



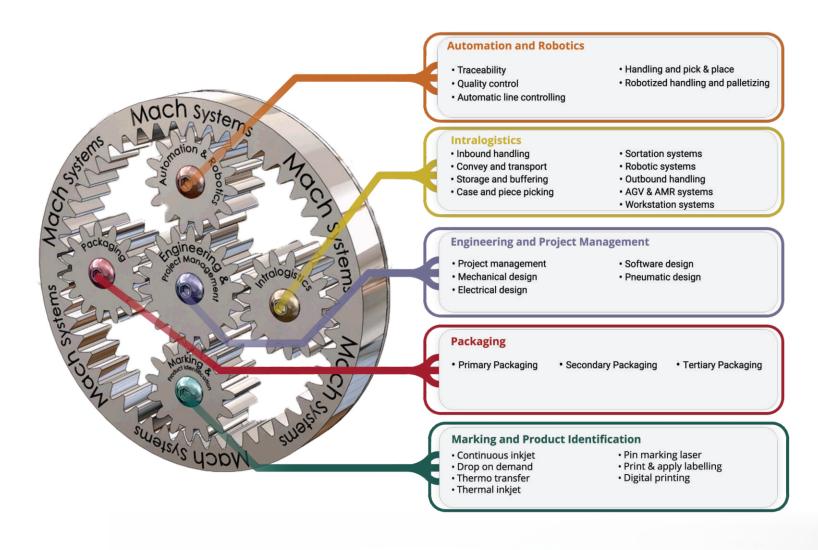
Packaging Division





About us

Mach Foreign Trade Distribution is the main industrial integrator with Romanian capital, which implements complex industrial projects for more than 25 years. Over time, we have diversified our portfolio of equipment and applications, focusing on quality and efficiency in the following **domains**:







Discover the Packaging Division

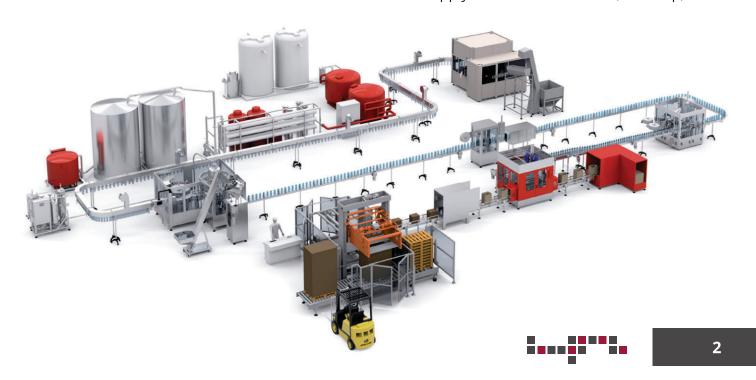
The Packaging Division serves the production industry with a complete offer of equipment and solutions in the industrial packaging area.

Our offer includes semi-automatic and automatic packaging equipment, monobloc or multiblock, customized stations and complete custom packaging lines.

Mach is present in the profile field through the Packaging Division with a major competitive advantage, which refers to the possession of a portfolio of critical auxiliary equipment for optimal functioning of solutions, applications, and packaging lines.

There are several specialized packaging services that we provide:

- Construction of complete packaging stations
- Integration of one, or more equipment in the case of pre-existing lines
- Technical consultancy, electrical, pneumatic, software and mechanical design, project management for complex packaging lines
- Customer needs analysis, procurement, delivery, installation and service
- Operator training
- Automation of packaging lines
- Equipment rental
- Supply of consumables: foils, PP strap, PET





Packaging types

Mach's packaging division it is specialized in industrial solutions for factories that perform packaging processes in the internal production. Depending on the production and the configuration of the business, Mach can offer automatic or semi-automatic equipment, as well as complex solutions that address automated packaging from the product-to-product until group packaging, according to the 3 stages of packaging: primary, secondary, and tertiary.



Primary packaging

Represents the first protection of the products. MACH offers solutions to demanding work environments, either in terms of production or in terms of the products to be packaged (irregular shapes, rugged textures, sensitive products, etc.).

