



Mechanical Design CE Marking Conformity

TECHNOLOGICAL SOLUTIONS FOR INDUSTRIAL AUTOMATION

PRESENTATION

Prosystem Engineering Srl is an Italian company based next to Torino, in Italy.

The company was created in 1996 as Prosystem Ingegneria, then in 2012 it became Prosystem Engineering Srl.

Prosystem Engineering Srl activities are:

- Engineering office of study, design and planning
- Industrial advising / consulting

The Engineering office has 1 owner/holder taking care of the technical, commercial part and managing 13 employees divided as 7 designers and drafters, 2 consultants, 1 assistant, 2 external collaborators and 1 person in charge of the international and commercial relations, interpreter....

This documentation is regarding the engineering and design sector

PROSYSTEM ENGINEERING SRL is proud to show its own potential in the development of technologies for the industrial sector.

In particular, we offer our knowledge of design, creation and engineering of:

- Elevators.
- Conveyor belts and rolling systems.
- Automatic warehouses.
- Carpentry structures of small, medium and large dimensions.
- Mining equipment.
- Machinery for the food industry.
- Equipment for the ecological sector.
- Equipment, test benches.
- Assembly stations.
- Operating machines.
- Production line systems.
- Forklifts/elevators.
- Robotic islands.

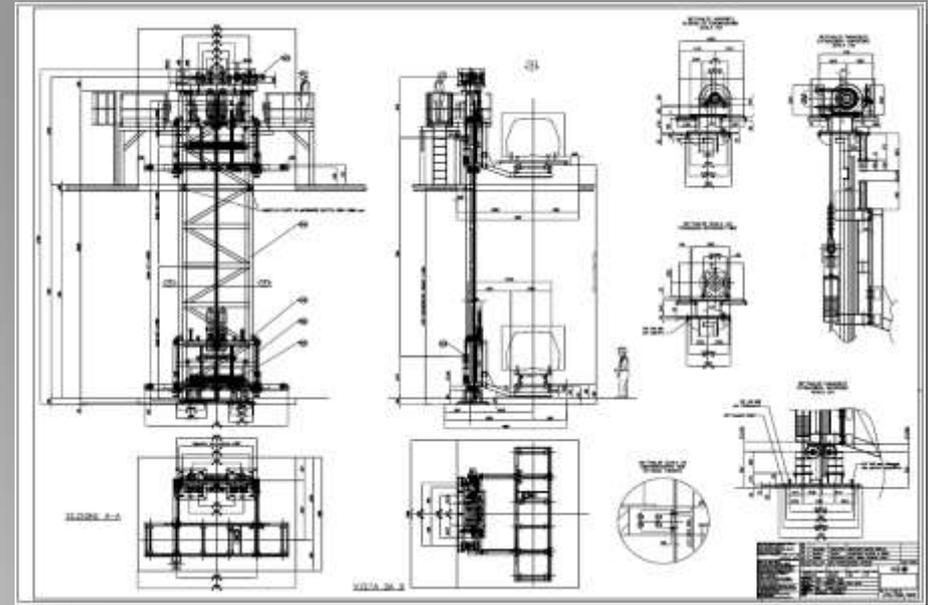
in order to make improvements and technological developments related to efficient production, better returns, to adapt to the demands of national and international market and bring better workplace safety.

The utilization and application sectors in which these may be applied are various: metal engineering, food industry, pharmaceutical, mining, energy, etc... Both for large and small productions

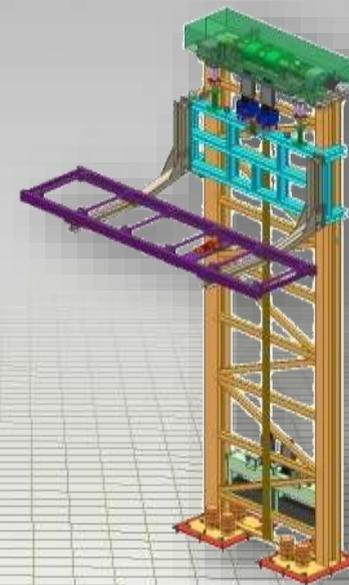
We are also specialized in CE marking conformity, machines and plants' security, preparation of the technical documentation, user and maintenance manuals, etc...



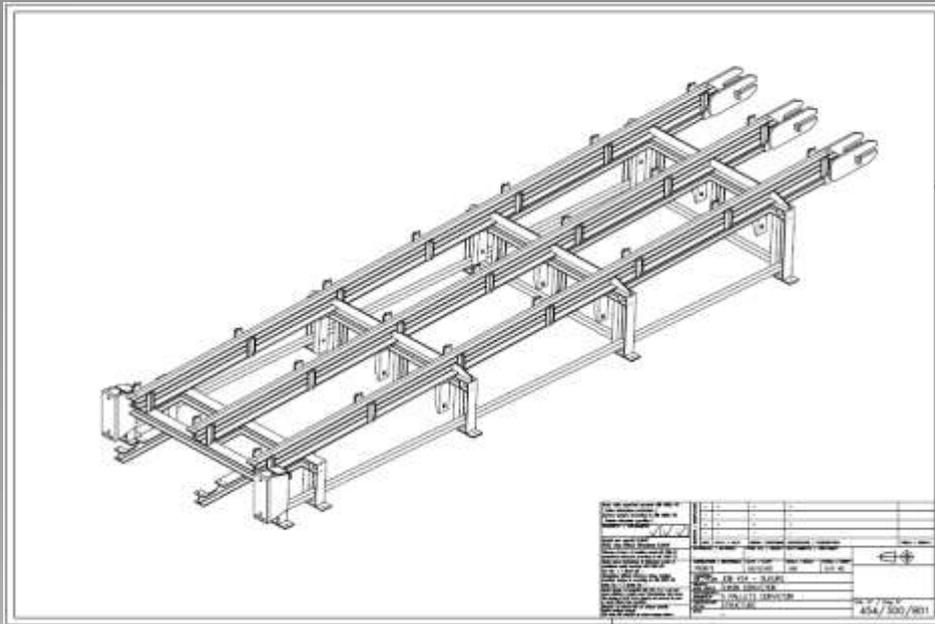
Hydraulic scissor lift



Single-column elevator operated by belt or chain



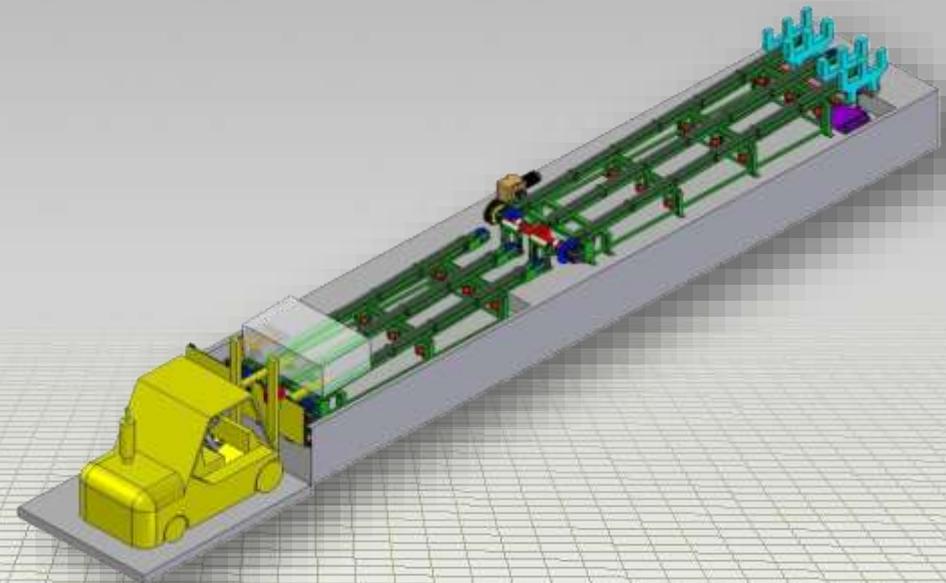
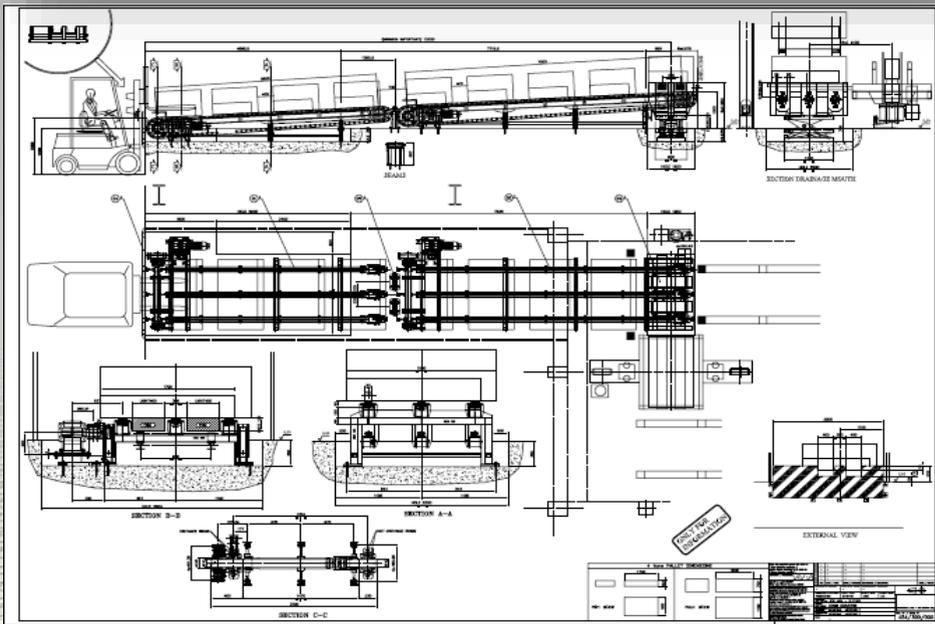
ELEVATORS



