

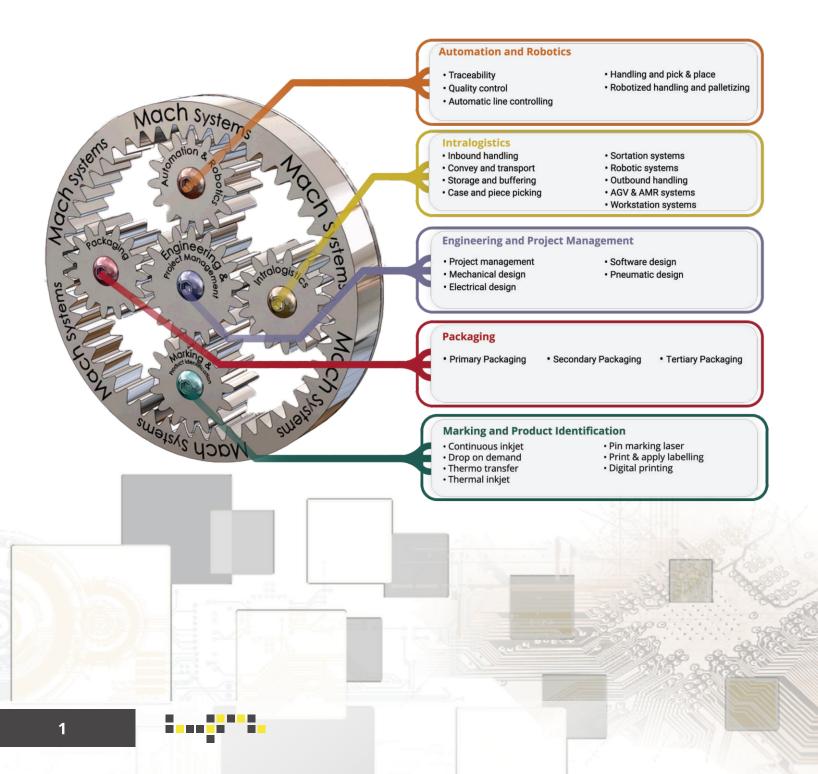
Intralogistics Division





About us

Mach Foreign Trade Distribution is the main industrial integrator with Romanian capital which implements complex industrial projects for more than 24 years. Over time, we have diversified our portfolio of equipment and the applications, with our main objective being to provide quality assurance and efficiency in the following **domains:**







The Intralogistics Division has developed within Mach as a natural progression of the complex projects in the multitude of fields in which our company has worked. Wherever planning, automation, and traceability of production processes are needed, Mach can offer solutions. From the point of view of optimization, our company can intervene in the solution and process design, integration, automation, and maintenance in intralogistics and logistic centers. How do we achieve all of this? The answer can be found on the following pages.

New Requirements

- ✓ Execute smaller orders
- ✓ Handle and store more items
- ✓ Provide more product and service customization
- ✓ Offer more value-added services

Less resources

- ✓ Less time to process an order
- ✓ Less margin for error
- ✓ Fewer young, skilled, native-speaking literate personnel
- ✓ Less warehouse management nsystem, capability (a by-product of Y2K investments in enterprise resource planning systems)

Benefits for your clients

- ✓ Error free deliveries
- ✓ Best stock availability
- ✓ Acceptance of "last minute" orders
- ✓ Reliable delivery dates

Benefits for Management

- ✓ Increased productivity, efficiency and quality
- ✓ Monitor logistics processes in realtime
- ✓ Active logistics execution via KPIs







Warehouse Profiling

By profiling the activity of items and orders received into the warehouse, we can determine which pick method to use, how much space to allocate and therefore where and how to store the product.

Warehouse Data Analysis

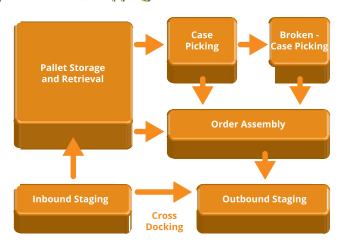
Data analysis - converting raw data into meaningful information that can be used to make decisions.

Data and pattern recognition are required to quickly and objectively reveal opportunities for simplification, process integration and automation.

