

Tech_M GROUP

High performance engineering



High performance engineering

We help our clients achieve technological growth, enabling their end-of-line processes to become more productive and efficient.

We develop and implement customized solutions for each production process and space, with a focus on improving working conditions for operators.



TECH_M is the combination of DNC and EARFLAP, two specialists in end-of-line machinery and solutions, with over 30 years of experience.

Together we give more

DNC

End-of-line Engineering

Since 1992. Experts in automation engineering and end-of-line projects, designing tailored applications for every industrial sector. We manufacture machinery for all packaging processes.

Tech_M GROUP

Since 2001. Manufacturer of industrial machinery for all end-of-line processes: box forming, case packing, sealing, palletizing, and pallet wrapping. We also specialize in the development of complete end-of-line projects.

Machinery for Packaging

EARFLAP

Tech_M Group

DNC

Tech_M GROUP

We were established to become the leading engineering company for automation end-of-line processes.

Our main goal is a continuous evolution, always staying at the forefront of technological innovation.

We supply high-quality machinery for all packaging applications.

We are committed to providing comprehensive and personalized service throughout all phases of project, from initial consultation to installation, commissioning, and ongoing support.

EARFLAP

LIMSA Corporation

GLOBAL AGRI-FOOD SOLUTIONS

TECH_M Group is the Packaging Engineering division of the LIMSA industrial corporation.

LIMSA CORPO S.L. is an industrial company founded in 1987 as an analysis and research laboratory, specialized in the cosmetics and food sectors.

In 2015, it began a rapid expansion process with the aim of diversifying its activities as much as possible, incorporating up to 11 new very diverse activities.

From 2022 it experiences significant growth, starting a new stage, with specialization within the Agri-food sector from different activities. Maintaining the essence of the previous stage and the result of the success of this strategy, LIMSA CORPO has consolidated itself in offering Global Agri-Food Solutions.



AGRI-FOOD ACTIVITIES

Engineering
Agricultural Machinery
Laboratory
Agriculture 4.0
Drones (training, services and sales)
Agri-food Purchase / Sale Division
R+D Center

DIVERSIFICATION ACTIVITIES

Cardboard Cutting Center
Tissue paper
Metallurgical
Professional adhesives
Metal cases
Flocked Materials & Self-Adhesive Tape
Elevator control cabinet accessories



Figures of interest

LIMSA CORPO

Corporation Billing

107 M€

Activities

11

TECH_M GROUP

Division Billing

8 M€

Professionals

50

Export

30%

Facilities

6.500 m²



20
23

Mission Tech_M

**Solve the
comprehensive
end-of-line
needs.**

**To be in continuous
evolution to
anticipate new
challenges.**

**Innovate in our
technology to
improve our
customers
production.**

**Develop custom
projects for
any packaging
application.**

Values

Experience.

A great team of professionals with 30 years researching, experimenting and learning from the entire design and manufacturing process.

Innovation.

We are constantly seeking and analyzing customer needs to understand firsthand what needs to be improved.

We find the most innovative solution, whether it's through our machinery, or services, or a different way to face productive processes. Our goal is to turn it into a competitive advantage.

Commitment.

It is the pillar of our behavior and decision-making. We are committed to providing our customers with the best projects and machinery, designed to meet a real function and need.