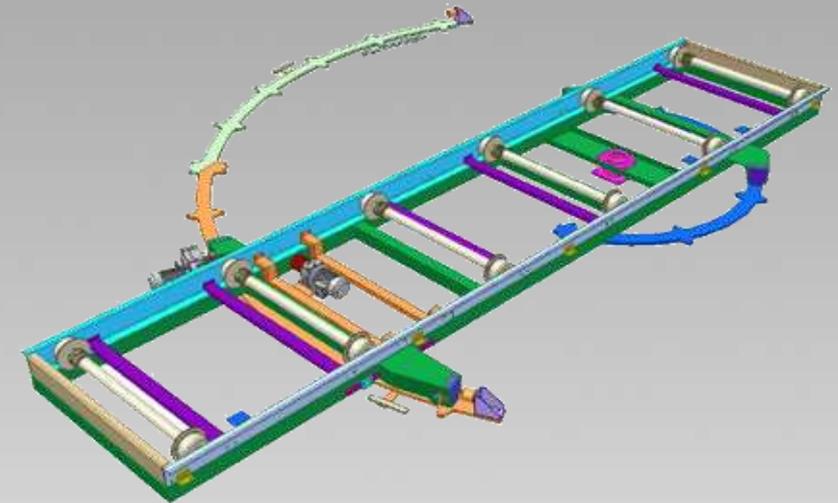
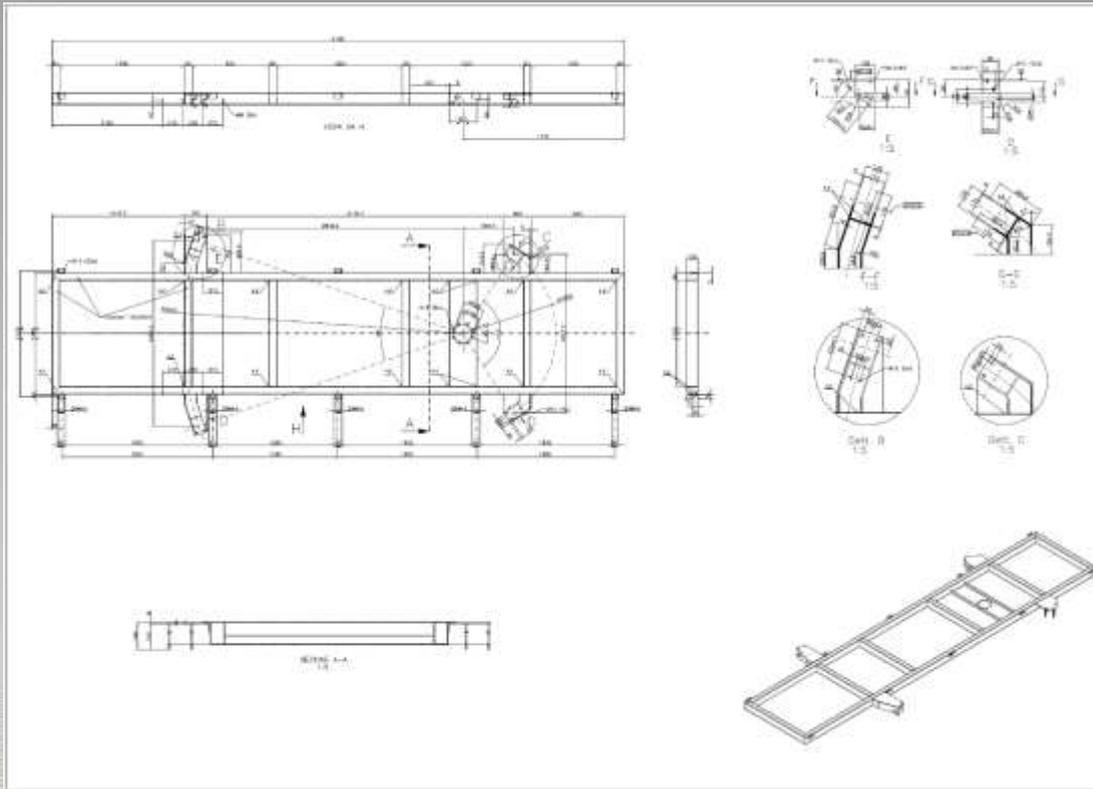
Conveyor belt for the transportation of pallets.

Forklift loading, automatic progression and unloading.

Each application is created according to its specific needs and the material to be handled.



Our experience, gained through many years of working in the field of automation, enables us to create different applications, from conveying systems, to revolving tables, to side shift equipment, elevators, mechanical hands, special machines, etc...
Depending on one's needs, it is possible to diversify the applications, from manual to semi-automatic to completely automatic.



Motorized revolving table for pallets progress and translation

Conveyor belts of various dimensions made for handling products or for feeding of automatic or manual machines.

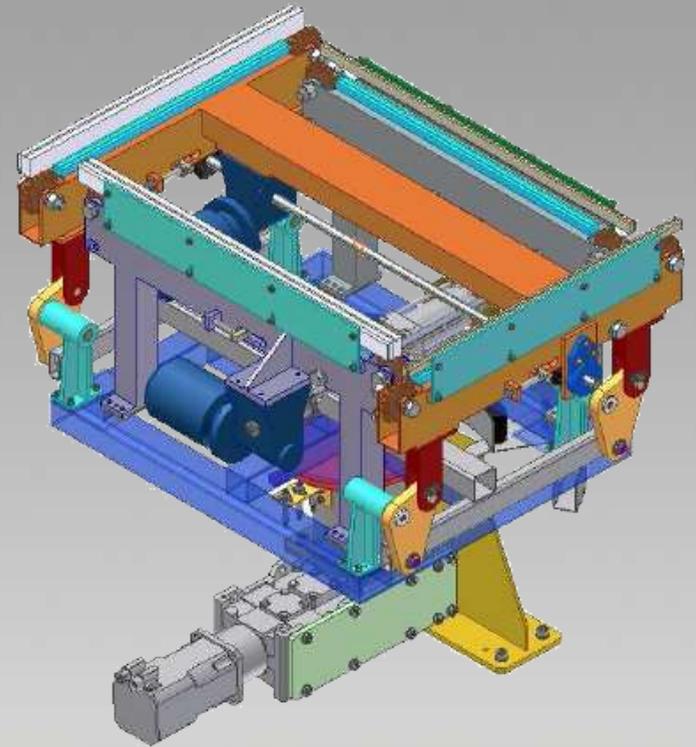
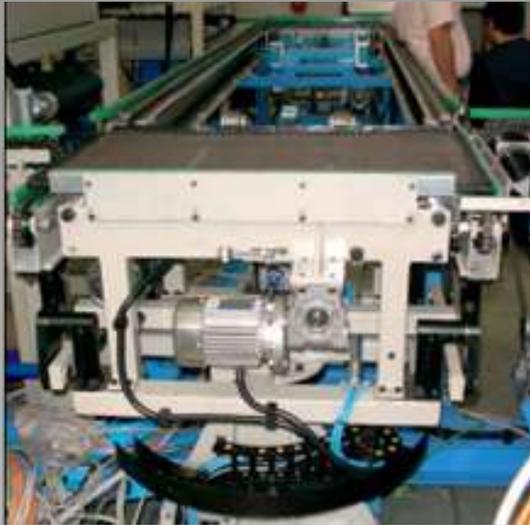


Roller conveyor systems, motorized or non-motorized roller conveyors, rotary tables, shifters, lifts.



CONVEYOR BELTS AND ROLLER SYSTEMS

 **prosystem engineering**



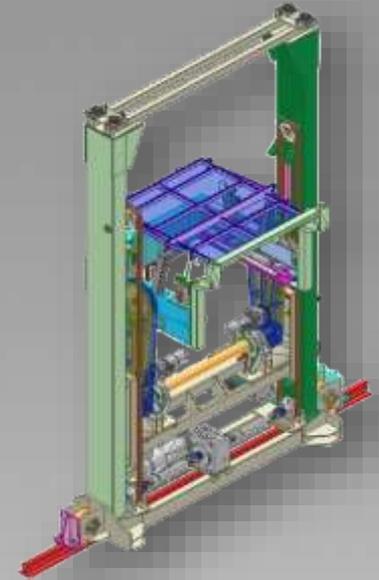
CONVEYOR BELTS AND ROLLER SYSTEMS



CONVEYOR BELTS AND ROLLER SYSTEMS



Automatic warehouses for the storage of small, medium and large materials.



AUTOMATIC WAREHOUSES

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The Engineering office, in the 24 years of activity, has always had a positive balance. It has Customers all around the world with which collaborate for plants and machines. For example, you can find Prosystem Engineering plants in: The United States, Australia, China, Russia, Brasil, Poland, Belgium, England, Spain, Italy, Oman, Turkey, etc...

The Engineering office customers can be:

- The plant and machines constructor
- The final customer, that is the plants' and machines user.

The Prosystem Engineering office is in contact with international companies and is able to maintain communications and contacts with foreigners countries.

The working team is consolidated by years of works together. Some of the employees are working for the design office for more than 20 years. The group harmony and working environment is optimal. The owner is in charge of the technical, the organization and the planning management of the team.