Primary packaging includes machines



Secondary Packaging

Represents the process of grouping several products of the same kind (boxes, trays, shuttles, formwork, etc.) or the application of the second packaging.

Secondary packaging includes machines for:



Tertiary Packaging

Represents the process of preparing products for storage or transport. Tertiary packaging includes machines for:

PVC strapping

Palletizing

Pallet strapping

Pallet wrapping

Conveyors

Horizontal wrapping



PET and HDPE blowing



Washing and drying containers



Filling



Capping



Filling jars



Vertically weighing and dosing



Vertical filling



Flow Pack



Thermoforming pans/blisters



Industrial check weighers



Conveyors



Shrink wrapping



Shrink-wrapping trays boxes + foil



Box/tray formation



Sealing boxes with glue or tape



Collective packaging



Metal Detector



Conveyors

Pick & Place







Steps of packaging

PRIMARY

- Bottling: PET, metal, glass, tetrapak
- Food bottling: PET, glass, metal, cardboard
- Vertical packaging: Stick, envelope, bag, bulk
- Horizontal packaging: Flow pack, single dose thermoforming, blisters,
- Chemical packaging: can, barrel, container
- Cosmetic packaging: PVC / metal bottle, jar



- Shrink-wrapping
- Shrink wrapping in tray or cardboard box
- Forming and sealing boxes with tape or glue
- PVC strapping
- Horizontal wrapping in foil





AUXILIARY



- Pallet strapping with PVC tape
- Corner application on the pallet
- Wrapping pallets with foil
- Packing pallets with stretch hood foil
- Pallet packaging with shrink wrap
 - PET and HDPE formation
 - Washing containers
 - Palletizing and depalletizing
 - Marking and labeling
 - Check weighers and contaminant detectors
 - Pick & place
 - Transport conveyors
 - Industrial supplies





Packaging solutions

Packaging is the science, art, and technology of protection products for the processes of distribution, storage, sale, and use. From a technological point of view, the packaging is a coordinated system for preparing goods for transport, storage, logistics, and sales until the end-use.

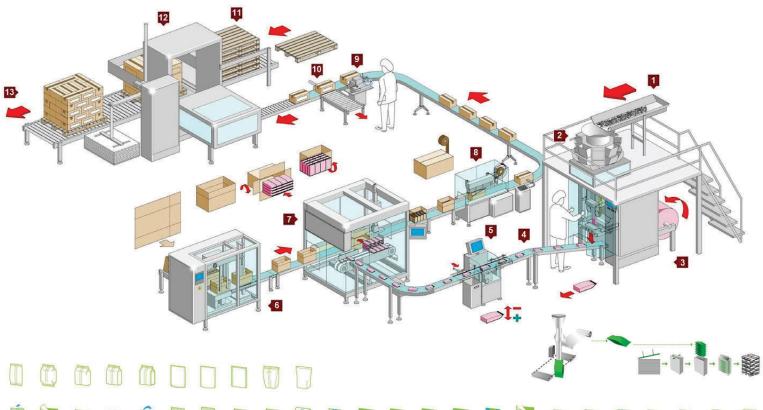


Mach installs automatic and semi-automatic industrial equipment and packaging lines for all types of products, in a variety of industries and work environments (with extreme temperatures, dust, steam, humidity, high degree of corrosion, etc.). We can pack client's products in bags, boxes, plates, bottles, jars, cans, boxes, canisters, crates, barrels etc.