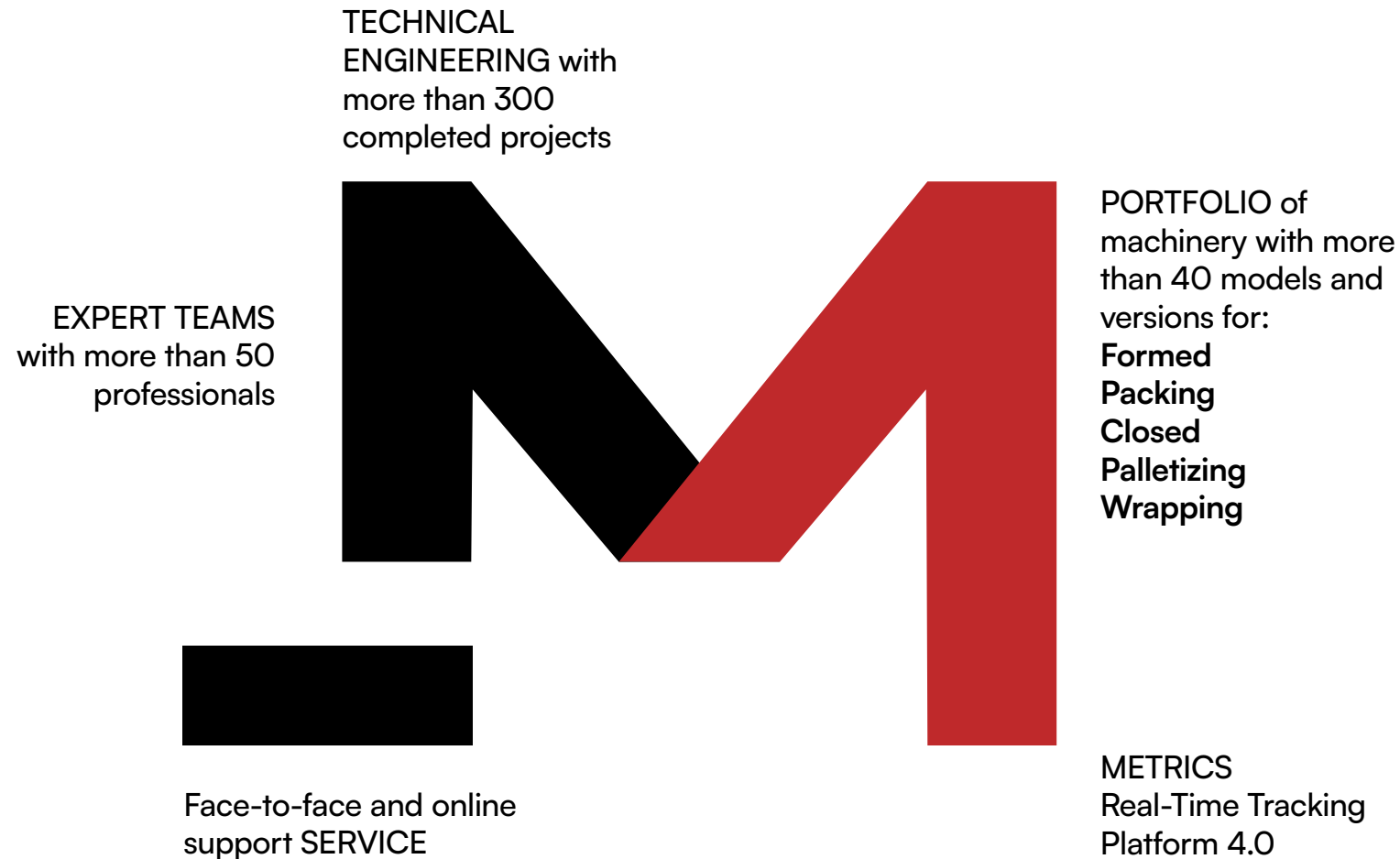
Vocation of service.

Our commitment to our customers and collaborators is the DNA of our company. We truly believe that providing excellent service is as important as designing and manufacturing quality machinery.

What we offer

High-performance engineering

The most complete range for your end-of-line





Engineering

We design

Our team is ready to develop a tailored solution for your specific needs. As engineers, we are passionate about taking on new challenges in the packaging industry every day.

We build

As manufacturers, we have the capability to produce equipment that perfectly meets your production requirements, with a full guarantee of performance and service.

We integrate

Our experience as a packaging company is reflected in every project we carry out. All of our equipment has been designed to be integrated into automatic production

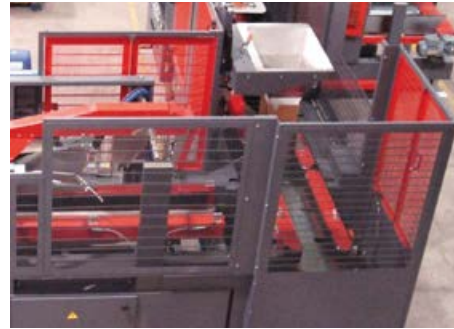
We offer you our best engineering team to advise and support you in implementing your automation project. With over 30 years of experience in project development, we can help you to define the best solution for your company. We know that **the key to any successful project is working closely with our clients to accurately assess their needs.**