Laminating production line

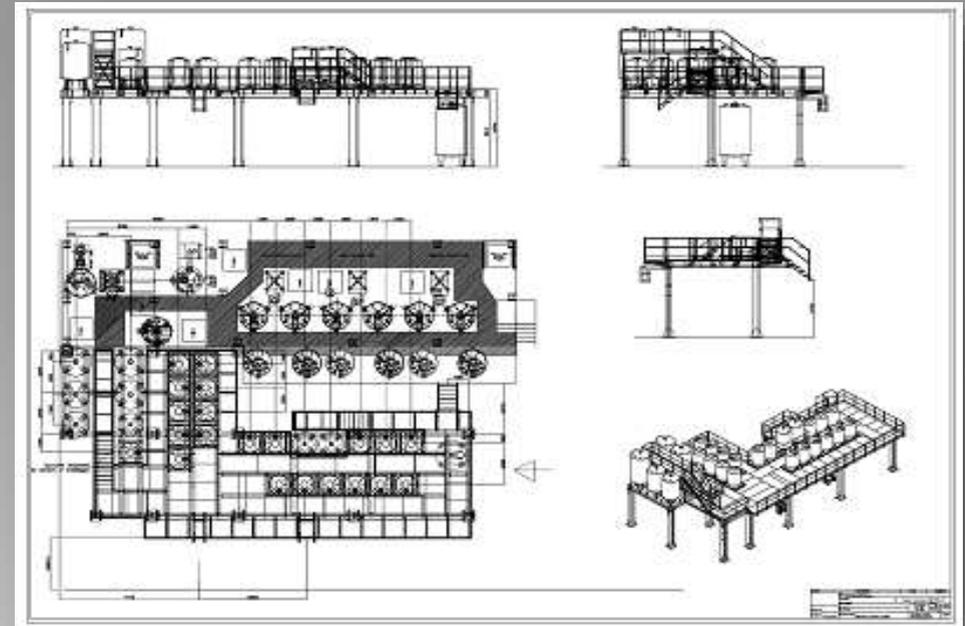
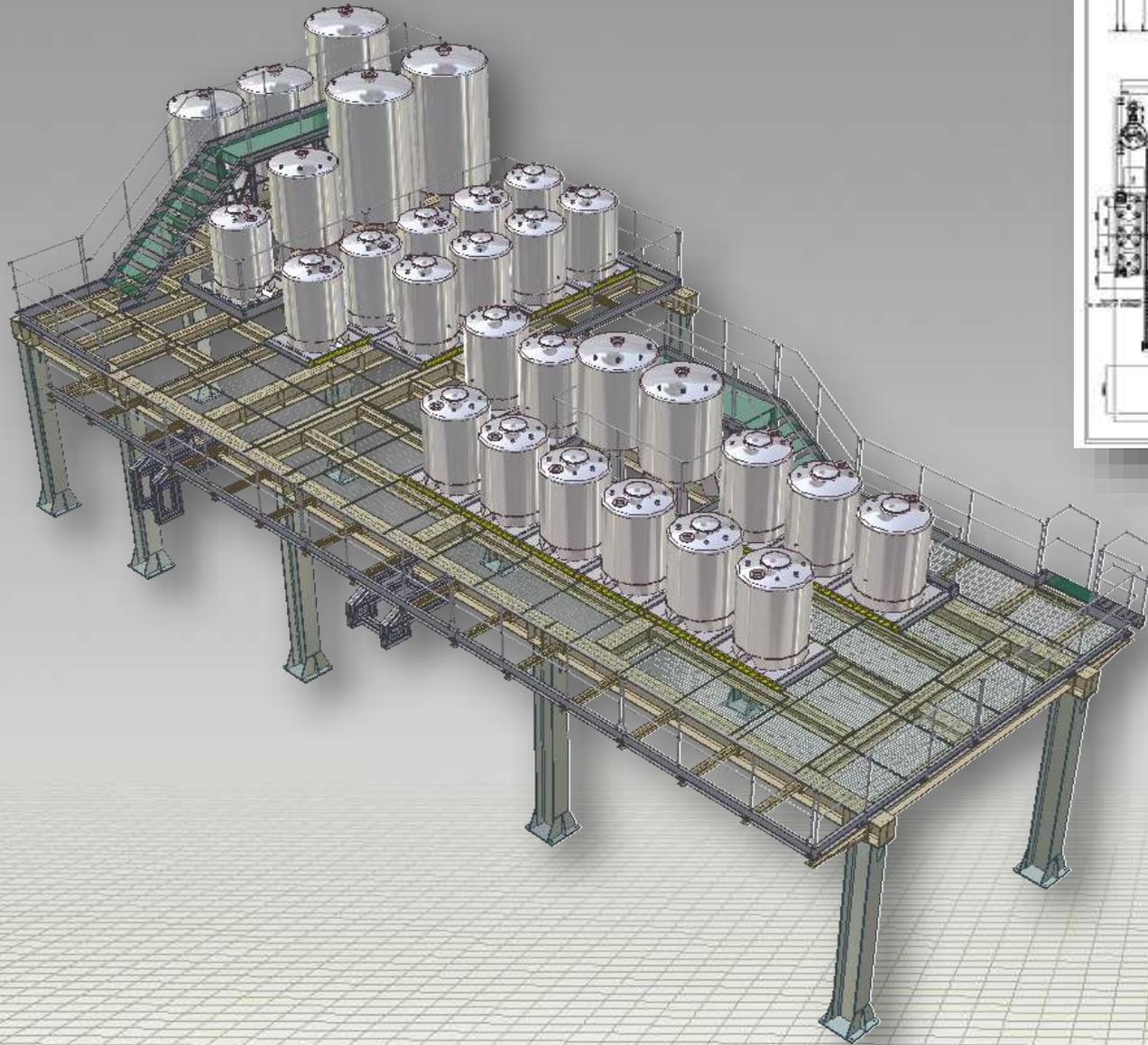




Coil Coating Line – (Brasil)

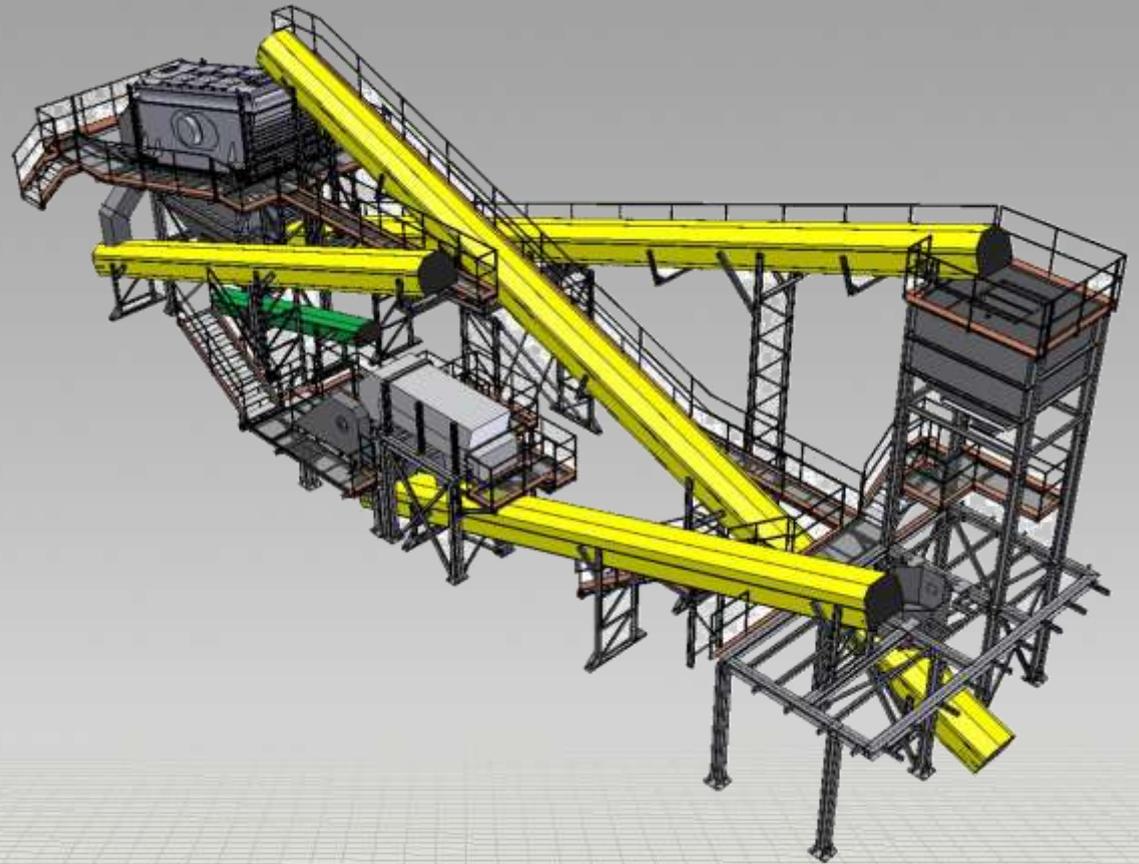


Works moving forward on an automated laminating production line:
Length 200 meters and height 30 meters