Warehouse Processes

Receiving, Put-away, Order picking Replenishment, Shipping

- Receiving is the collection of activities involved in:
 - the orderly unloading and receipt of all materials coming into the warehouse;
 - providing the assurance that the quantity and quality of such materials are as ordered;
 - disbursing materials to storage or to other organizational functions requiring them.
- Put-away is the act of placing merchandise in storage. It includes moving material to and placing material in assigned put-away locations.



- Storage is the physical containment of merchandise while it is awaiting a demand or until it is released from quarantine.
- Order picking is the process of removing items from storage to meet a specific demand.





- Shipping typically includes:
 - a. Sorting batch picks into individual orders
 - b. Checking orders for completeness and accuracy
 - c. Packing merchandise
 - d. Preparing shipping documents
 - e. Weighing and cubing shipments to determine shipping charges
 - f. Accumulating orders by outbound carrier
 - g. Loading trucks



Warehouse Layout

(Storage Equipment, Material Handling)

- Positioning of inventory and aisles
- Pathing for vehicles and transport vehicles for efficient movement
- Ease of access to necessary areas in the most efficient manner possible

Project Management

- Design and planning to ensure a smooth implementation process
- Testing and direct feedback loop to ensure that everything continues to work properly in the long term



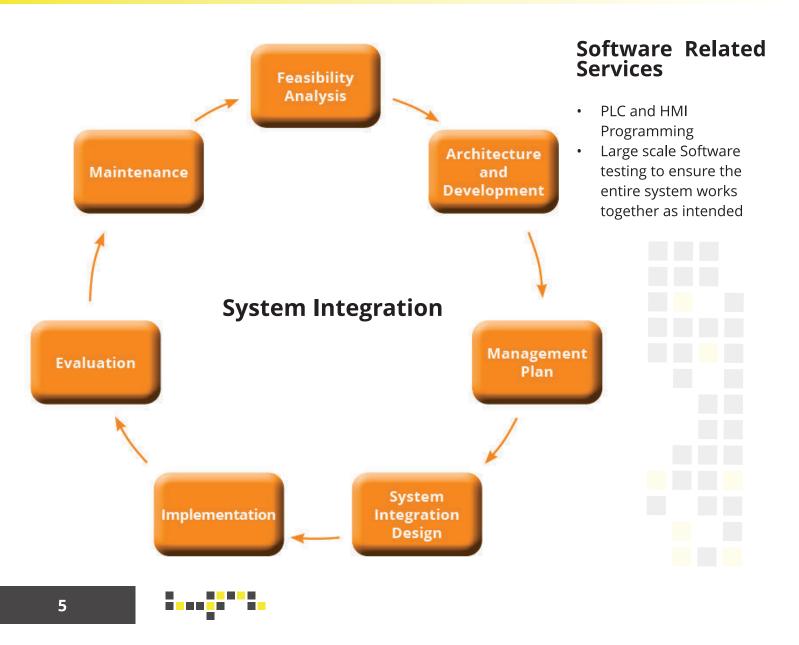


Procedures and Training

Training employees is inexpensive and will likely have the greatest return on investment of anything you will do in your operation. Operations that lack adequate procedures and employee training are likely to suffer from poor quality, low productivity, safety issues, low employee morale, highly stressed supervisors and managers, and a general lack of control.

Service Support and Maintenance

Proper maintenance of warehouse equipment is both a productivity and safety issue. Preventative maintenance plans should be in place for conveyor systems, automated material handling equipment, dock equipment, stretch wrapping machines, palletizers and others. Technical support can be provided both onsite or remotely.





Equipment

Conveyors

Equipment Sorters

Storage **Equipment** **Positioning Equipment**

Unit Load Formation Equipment

Identification and Control Equipment

Cranes

Industrial Trucks



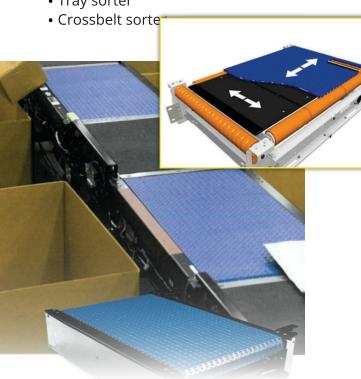
- Roller conveyor
- **Chain conveyor**
- Slat conveyor
- Flat belt conveyor
- Magnetic belt conveyor
- **Troughed belt conveyor**
 - **Bucket conveyor**
 - **Vibrating conveyor**