Engineering projects



Food

- Equipment to work down to -28°C
- Frozen bread packing stations
- Coffee capsule packing
- Handling of cans
- Wrapping of transport cages



Beverages

- Bag-in-box packing lines
- Metal drum handling
- Bottle packers
- Packing bags with cork stoppers
- Compact end-of-line for wineries



Chemical

- Handling of drums with different types of handles
- Equipment for working in ATEX atmospheres
- Handling of big bags and large volume boxes
- Conveyors for IBC containers



Logistics

- Multi-format handling lines
- Picking stations
- Ergonomic manual packing positions
- Weight and volume control
- Product sorting for shipments



Construction

- Roller and chain conveyors for very heavy loads
- Palletizing and wrapping of oversized loads
- Equipment for working in dusty environments
- Oversized aluminum joinery wrapping
- Handling kitchen countertops



Pharmaceutical

- Multi-product packing stations
- Conveyors for light loads in cleanroom
- Compact end-of-line cells
- Equipment with different degrees of IP protection



Textile

- Forming and closing of large boxes
- Fabric spool wrapping
- Coil handling
- Special conveyors for palletless loads
- Transport of loads on special bases



Other sectors

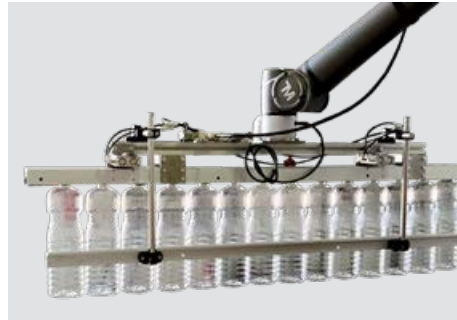
- Palletizing of aluminum bales
- Oversized stretch wrappers for the cardboard sector
- Equipment adapted to corrosive environments
- Straw bale baling
- Sealers for double flap boxes

Examples



Palletizing in 18 stations

By reading the barcode on each box, the robot moves along a 12-meter track and palletizes boxes containing different products that arrive alternately at different stations.



Depalletizing of oil bottles with Cobot

Collaborative robot depalletizing system that unstacks bottles and places them on the filling line.



Palletizing fertilizer drums

Palletizing, vertical strapping, and stretch wrapping of 20-liter chemical fertilizer drums with weatherproof protection.



Coffee capsule packing

Development of a wrap-around case erector and packer, SWING model, specifically designed for coffee capsule packaging.



Automatic palletizing and wrapping with compactor

Automated palletizing, stacking, and wrapping of bags, including a complete line design with an adapted gripper robot.



Bottle packing line

Single-unit case erector and packer for simultaneous packaging into two boxes, enhancing product presentation.



Palletizing and wrapping of wooden blocks

Grouping of wooden blocks for pallets, full-layer palletizing, and simultaneous wrapping.



Automatic packing of napkins with robots

Automatic packing line for paper napkin packs with robot.

Examples



Palletizing boxes with bottles
Automatic palletizing cell with robot. The robot supplies the pallets itself, reducing production costs and increasing productivity.



Robotic cell for packing and palletizing bottles with a single robot
Automated case erecting, taping, and closing. Project design incorporating necessary aisle and walkway space as per customer requirements.



Palletizing and wrapping of paint cans
Automation of the entire end of the line. All format changes are made automatically.



Ultra-compact end-of-line
Installation of a single robot that forms the box, fills it with the product and palletizes. Development of multifunction head.



Detergent palletizing
Double palletizing station for detergent boxes with quadruple head and automatic pallet feeding.



Robot with gripper adapted for palletizing canisters
Study, realization and installation of a handling head adapted for palletizing bottles with a handle.



Box forming with robot
Special application for the forming of large boxes with an anthropomorphic robot and sealed with a self-adjusting head closer.



Palletizing and wrapping of paper rolls
Automatic cell for palletizing coil packs and annoying pallets up to 3 m high.