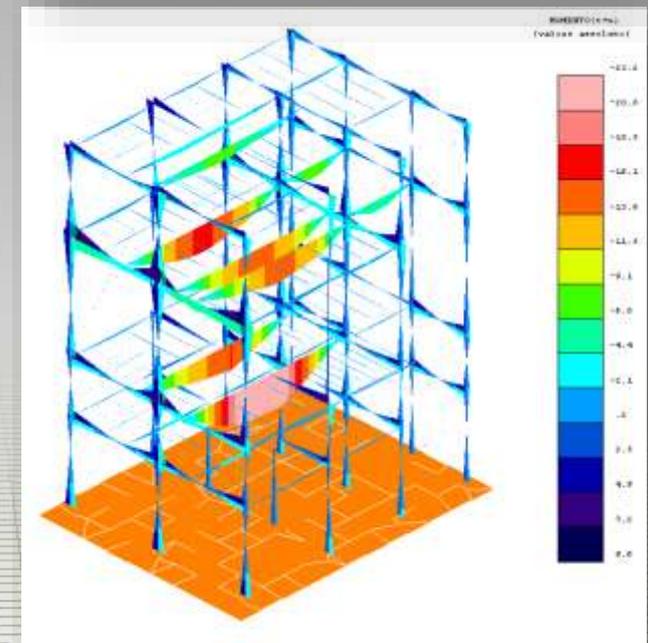
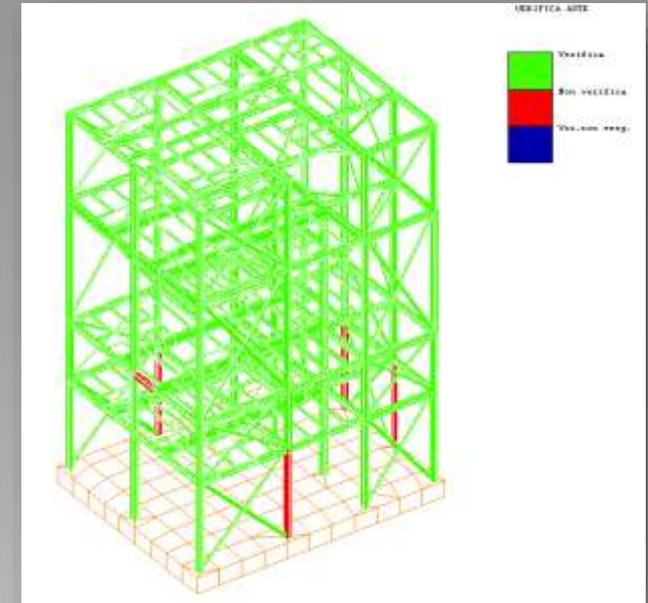
Small, medium and large metal structures for different applications.

Structures, machinery and conveyors for raw material processing plants

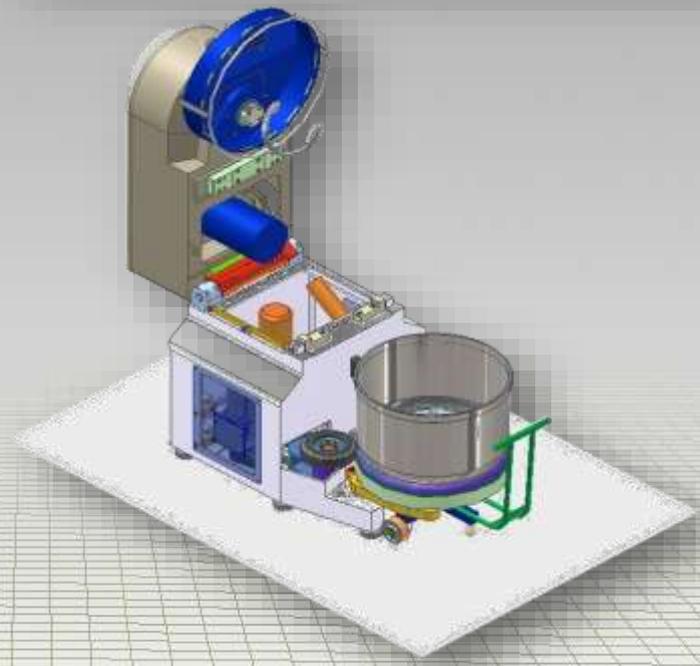
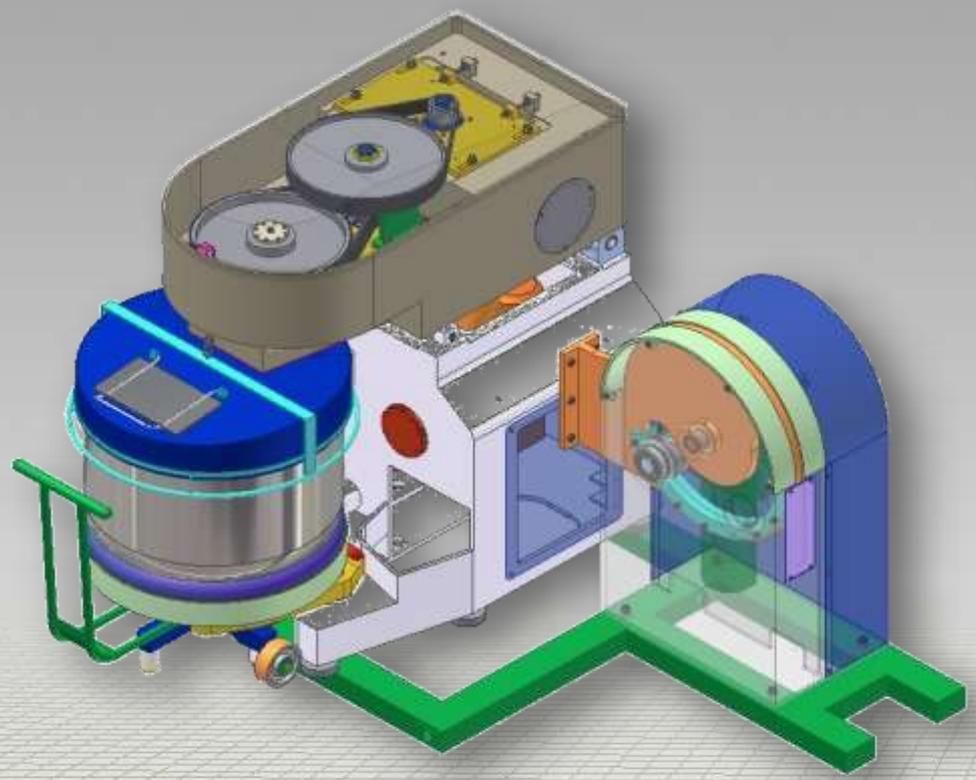




Linear static analysis
Dynamics analysis
Seismic verifications
FEM analysis
Finished elements analysis



Machinery for the food industry
In the pictures: spiral mixers for bread



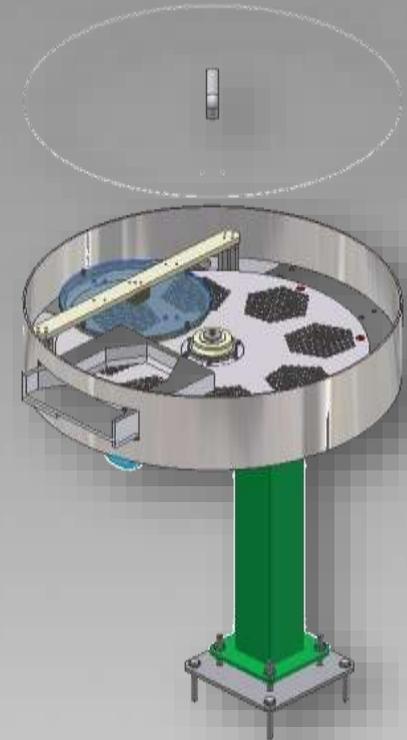
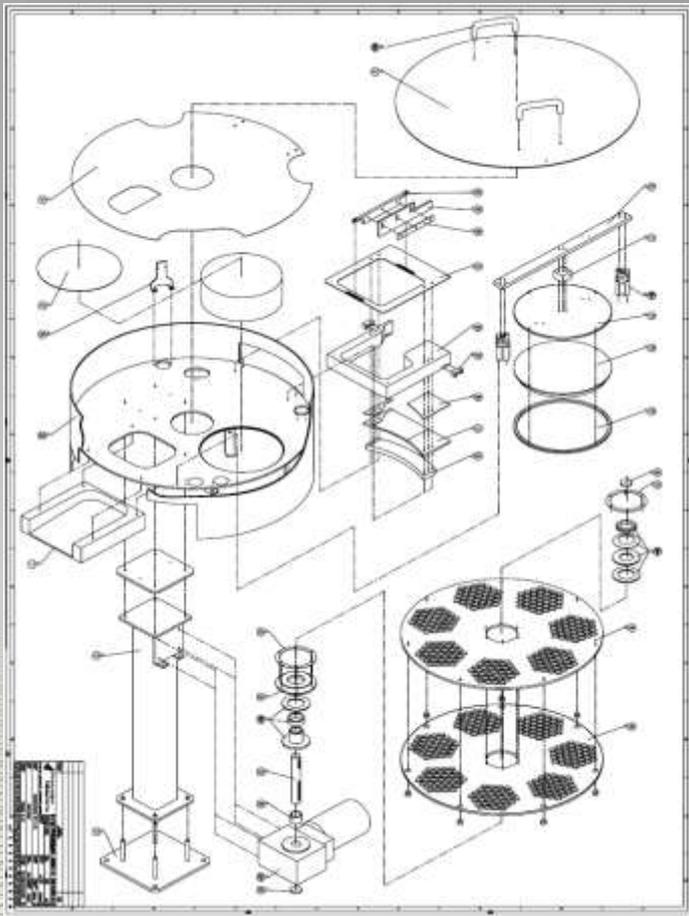
Ecological technologies



EQUIPMENT FOR ECOLOGICAL INDUSTRY

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Demagnetizer for mechanical components