Conveyors

- Screw conveyor
- **Pneumatic conveyor**
- **Vertical conveyor**
- **Cart-on-track conveyor** (crossbelt)
- **Tow conveyor**
- **Trolley conveyor**
- Power-and-free conveyor
- **Monorail**
- Sortation conveyor

Sorters

- Transfer and diverter modules
- Tray sorter



Positioning Equipment

- Industrial Robot
- Turn Table
- Dock Leveler
- **Ball Transfer Table**
- Rotary Index Table
- Parts Feeder
- Air Film Device
- Hoist
- Balancer



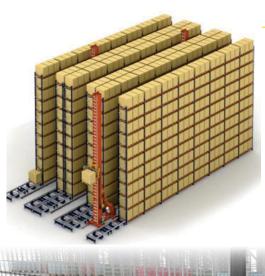






Identification and Control Equipment

- Barcodes
- RFID
- Magnetic Strips
- Portable Data Terminals
- Pick-to-Light
- Checkweighers
- Dimensioning systems



Cranes

- Jib Crane
- Bridge Crane
- Gantry Crane
- Stacker Crane

Storage Equipment

- Block Stacking
- Selective Pallet Rack
- Drive-in-Rack
- Push-back rack
- Flow-through rack
- Slide-through Rack
- Cantilever Rack
- Stacking Frame
- Bin Shelving
- Storage Drawers









Unit Load Formation Equipment

- Bins
- Skids
- SlipSheets
- Tote Pans
- Cartons
- Pallets
- Baskets
- Bags
- Bulk Load Containers
- Crates
- Intermodal Containers

BRILLY BELLEY BELLEY

Industrial Trucks

- Hand Truck
- Pallet Jack
- Pallet Truck
- Platform Truck
- Counterbalanced lift truck
- Narrow-aisle reach Truck
- Automatic Guided Vehicles









Turnkey solutions for your warehouse

Intralogistics, warehouse automation, 4.0 warehouse, smart warehouse, all are keywords that lead to a crucial objective, one of needing to adapt and thrive. To quickly adapt the business to ever increasing challenges, such as new consumer demands and a diminishing pool of human resources, objectives are needed for which investments are mandatory. Only by realizing the need for long-term investments, can a business begin the process of evolving from a stage of survival to one of sustained and stable growth.

Main areas where we provide complete solutions

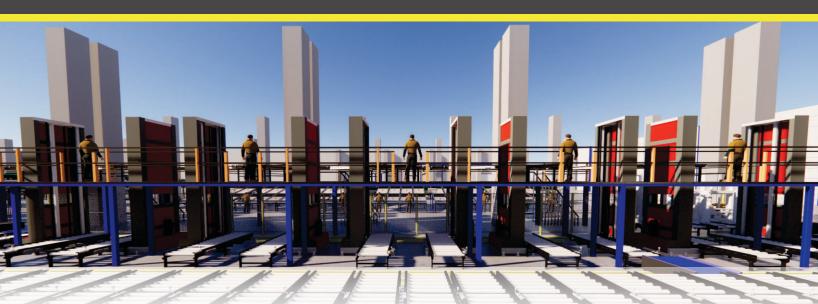
- Inbound handling
- Convey and transport
- Storage and buffering
- Case and piece picking
- Sortation systems

- Robotic systems
- Outbound handling
- AGV systems
- Workstation systems













We have an offer for every business

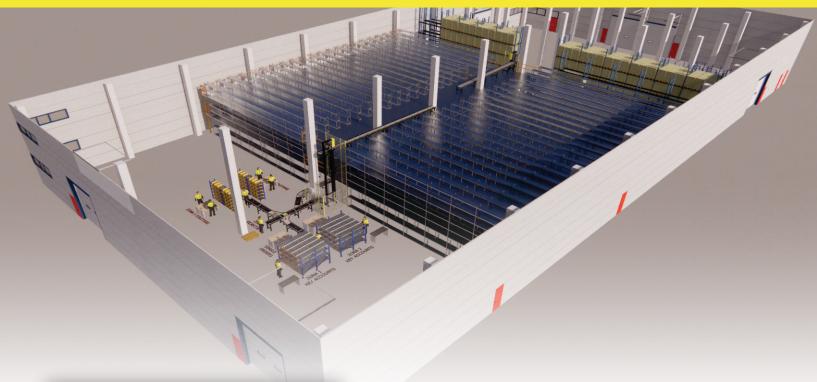
Mach has the technology, know-how and the partnerships needed to offer products to a wide array of different types of warehouses:

- ✓ Distribution center
- ✓ Pick, pack, & ship warehouse
- ✓ Smart warehouse
- ✓ On demand storage
- ✓ Cold Storage
- ✓ Bonded warehouse

investments persist
in the face of ever-changing
consumer demand trends?