The most complete range for your end-of-line

Case Erectors



BEM 100



BEM 200



BEM 200xs



BATEC



BEM XL

Packing Solutions



ZENIT



SWING



Bizzy



Bizzy+



Collaborative Robot



Robotic Solutions

Box sealers



CS15



CS25



CS35



CS45

Palletizers



4AXIS



Cobot



Compact palletizing cells



Palletizing Robot

Automatic pallet wrapping machines



Line



Spin



Cover

Semi-automatic pallet wrapping machines



Single 200



Single+



Single 600 TP



Fenix+



Ronda 900+



Rotex 700



Rotex 800

Case erectors

BEM 200

Reliability and precision in every box

It is the automatic erector that supports the most box sizes on the market.

All operations are controlled via a touch screen with a very intuitive graphic menu. The ideal equipment for demanding productions.



- Fast and accurate format change
- On-screen graphic help
- Bottom closure of boxes with tape, gummed paper or hot glue
- Warehouse loading without stopping production

BATEC

Automatic case erector

The BATEC automatic case erector gives solution to a wide range of boxes on the market in a single unit, supporting a wide range of formats. Easy to operate and adjust; it includes a touch screen HMI with a very intuitive graphic menu to simplify the user's work. Maximum precision in each movement to guarantee high productivity and quality.



- Production of up to 20 boxes/minute
- Touch screen HMI with graphic menu
- Format adjustments monitored by screen
- Closing of lower flaps with tape, hot glue or water activated paper
- Ergonomic magazine loading, without stopping production
- Magazine capacity of 150 boxes
- Safety protections

BEM 100

The first step to automation

Equipment to form RSC type boxes in a semi-automatic way, which can also be used as a packing table. Designed to facilitate work in an ergonomic and safe way.

- Compatible with different box sizes
- Can be attached to a sealer
- Adjustable working height
- Fast and accurate format change



BEM 200 XS

Specially designed for small formats

Automatic box erector for small box sizes that require high working precision. Especially suitable for e-commerce picking applications.

- Fast and accurate format change
- On-screen graphic help
- Very compact size
- Warehouse loading without stopping production



BEM XL

A whole range for special boxes

The different XL versions of the BEM automatic box erector are specially designed for applications that work with large boxes. They are robust and reliable machines, designed to work without rest.

- Fast and accurate format change
- On-screen graphic help
- Bottom closure of boxes with tape, gummed paper or hot glue
- Warehouse loading without stopping production



Packing solutions



Zenit

The most versatile packing solution

Automatic packer for rigid or semi-rigid products, adaptable to any production line. Equipped with a quick format change system to work with multiple references. The ideal solution for medium and low production lines.

- Compact design
- You can fill two or three boxes at a time
- Quick head change system
- Adaptable to different types of containers
- Multiple deployment options



Swing

High performance nesting

Wrap-around case packer from die-cut foil with hot glue closure. The grouping and loading system are customised for each type of product and box.

- Compact design
- Screen settings
- Fast format change
- Multiple deployment options



Bizzy/Bizzy+

The equipment that adapts to any production line

Modular case erecting and nesting monobloc, to fill one, two or three boxes at the same time. Configurable for packing any type of space and product.

- Robust and optimised design
- Can fill two or three boxes per cycle
- Screen settings
- Fast format change
- Multiple deployment options



Collaborative robot

Safe to work alongside

This solution is especially suitable for low-speed applications in confined spaces that are shared with the operators. Its ease of programming allows new formats to be added continuously.

- Can be integrated into any space
- Transportable for working on different lines
- Can incorporate machine vision applications for self-adjustment
- Adapts its operating speed to ensure the safety of the operators



Robotic solutions

An infinite world of applications

A large number of robots available on the market are configurable for nesting applications. We select the most suitable option for each case and customise it according to production requirements.

- Customised heads
- Solutions adapted to real production needs
- Possibility of working with different products with the same application
- Suitable for very heavy loads
- The same robot can perform different functions



Case sealers

Semi-automatic



CS15

The first step to increasing production

Semi-automatic equipment for upper and lower sealing of boxes with adhesive tape. With manual adjustment to work with different box sizes.

It can seal just the top or bottom of the box
Quick and easy seal refill
Adjustable working height
Drags without marking the box
Different versions according to box size and drag



CS25

Ideal for combining boxes of different sizes

Semi-automatic equipment for upper and lower sealing of boxes with adhesive tape. It detects the size of the box and automatically regulates itself to be able to work alternately with boxes of different dimensions.