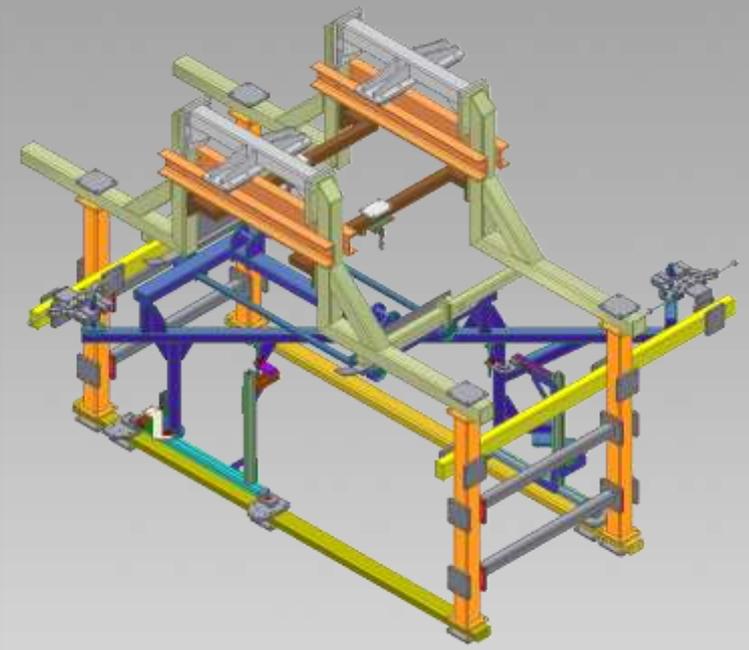
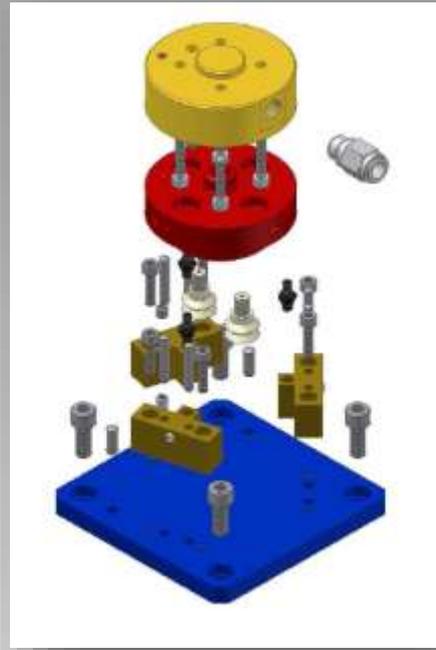
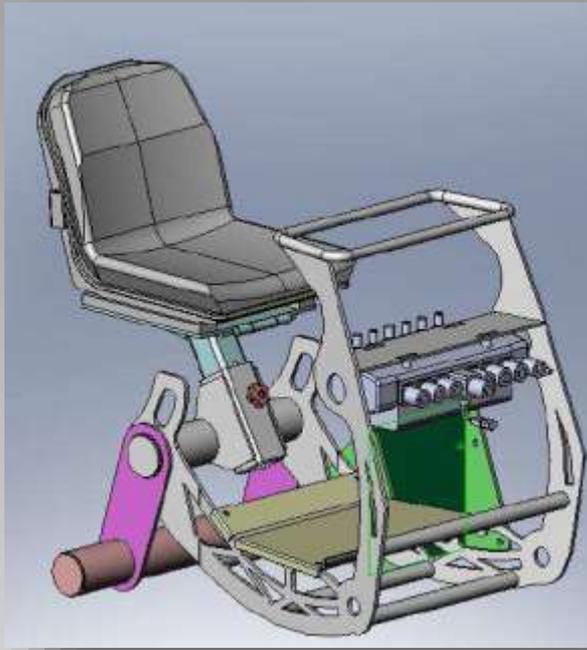
EQUIPMENT



Graphic sector machinery and equipment for handling, shifting and feeding of rotary presses



EQUIPMENT

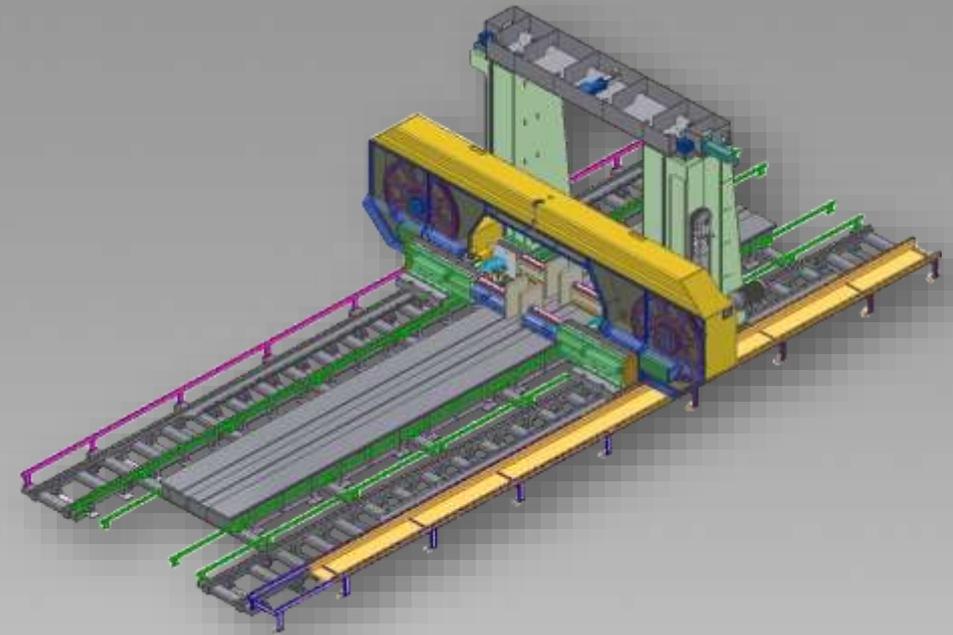


EQUIPMENT



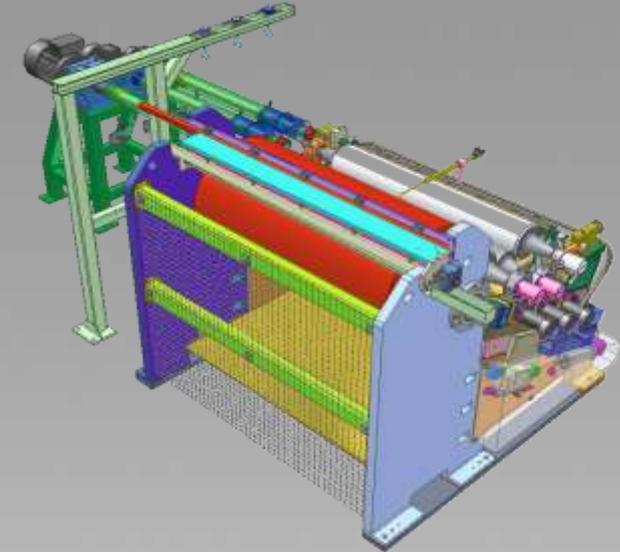
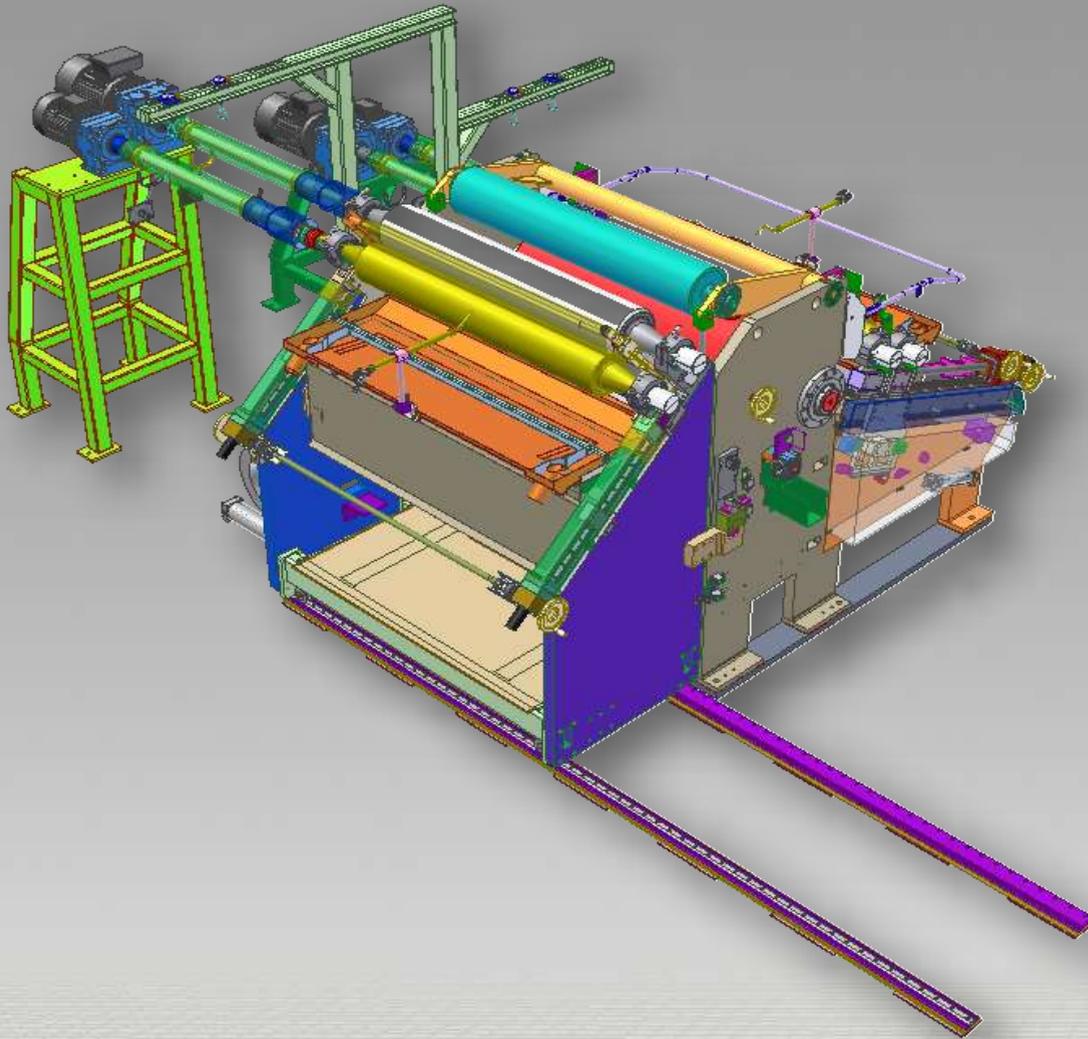
Assembly or test stations, automatic or semi-automatic