The ultimate frontier in warehousing will be achieved when they will function entirely on their own. Even with the advent of industry 4.0 there is much to improve in a warehouse, not only at a technological level, but also within the development of smart and modern business. Together with the evolution of the smart warehouse and logistics businesses, the working sector for employees will undergo drastic transformations. The operators will have also to adapt to consumer demands and to learn how to work with and analyze the produced data and maintain the automated systems.





Benefits for your Warehouse

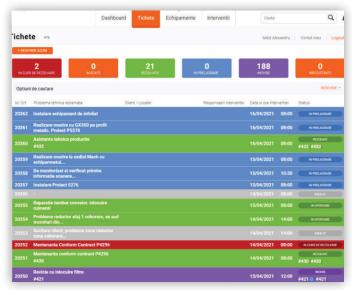


- Control center that allows real-time monitoring of automated processes
- Automated: goods receipt, order-picking, replenishment, goods issue, loading, fleet utilization
- No guesswork about product location
- Picking and put away are faster, and more efficient;
- Integration with barcodes, RFID, voice and ImageID as well as mobile terminals
- · Flexible and efficient resource planning
- Administration of storage space
- Easy-to-learn-system for new employees
- Merchandise can be picked up within an hour

- of arrival, versus weeks or even months
- New personnel require only minimal training vs. a previous multi-month learning curve
- The warehouse handles more orders per day with fewer fulfillment or shipping errors
- Better product awareness: easy view of what turns fast/slow and why
- Better order tracking/easy view of return rates
- Stock levels are kept current, enabling better purchasing decisions





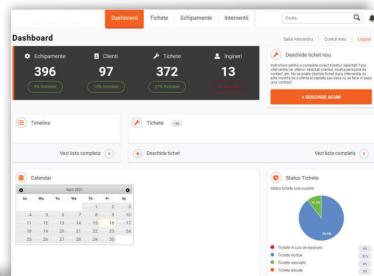


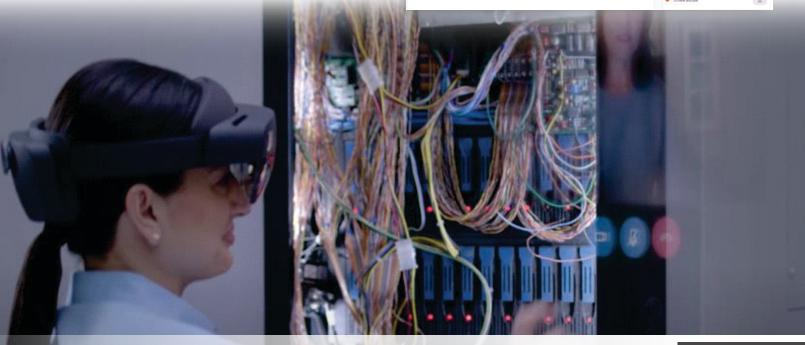
Areas covered:

- Warehouse Automation
- Bottling lines
- Packing machines
- Binding machines
- Conveyor systems
- Labeling systems
- Marking systems Inkjet and Laser
- Quality control systems
- Palletizing machines and industrial robots

Maintenance and Technical Support

With more than 25 permanent employees and 4 collaborating companies, the service department offers a national coverage with headquarter in București and territorial offices located in Bacău, Cluj, Târgul Mureș, Arad, Braşov and Gorj.









Automation division and field specialists

Remote & on-site - support and troubleshooting services for PLCs, servo controller, parameterizations, etc.

Installation and repair division

Installations, settings, configurations and commissioning of systems and equipment sold by the company Mach FTD or sold by other companies.

Maintenance and revision division

Inspection visits, preventive and predictive maintenance.