It can seal just the top or bottom of the box
Quick and easy seal refill
Adjustable working height
Drags without marking the box
Different versions according to box size



Automatic case closers

CS35

The perfect box closure for your line

Equipment for integrating into automatic lines that closes the upper flaps of the box and seals the lower and upper faces with adhesive tape or hot glue. Quickly manually adjustable to work with boxes of different dimensions.

It can seal just the top or bottom of the box
Quick and easy seal refill
Adjustable working height
Drags without marking the box
Different versions according to box size and type of closure



CS45

Simplifying work on lines with multiple formats

Equipment for integrating into automatic lines that work alternately with different box sizes. It closes the top flaps and seals the bottom and top sides of the box with adhesive tape.

It can seal just the top or bottom of the box
Quick and easy seal refill
Adjustable working height
Drags without marking the box
Different versions according to box size



Palletizers

4AXIS

Ideal for restricted spaces

Very compact Cartesian palletiser that adapts to any available space. It can work with a wide range of products and is equipped with its own software to configure new formats from the same computer.

- Multiple deployment options
- Quick head change system
- Plug and play
- Very high working precision
- Very intuitive graphic menu display



Cobot

Mobile and adaptable palletizing

This solution is especially suitable for low-speed applications in confined spaces that are shared with the operators. Its ease of programming allows new formats to be added continuously.

- Can be integrated into any space
- Transportable for working on different lines
- Can incorporate machine vision applications for self-adjustment
- Adapts its operating speed to ensure the safety of the operators



Compact palletizing cells

Plug and play systems

Robotic palletizing applications, pre-designed to fully optimise the required space and for fast programming and start-up.

- Versions with one or two palletizing stations
- Optional automatic pallet feeding
- Can include pallet configuration support software
- Very high working precision



Palletizer robot

The universal solution

We select the most suitable option for each application, according to the conditions and workloads. We design and manufacture the heads, program and integrate all the necessary accessories.

- 100% configurable
- Possibility of performing various functions
- Solutions available for any type of load
- It can incorporate sensing to make decisions on the go
- Very high working precision



Stretch- wrappers

Semi-automatic

Single 200

**Takes care of the
pallet for you**

Semi-automatic stretch-
wrapping machine with a
mechanical brake and manual
film setting and cutting.

Optional motorised pre-stretching
4 pre-set stretch-wrapping programmes
Adaptable to different pallet sizes and heights



Single+

**High performance in
a basic equipment**

Semi-automatic stretch-wrapping
machine with motorised pre-stretching
and manual film setting and cutting.

Up to 300% motorised pre-stretching
Program memorisation
Touch screen configuration
Minimal film consumption
Adaptable to different pallet sizes and heights



Single 600 TP

**Basic equipment for
pallet truck loading**

Semi-automatic stretch-wrapping
machine with a mechanical brake and
manual film setting and cutting for
pallet truck loading.

Optional motorised pre-stretching
4 pre-set wrapping programmes
Front and side loading versions
Adaptable to different pallet heights

Fenix+

**The most configurable
equipment**

Semi-automatic stretch-
wrapping machine with manual
film setting and cutting. Can
be fully customised to meet
the client's load needs and
technical requirements.

Available with pre-stretch and different types of brake and spool holders
Program memorisation
Touch screen configuration
Minimal film consumption
Adaptable to any pallet size and height



Ronda 900+

**Versatility and
autonomy**

Stretch-wrapping robot that
can wrap loads of any size
anywhere, without having to
move them.

Motorised pre-stretch
Program memorisation
Touch screen configuration
Minimal film consumption
Long battery life for charging

Semi-automatic

Rotex 700

Basic equipment for unstable loads

Semi-automatic arm stretch-wrapping machine with motorised pre-stretching and manual film setting and cutting.

Up to 300% motorised pre-stretching
4 pre-set wrapping programmes
Minimal film consumption
Adaptable to different pallet sizes



Rotex 800

To hold unstable loads in place

Semi-automatic arm stretch-wrapping machine, transportable on electric forklifts.