ASSEMBLY STATIONS



Special machine for sheet metal, band cutting or for cutting bars of large dimensions

OPERATIVE MACHINES

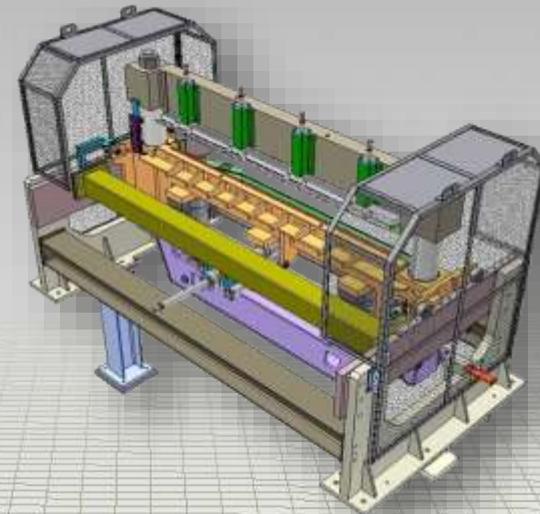
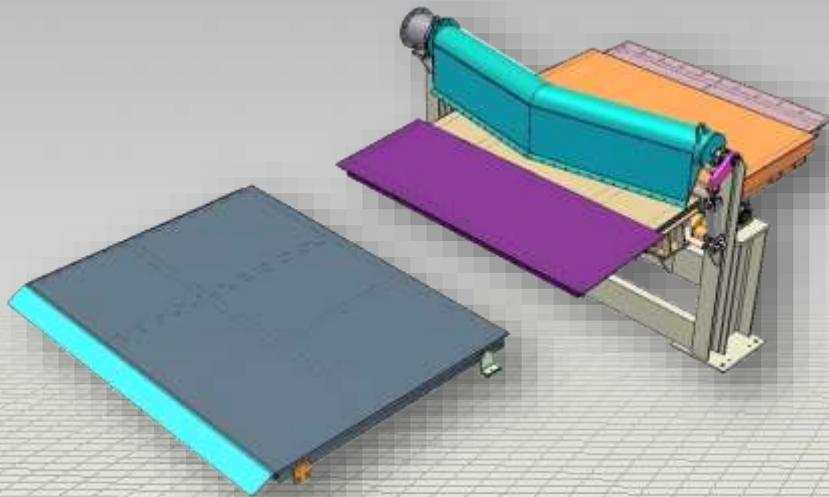
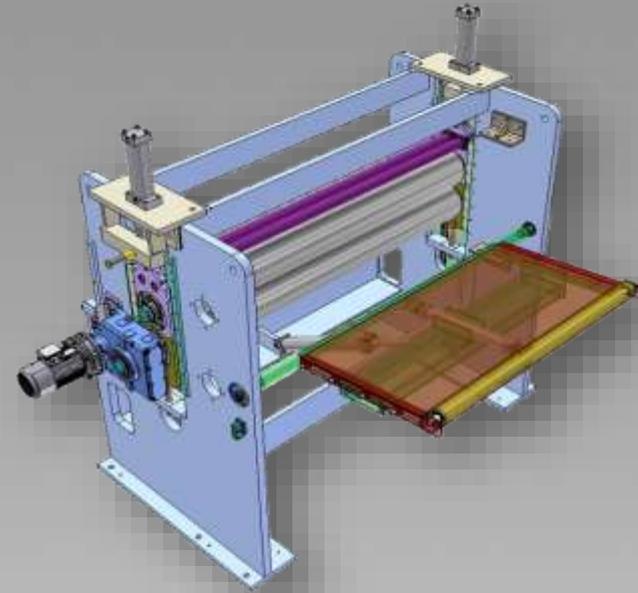
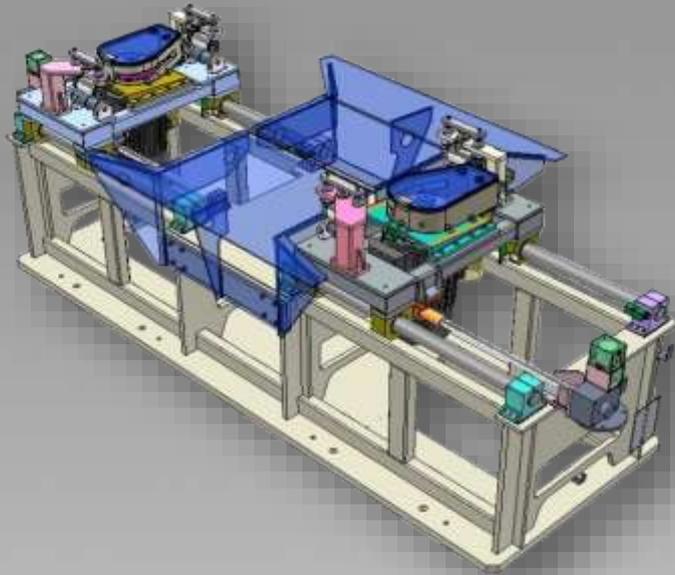


Production line machine for the painting of sheet metal bands

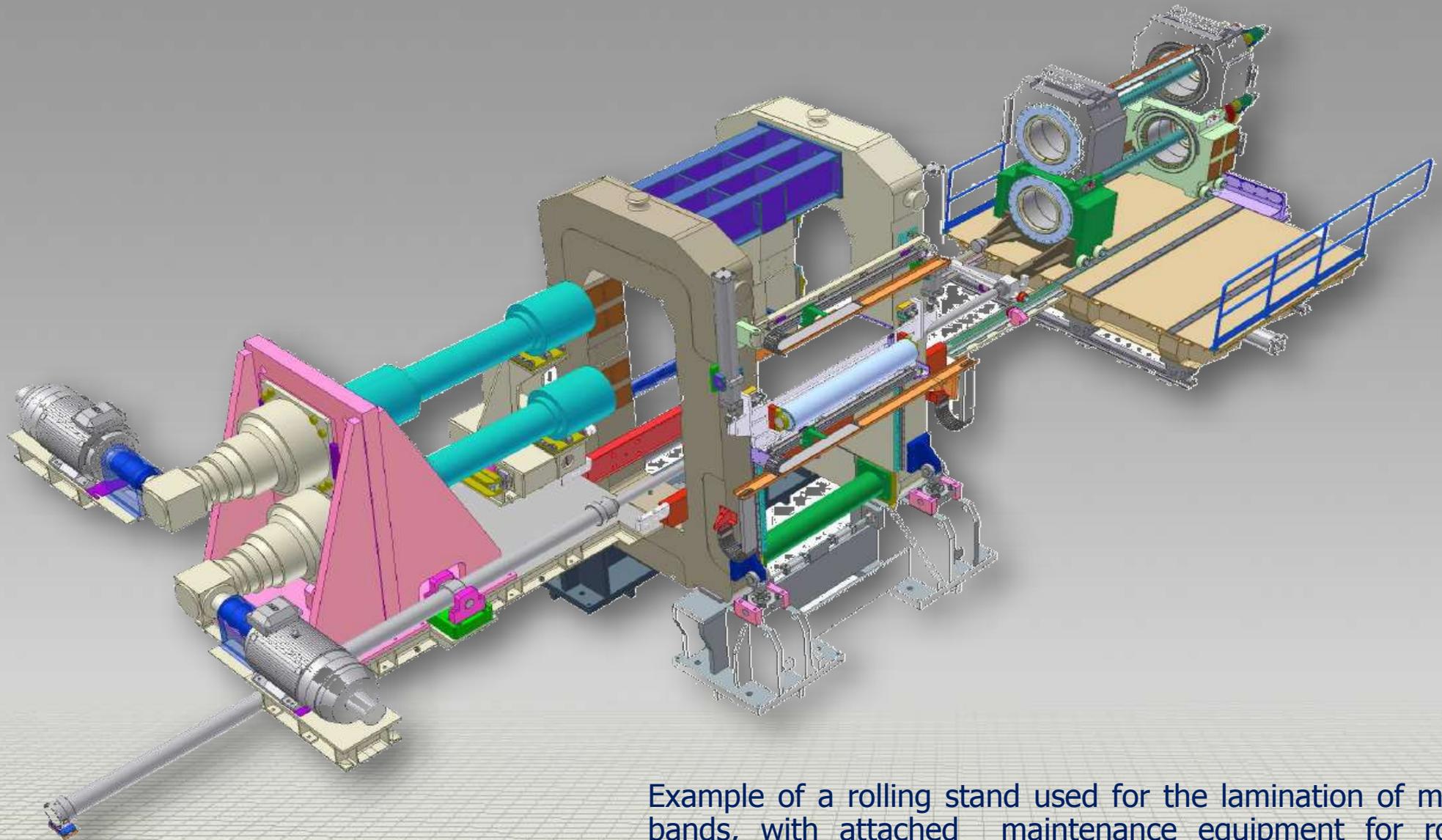
Different kinds of special machines for single operation or in line, according to requirements