Support Center

- Our standard support services are offered within the normal working hours 8:00-18:00.
- Extensive services
 (16/5, 16/6 24/7) are
 available, upon request,
 based on SLA support
 contract.

Support services are structured in 3 levels:

- **Support level 1**. In case of a malfunction the customer will report the problem to MACH support center for fast and competent support regarding application/ operating issues or technical problems which cannot be solved by the customer's own trained personal. First level support is operated by an engineer having general knowledge of the project.
- **Support Level 2** MACH can ensure rapid and efficient support in case of a malfunction by connecting via VPN to customer's system.
- **Support Level 3** Site intervention for malfunctions can not be fixed remotely.





Industrial equipments and solutions

ABB: Sweden - Industrial robots

AMBAFLEX: Netherlands - Special systems of conveyors **CONVEYOR UNITS:** Great Britain - Conveyor systems

DOMINO: Great Britain - Inkjet printers, laser marking systems, thermal transfer printers, labeling systems

ERGOPACK: Germany - Pallet strapping

FLEXLINK: Sweden - Conveyor and pallet automation system

INTERROLL: Switzerland- Global provider of material handling solutions

GEBHARDT: Germany - From conveyor rollers to aisle stackers and complete intralogistics systems

PRIME VISION: Netherlands - Computer vision and AI solutions

ROBOPAC: Italia - Semi-automatic wrapping machines, automatic packaging solutions, industrial wrapping

machines and case packers machine, palletizer, AGV &LGV shuttles

SATO: Japan - Label printing equipment

SMI HANDLING SYSTEMS: Germany - Vacuum technology

SMI PACK: Italy - Shrink film packaging systems

ZEBRA: USA - Label printing, barcode scanning and international coding systems





























Components, sensor systems, vision

COGNEX: USA - Vision systems

COVAL: France – Vacuum automation technology

FESTO: Germany - Components, pneumatic and electrical sensor systems

KEYENCE: USA - Sensors and vision systems

SICK: Germany - Sensor elements **SIEMENS**: Germany- Sensor elements **WENGLOR**: Germany - Sensor elements









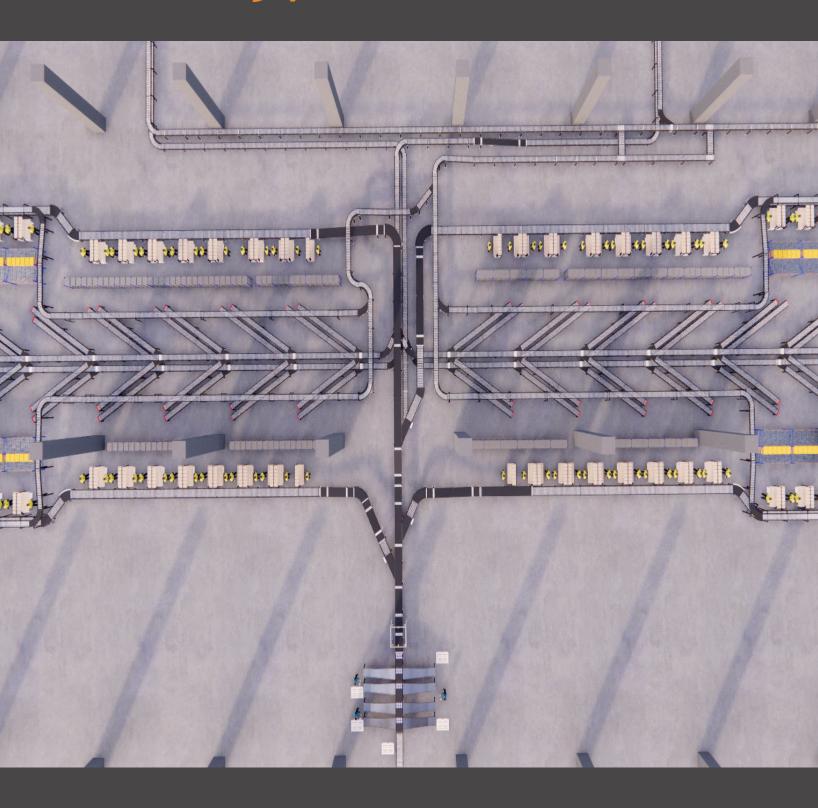












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