Up to 300% motorised pre-stretching
4 pre-set wrapping programmes
Touch screen settings
Minimal film consumption
Powered by the forklift's battery



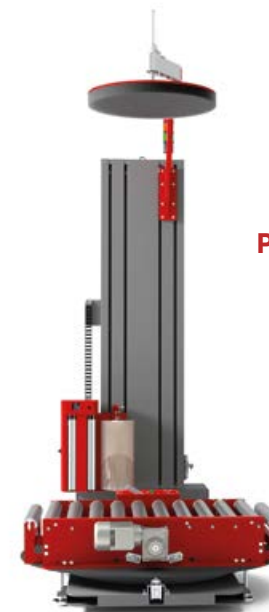
Automatic

Line

The stretch-wrapper platform with the highest production on the market

Turntable stretch-wrapping machine to integrate into automatic lines. Designed to work with any type of load and without intervention. Fully customisable with a wide range of options and accessories.

100% customisable
Different pre-stretch options
Touch screen configuration
Clean cutting of film with thermo-welding
Adaptable to any pallet size and height



Spin

The solution to unstable loads

Rotating arm automatic equipment for stretch-wrapping with still load. Designed to integrate in line.

100% customizable
Motorized pre-stretch
Touch screen configuration
Clean cutting of film, without glues
Adaptable to any pallet size and height

Cover

Total protection for your product

Automatic film dispenser to protect pallets from dust and/or rain. Compatible with any model of automatic or semi-automatic stretch-wrapper.

Arm and gantry version
Adaptable to any sheet size
Different cutting options
Automatic load height detection
Configurable for any pallet size and height

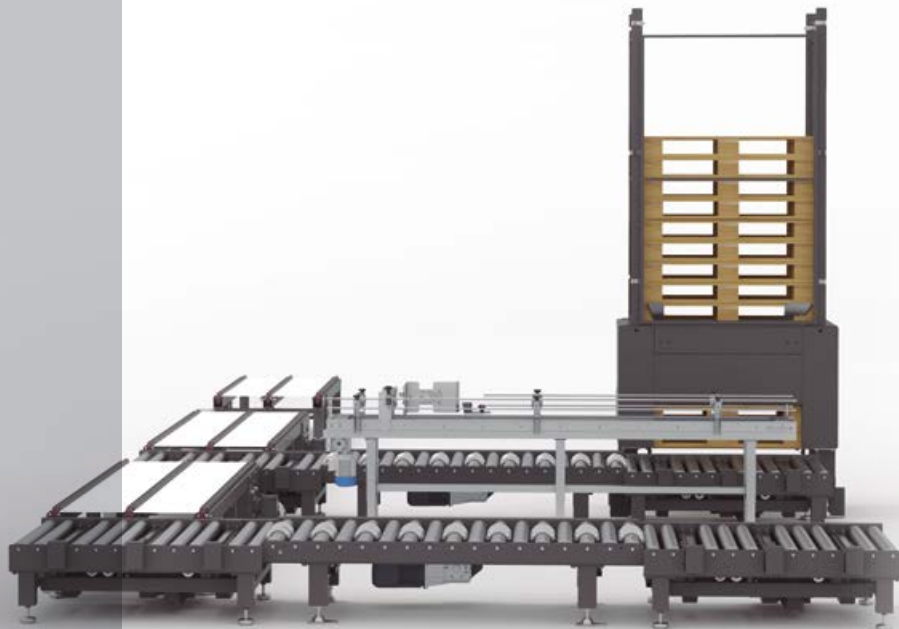


Handling and accessories

We have all the accessories and transport solutions necessary to give you a comprehensive end-of-line solution, complementing our range of machinery.

Accessories

Labelling and marking
Weight management
Metal detectors
RFIT reading
Image control
Reading barcodes and QR codes
Traceability
Volumetric control



Conveyors for boxes

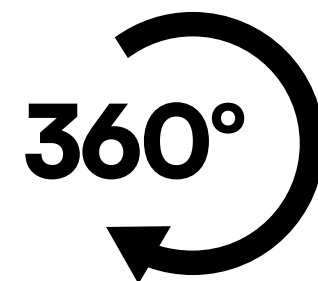
Free and motorised rollers
PVC band
Modular belt
Wings
Hinge
Metal netting
Roller ball table
Transfer
Spinners
Accumulation tables
Tippers
Lifts
Stretch
Centring system
Foldable passenger gate
Ergonomic work tables
INOX/PVC construction

Pallet conveyor systems

Free motorised roller conveyor
Chain conveyors
Hinge
Modular belt
Transfer
Guided trolley
Rotating table
Pallet dispenser/stacker
Pallet centralisers
Pallet lift
Slave pallet placement
Pallet exchange
Pallet lifter
Loading gauge control
FIFO accumulation

Services

Our commitment is to ensure that our customers' facilities and machinery always operate at peak performance. To this end, we provide a dedicated team of professionals and technicians, equipped with all the necessary tools to facilitate your daily operations.