Vertical filling application (> 100 bag types)













- 1. Feed conveyor
- Closed conveyor in case of dust
- Uncovered conveyor
- 2. Product weighing and dosing
- Volumetric
- Linear
- With a snail
- With tape
- Multicap
- 3. Packing and filling machine
- 4. Transport conveyors
- 5. Check weighers / metal detectors
- 6. Box making
- 7. Collective packaging
- With robotic module
- With insertion of products in the box
- 8. Sealing boxes
- With self-adhesive tape
- Sealing by gluing the box
- 9. Label applicator

- Adhesive label
- With glue label
- 10. Rejection module for noncompliant products
- 11. Pallet stacking station
- 12. Palletizing
- With Robot
- With translating table
- 13. Pallet wrapping
- Stretch foil or sleeve wrapping
- PVC strapping





Horizontal packaging application

- 1. Feed conveyor
- 2. Grouping product module
- 3. Horizontal packing machine
- 4. Individual packaging
- 5. Grouped packaging
- 6. Metal detector/check weighers
- 7. Monobloc
- Box maker
- Filling boxes

- Sealing boxes
- 8. Rejection module
- 9. Palletizing robot
- 10. 90 ° transfer conveyors
- 11. Pallet stacking station
- 12. Pallet wrapping
- With stretch or sleeve
- Strapping with PVC





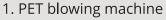
Complete line in the beverage industry



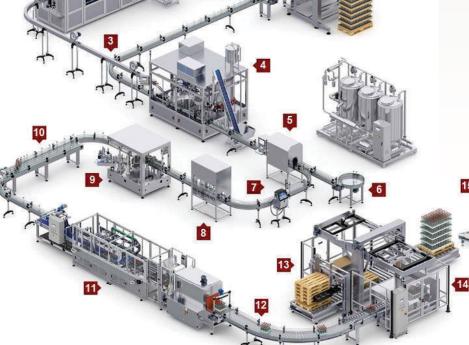








- Automatic preform dispenser
- Compressor
- Enclosure for heating and blowing containers
- 2. De-palletizer
- 3. Conveyors for transporting empty containers
- Conveyors with links / belt
- Air blowers
- 4. Monobloc liquid filling
- Rinse and dry
- Filling
- Putting caps
- 5. Flow scale
- 6. Accumulation mass
- 7. Date / batch printing
- · With ink
- With laser
- 8. Metal detector
- 9. Label applicator
- Adhesive label
- With glue label
- Sleeve
- 10. Transfer conveyor
- 11. Packaging
- In heat-shrinkable foil
- Box, tray, or pad packing
- Mixed tray / pad + foil
- 12. Transport conveyors
- 13. Pallet warehouse
- 14. Palletizing
- With the Robot
- With translating table
- 15. Pallet wrapping
- With stretch foil or sleeve
- PVC strapping





Complete packaging line for the chemical industry

The project consisted in the participation of Mach FTD in all stages of packaging, namely primary, secondary, and tertiary packaging.

In this project, the **primary packaging** was comprised of filling, capping and induction sealing of PET and HDPE bottles with a volume from 100 ml to 1000 ml. The bottles were then labeled, marked with date and batch, then the dosage was checked by passing through a check weighing system.

The secondary packaging level consisted of forming cardboard boxes, inserting bottles into boxes, separating the product layers with cardboard, and sealing the boxes with adhesive tape. After sealing, the boxes are labeled and prepared for the robot automatic palletizing process.

Tertiary packaging continued with the wrapping and labeling of pallets of goods, prepared for transport to the customer. In the project were used partners' equipment and custom component, designed by the Mach FTD team.

Equipment: dosing and filling equipment with 6 heads, caps elevator and sorter, automatic cap threading equipment, date and batch printing printer, checkweigher, induction sealing equipment, wrap-around label applicator, automatic box former "American box" type, pick and place module, automatic box sealer with adhesive tape, robot palletizing module, automatic pallet dispenser, automatic pallet wrapper, pallet label applicator.





PARTNERS

ACMI: Italy - Bottling and packaging lines and equipment;

AETNA GROUP: Italy - Packaging, wrapping, sealing with adhesive tape of cardboard boxes, palletizing system;

ALBERTINA: Czech Republic - Filling, capping, labeling and complete filling lines equipment;

ALTEC LTD: Czech - Bottling equipment;

AMS FERRARI: Italy- Bottling, packaging and processing lines;

CONCETTI: Italy -Equipment for packing, weighing and palletizing, complete bag packing lines;

DURFO: Italy - Semi-automatic bottling and packaging equipment; **EMERITO**: Spain - Complete food processing equipment and lines;

ERGOPACK: Germany - Pallet strapping;

EARFLAP: Spain - Primary, secondary and tertiary packaging equipment;

FAMARTEC: Italy - automatic machines for blisters, trays, and boxes, for pharmaceutical and cosmetic applications.