OPERATIVE MACHINES

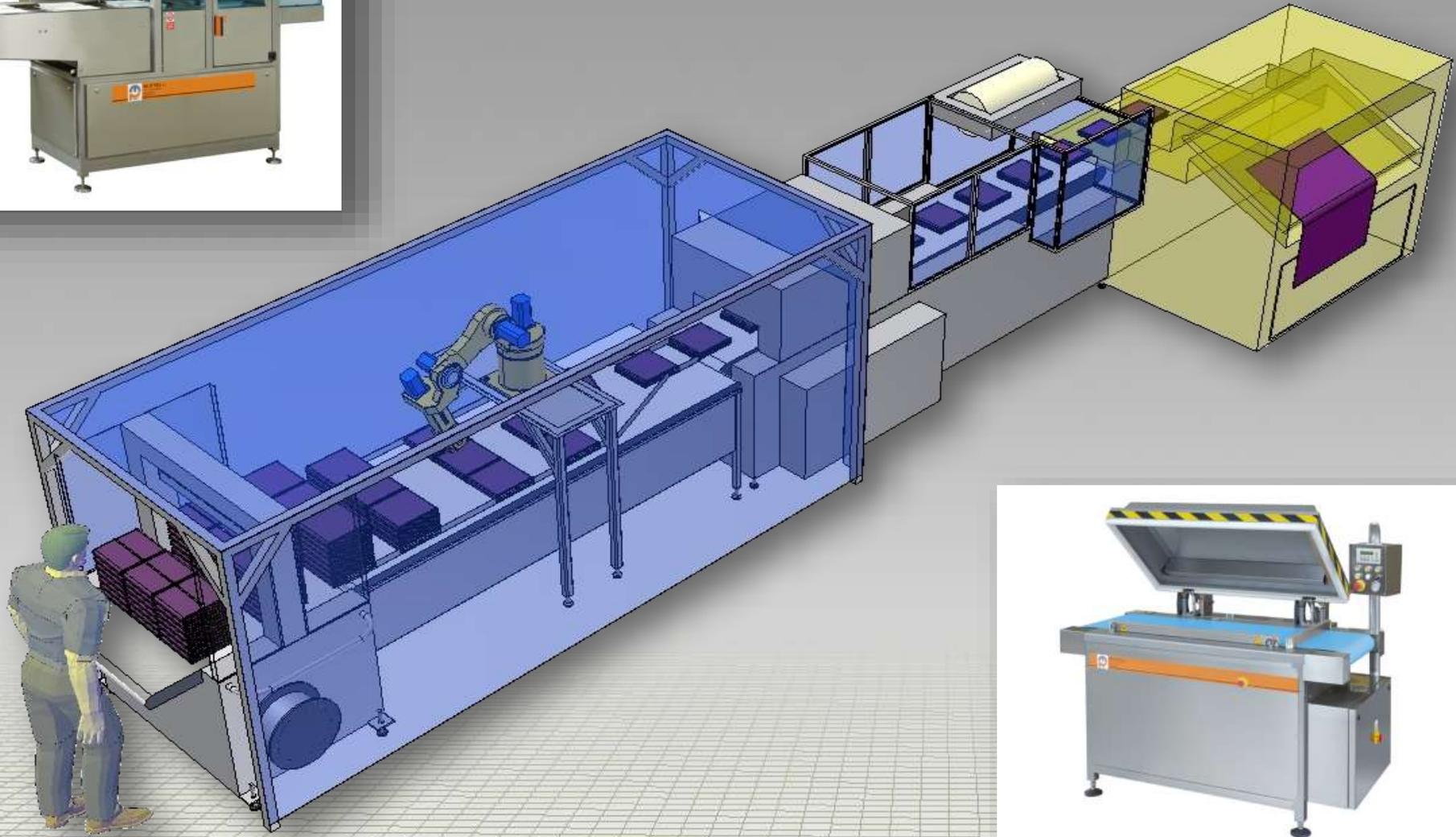


OPERATIVE MACHINES



Example of a rolling stand used for the lamination of metal bands, with attached maintenance equipment for roller replacement

Automatic production line for bending, vacuum packing and palletizing of textiles





The illustrated production line is made to execute the assembly of vehicle wheel hubs through a manipulating industrial robot in automatic mode.

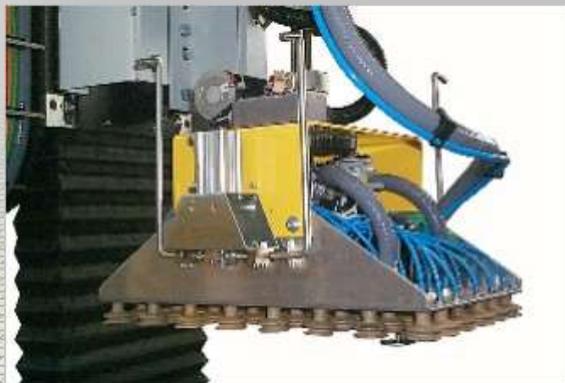
PRODUCTION SYSTEMS AND LINES

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Bearing structures, consisting of several controlled axes and assembled together. They allow the various movements of the gripping tools within the work area



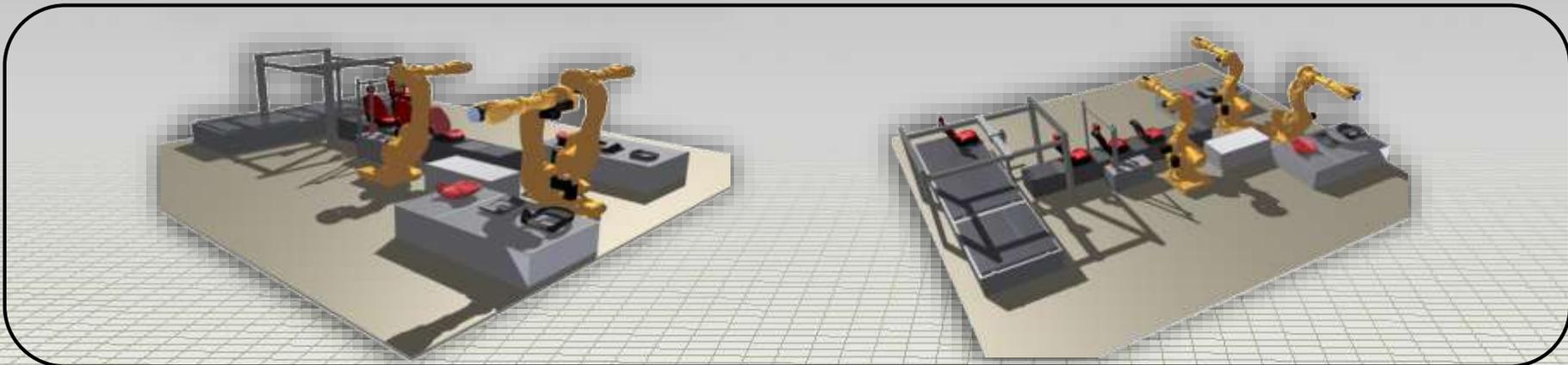
Examples of gripping equipment



PALLETIZERS

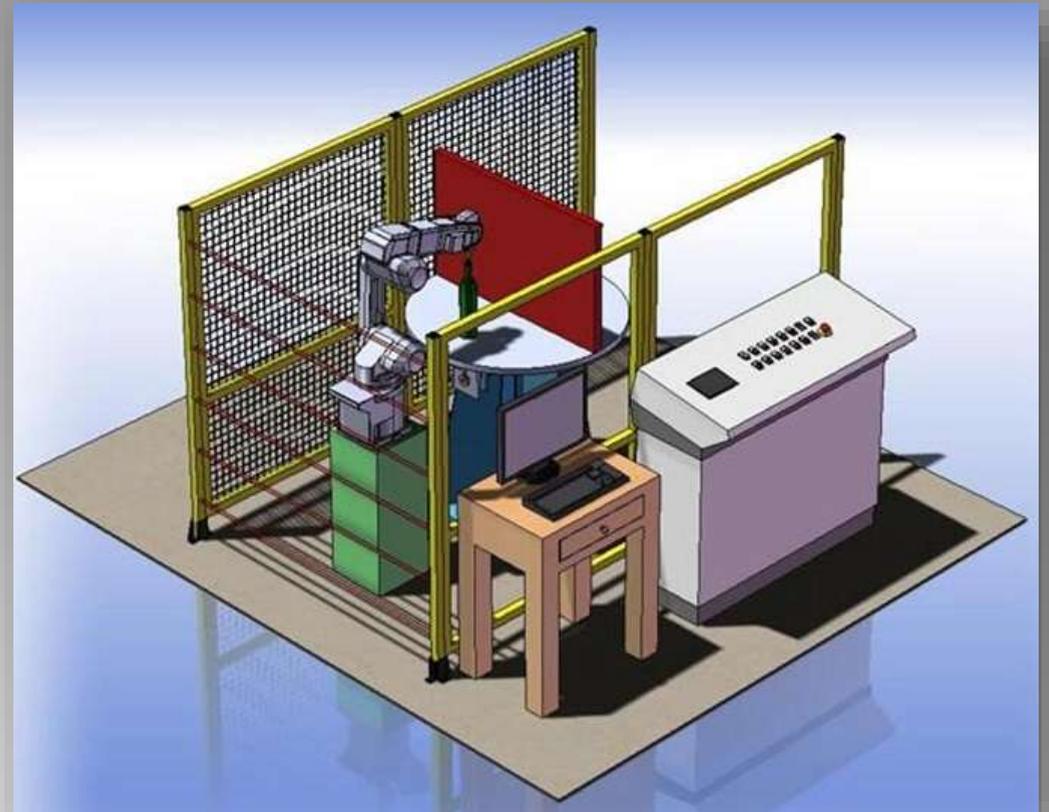
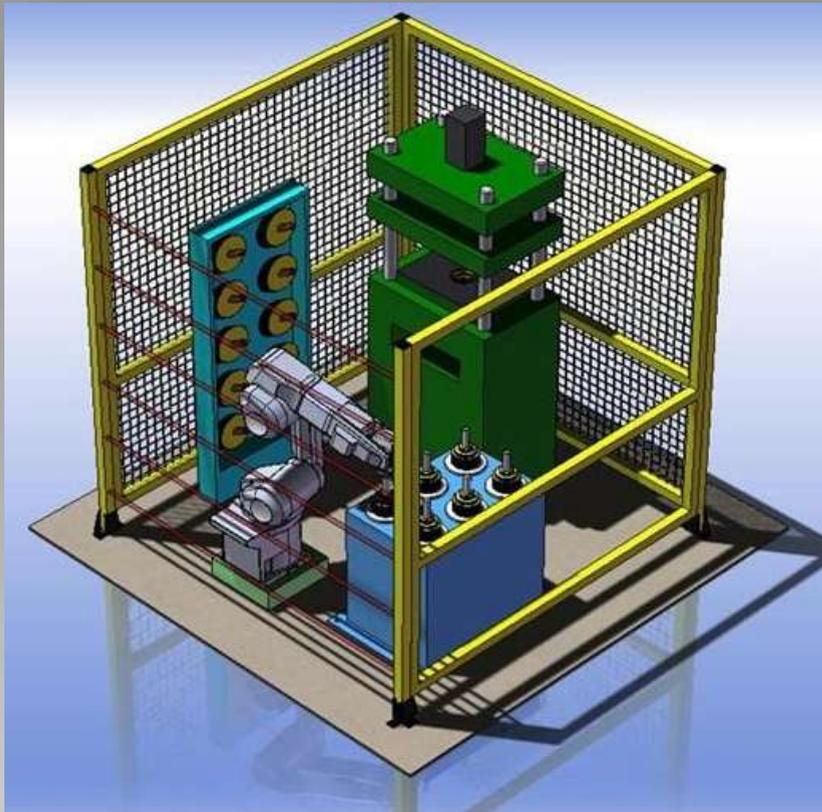