Technical Assistance Service

An expert technical team that will adjust your machines and optimize processes.

Online support

Save time and money with our online-connected facilities and expert support.

Preventive maintenance programs

We help you eliminate problems by scheduling production line maintenance stops in advance.

Spare parts

We always install original elements to get the maximum performance out of each piece of equipment.

Documentation

We have all the manuals, diagrams and certificates of all the equipment and installations carried out in the last 30 years.

Machinery Upgrade

We upgrade old equipment to increase its productivity and extend its useful life.

New formats and program updates

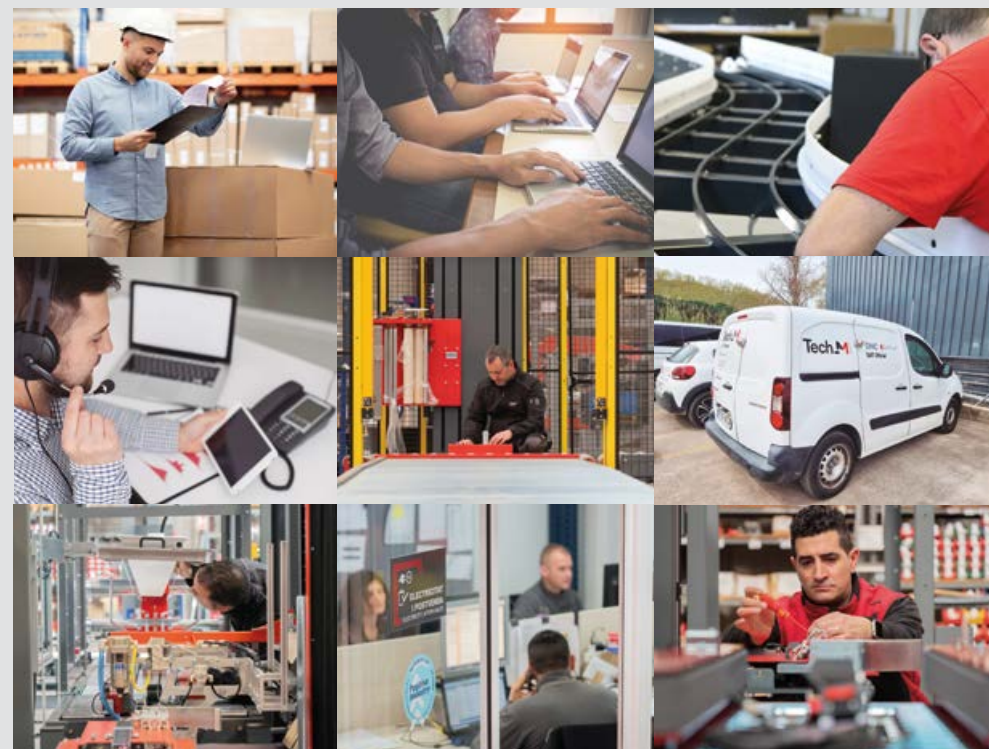
We support the configuration of new formats integrated into existing lines. We update programs to the latest software versions.

Technical advice

We advise our clients on how to maximize the performance of their equipment by reviewing processes and recommending the best consumables to use.

Training

We train our clients' technical teams to become self-sufficient in their daily tasks and to work with maximum ergonomics and safety.



Metrics

Stay always connected from anywhere to know everything that happens on your production line. Receive alerts and notices to make necessary decisions quickly and with all the information in your hands.



The IoT application that monitors your production line in real time

- ✓ Real time information
- ✓ Production, consumption and incidence KPIs
- ✓ Save all-time collected data
- ✓ Email alerts
- ✓ Personalized parameterization of machine warnings
- ✓ Direct communication with SAT
- ✓ Improved machine diagnostics with remote support
- ✓ 100% secure connection



tech-m.com