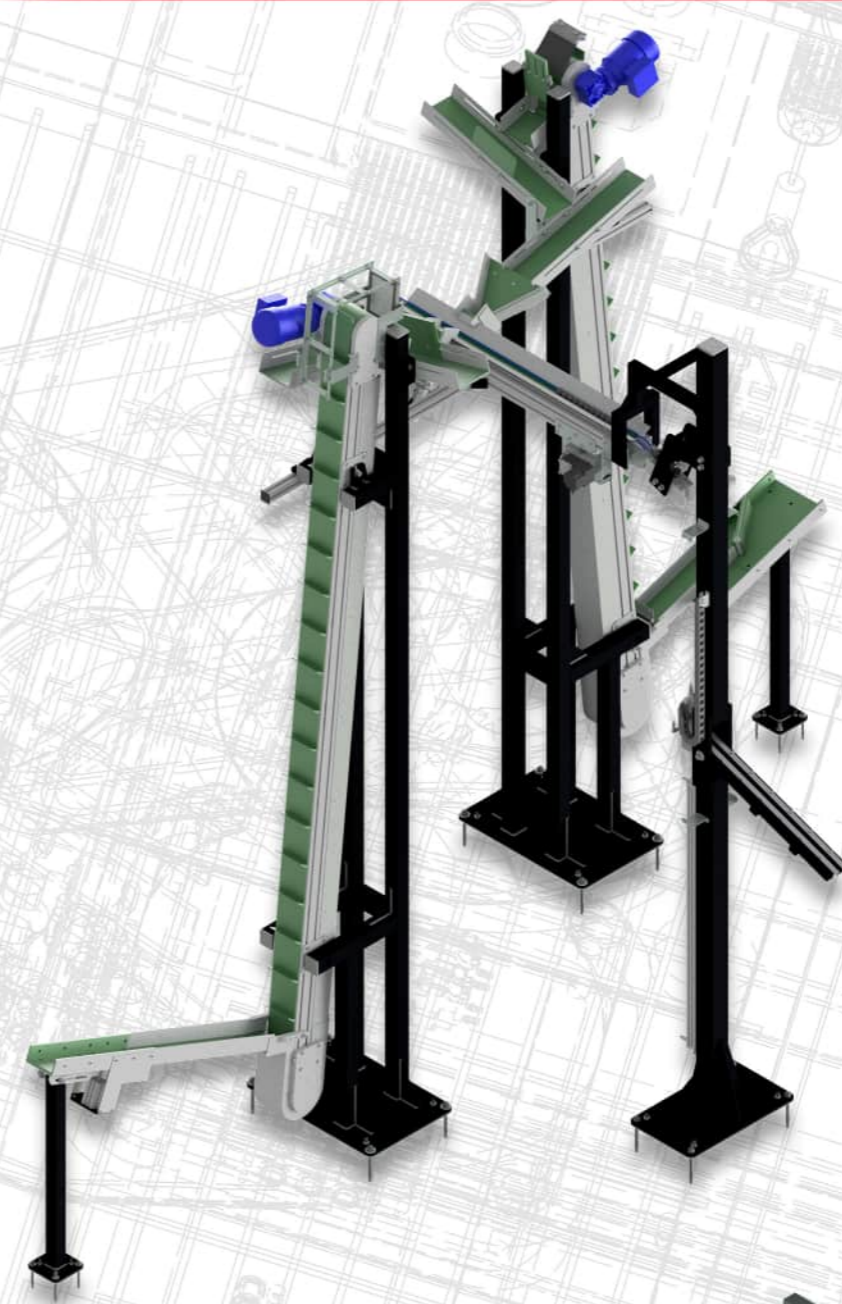
Device minimalisation



The device is designed for laying the insulation in successive steps according to the rotation of the table

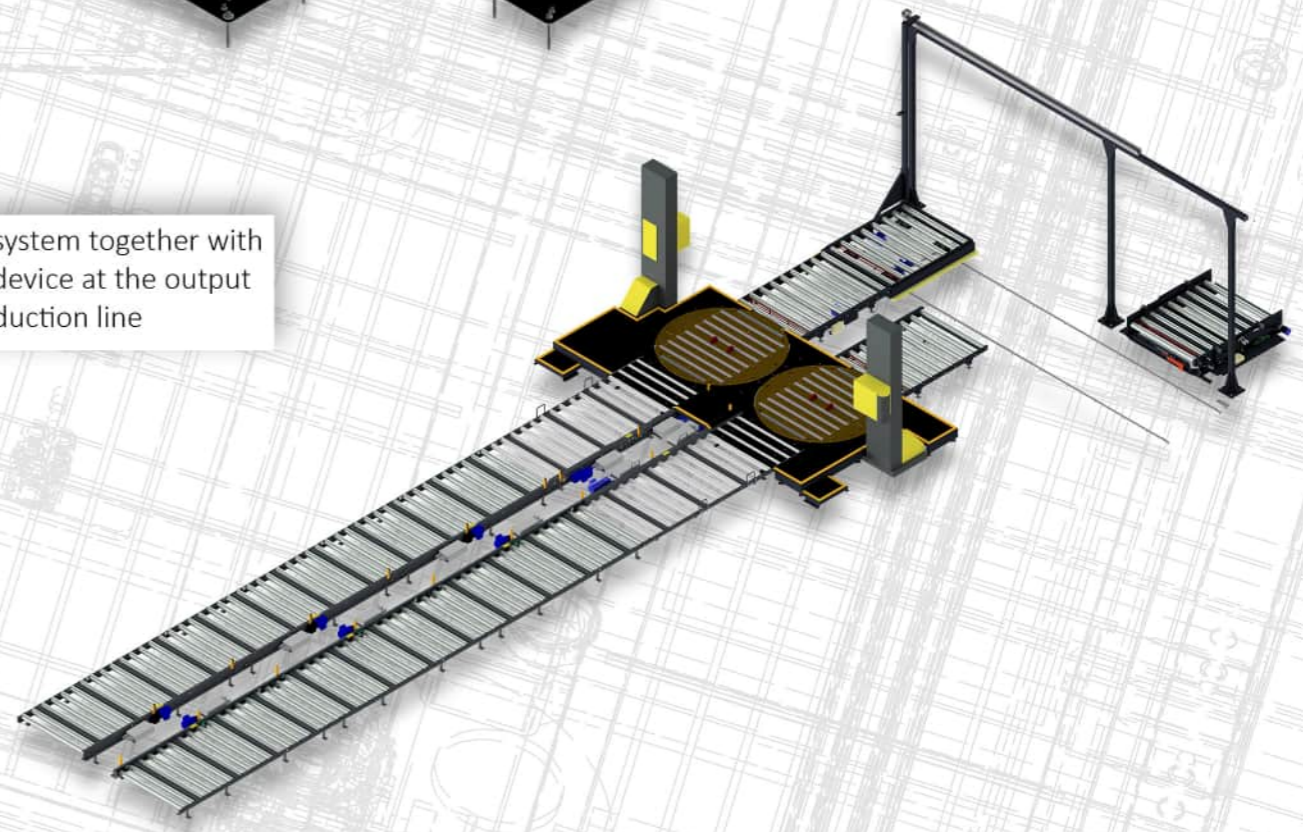


Modernised isolation machine without the use of a turning table



Conveyor system for transporting pins within the production line

Conveyor system together with wrapping device at the output of the production line



When will we understand each other

- When you are a person who can be actively involved in creating a solution
- When you put your experience into designing a solution and we put our know how
- When we have an open and fair approach to the matter from both sides



**solution
for you**