Examples of applications that meet specific production needs
with an excellent cost/performance ratio



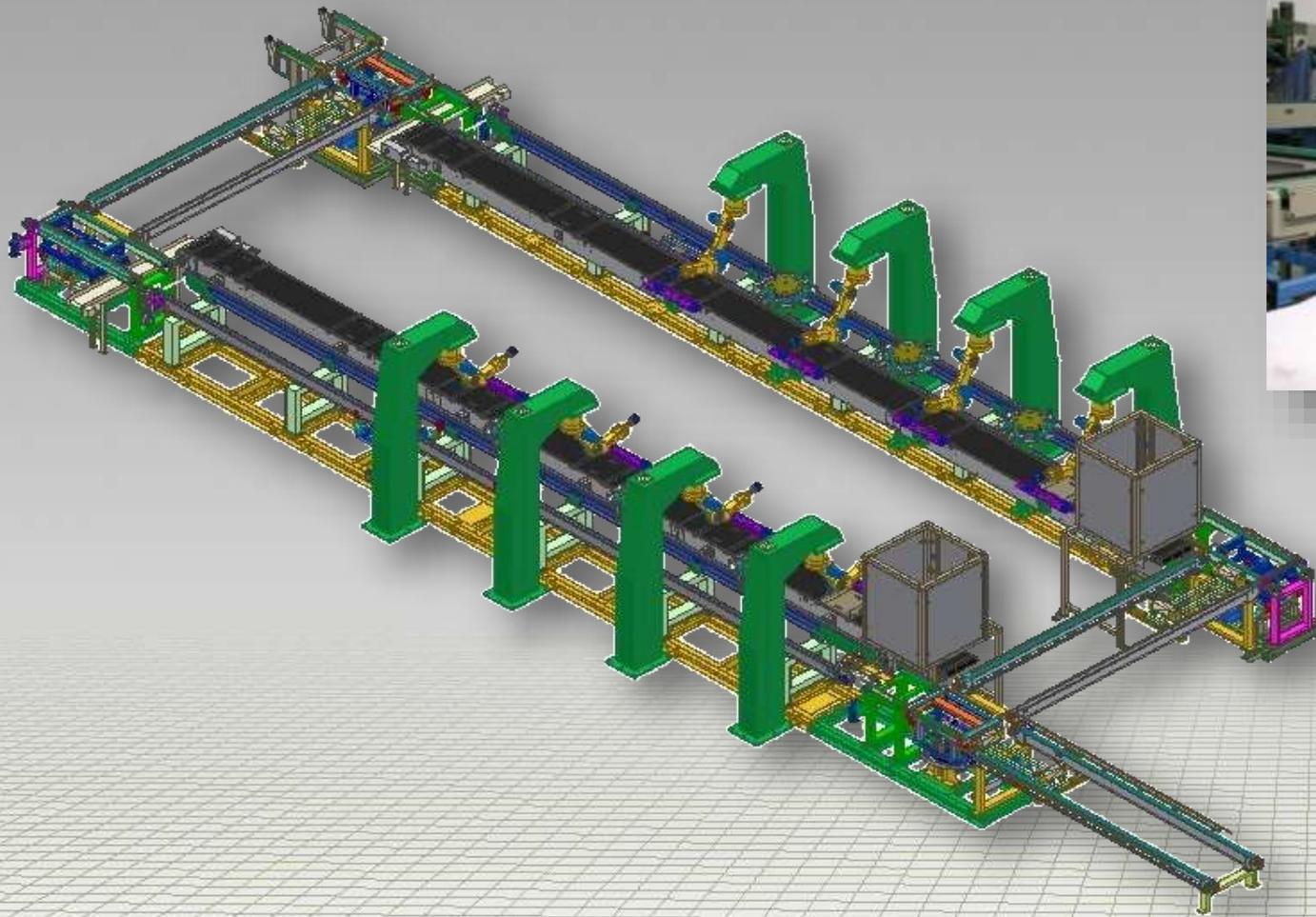
ROBOTIC ISLANDS

 **prosystem** engineering



Modular solutions that allow you to integrate machines or production lines with new units, following increased production demands

Study, design and creation of machines for handling, production, manufacture and packaging.
Creation of completely automated production lines and robotic islands to process different types of products.



ROBOTIC ISLANDS



COATING LINE – (RUSSIA)



COATING LINE – (RUSSIA)



COATING LINE – (RUSSIA)



WATER-BOTTLING PLANT

VINEGAR-BOTTLING PLANT



OIL-BOTTLING PLANT



OIL PRODUCTION AND STORAGE PLANT



COATING LINE – (BRAZIL)



COATING LINE – (BRAZIL)

THE CE MARKING CONFORMITY

The EU Machinery regulations have helped increase the safety of employees, by providing specifications for the design and construction of the machines that can minimize the risks arising from their use. It applies to the following products:

- machines;
- interchangeable equipment;
- safety components;
- Accessories for lifting;
- chains, ropes, straps;
- Mechanical transmission removable devices;
- Partly completed machinery (parts that almost make up a machine, but are not able to perform a specific application on their own - for example: a drive system – that is intended to be incorporated or assembled with other machine or assembled with other partly completed machinery or equipment in order to form a machine).

The certification of the machines is permitted only if they meet the essential requirements for health and safety imposed by the EU Machinery regulations and subsequent additions and amendments.

The manufacturer must issue the technical documentation and the internal measures that must be implemented to ensure their compliance with the provisions of the EU Machinery regulations.

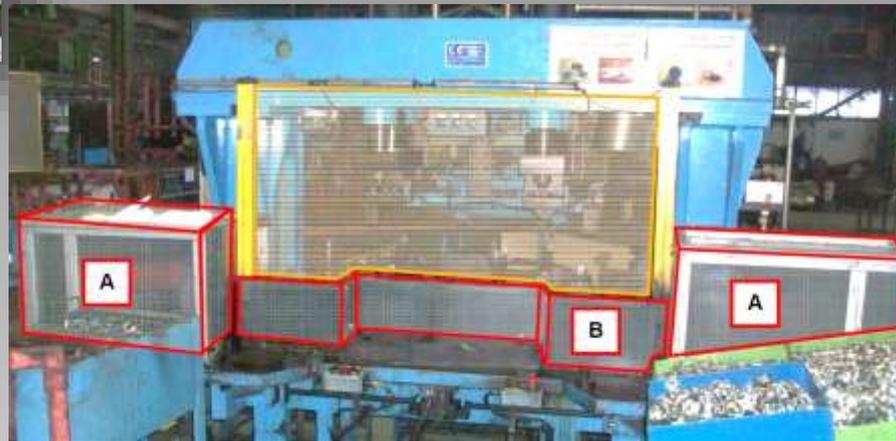
Prosystem Engineering Srl follows the legal European standards and is able to provide technical support:

- Inspections and meetings to check the machines' conformity according to the applicable standards.
- Analysis of the machine and verification of the essential safety requirements, including risk evaluation.
- The list of essential safety requirements, standards and other technical specifications used in the design of the machines.
- Information on any adjustments that must be made to the machine in order to be in line with the current legislation.
- Explanation of the methods adopted in order to eliminate risks presented by the machine.
- Preparation and/or verification of designs for machines according to UNI and CEI regulations.
- Preparation and/or verification of designs of the Technical Documentation and the User and Maintenance Manuals according to standards.
- Preparation of User and Maintenance Manuals.
- List of applicable regulations.
- Preparation of declarations of conformity.
- CE Marking Conformity.

CE MARKING CONFORMITY



BEFORE



ADJUSTMENTS



AFTER

CE MARKING CONFORMITY

TECHNICAL EXPERTISES

PROSYSTEM ENGINEERING S.r.l. offers its professional services in carrying out Technical expertises, carried out by an Engineer enrolled in the Professional Register, in the sectors:

- Safety of machinery
- CE Marking
- Contentious on the purchase/sale of machinery, plants and equipment
- Technical expertises requested for leasing companies
- Expert reports following accidents at work
- Safety check for used machinery sale



TECHNICAL EXPERTISES



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