ILPRA: Italy - Thermoforming, dosing, filling and sealing machines;

IPS: Italy - Horizontal packaging (flow pack);

LOMA: United Kingdom -Check weighing and contaminants detection systems;

LORA PACK: Italy - Horizontal / vertical packaging machines in flow pack bags;

MARIN: Italy - Machines for the liquid bottling industry of the chemical industry;

MESSERSI: Italy - Automatic pallet strapping equipment;

MF TECHNO: Italy- Complete equipment and installations for weighing,

packing, palletizing bags from 5-50 kg;

NEMESIS: Italy - Check weighing and metal detection equipment;

PLASTICBAND: Spain - Horizontal wrappers and strapping machines;

SMF: Germany - PET blowing equipment;

SMI PACK: Italy- Packaging systems with shrink wrap;

STV:Italy- Complete equipment and lines for food packaging in jars and metal boxes;

TIRELLI: Italy - Packaging equipment for the cosmetics and pharmaceutical industries;

UNIFILL: Italy- Equipment for thermoforming and blister filling; **VELTEKO**: Czech Republic - Vertical packing equipment, box filling equipment, dosing equipment, etc.

VISION COMPONENTS AND SENSORS

COGNEX: USA - Vision Systems;

COVAL: France - Vacuum technology;

FESTO: Germany - Pneumatic and electrical components and

systems;

KEYENCE: USA - Vision sensors and systems;

SICK: Germany - Sensors; **SIEMENS**: Germany - Sensors; **WENGLOR**: Germany - Sensors.

Partners





















































Vision components and sensors









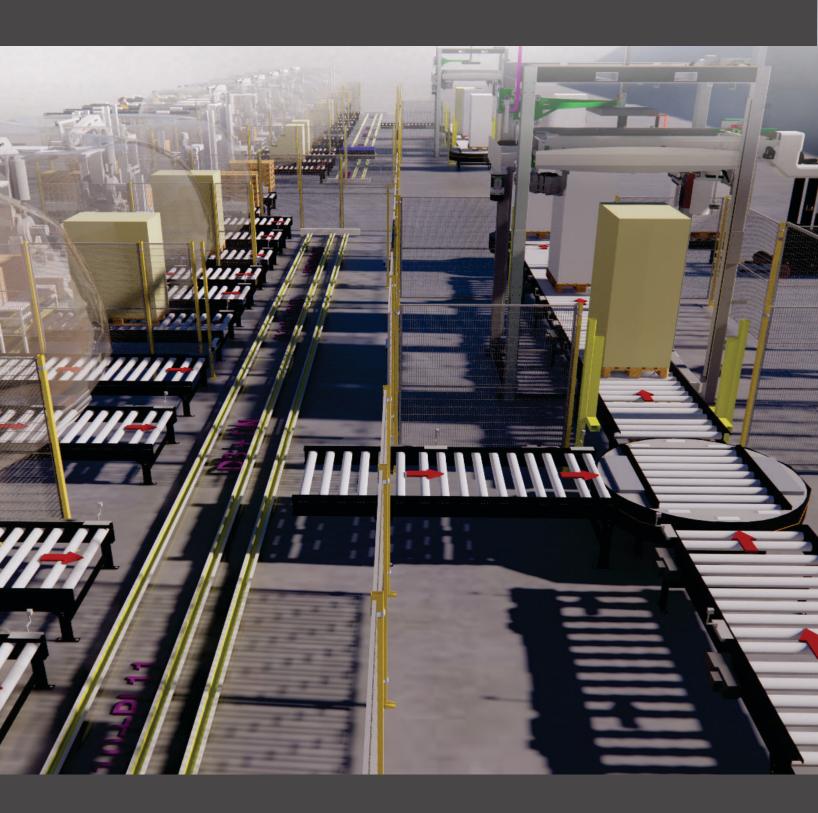












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