almaflex

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## **INTRODUCTION**

The modular system ALMAFLEX (manual flexible storage) allows the management of parts linking the different steps of the productive process, generating buffers between them, even integrating the final transportation (ALMAFLEX can be integrated into delivery trucks), and it can also be used at the final consumption points.

It is a completely modular and standard system which allows easy handling of the parts, even those which are decorative. Even though the conception of the system is to be manually operated, market demand has driven the incorporation of some automatic actuators.

Different accessories such as rail switches, work station stocks, carts or transfer systems allow many different configurations depending on the customer's requirements and the space availability.

ALMAFLEX was born as an answer to specific needs of reconfiguration in storage processes as well as in the logistic flows linked to them.





### PHILOSOPHY



The philosophy of ALMAFLEX is based on the following concepts:

RE-CONFIGURABLE. At any time the flows can be reorganized, dimensions of the storage area can be changed, different spaces assigned, etc. There but t respond to continuous changes in the production programs.

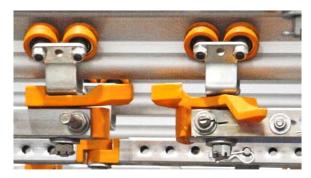
BIDIRECTIONAL. Parts are hung on trolleys and transported onto rolling transport units (rosaries) that can be automatically linked to each other and accumulated in accumulation bars. Accumulation bars, rosaries and all the rest of ALMAFLEX elements have been designed to permit bidirectional movement.

MODULAR. Possibility of increasing, reducing or reconfiguring the original installation. Accessories, functional assemblies or complete applications, even comprehensive studies and turn-key logistic solutions can be delivered.

FLEXIBLE. Adaptability to the environment, avoiding obstacles and making the best of the available space.







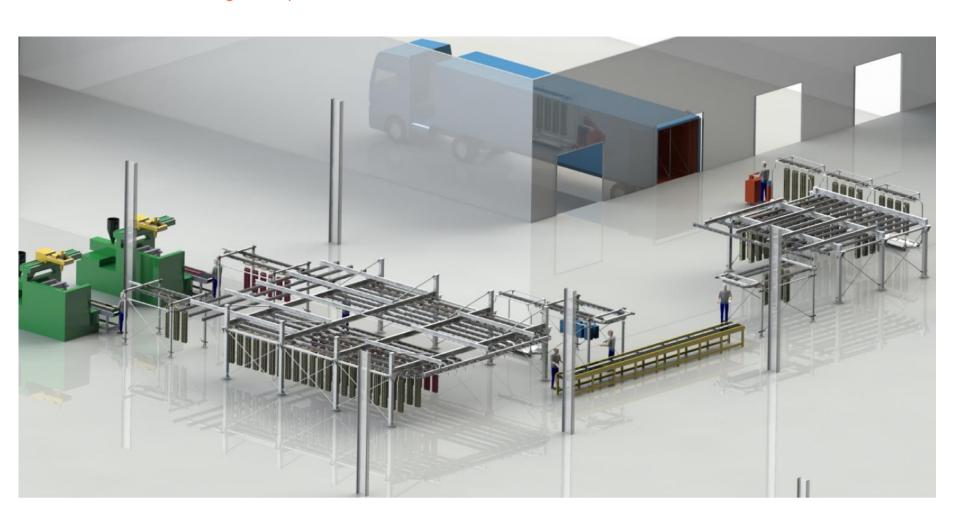
## **GENERAL CHARACTERISTICS**



- Totally modular, standardized and industrialized system.
- Manual operation, possibility of integrating not manual actuators.
- Allows space optimization, fitting the shop stock dimensions to the actual dimensions of the part and stock size of parts needed.
- Accessories for flow management and system connection: stop stations, link release stations, rail switches, transfer bars, carts, etc.
- Possibility of getting the system into the delivery truck, linking processes between supplier and customer, reducing logistic times and avoiding unnecessary handling. Ideal for JIT applications.
- Accumulation bars made of self supporting aluminum profile, geometry reinforced to guarantee alignment with few fixing points to the support structure.
- Specifically designed support structure, integrated and adjustable, ideal for layout changes.
- Possibility of anchoring the structure to the ceiling or to the floor of the building.
- Specific design of the hanger depending on the part; different types of hanger: bag rack, metal, plastic, rubber.
- Customers autonomy for rapid&simple assembly, installation or reconfiguration.



general plan





#### functional elements



#### **ROSARY**

- Configuration according to customer needs, with one single section or with more than one (multi-section) and adjustable pass of the part.
- Possibility f induding a linking system.
- Must be equipped with an interface between the sleeper and the load to eliminate lateral torque.



#### **ACCUMULATION BAR**

- Accumulation bar made of reinforced anodized aluminum
- Different fixtures to hold the bars to the structure
- Bidirectional and reconfigurable

4

functional elements



#### TRANSFER BAR

- Allows the interchange of rosaries between the main shop stock and work station stocks or consumption points, even reaching the delivery truck.
- Ideal for short distances.

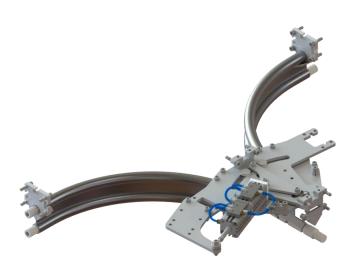


#### TRANSPORT CART

- Allows the interchange of rosaries between the main shop stock and work station stocks or consumption points, even reaching the delivery truck.
- Ideal for medium distances.
- Possibility to engage carts to operate in a milk-run system

4

functional elements



#### **RAIL SWITCH**

Possibility of being automatically operated



#### STOP AND LINK RELEASE STATION

- Stop station
- Link release station
- Stop and link release station

# TECHNICAL SPECIFICATIONS



Maximum load per rosary (with 2 trolleys)	46 Kg
Minimum distance between accumulation bars	250 mm
Recommended distance between pillars in main shop stock	9000 mm
* wider distances attainable depending on the application	3000 mm
Horizontal curves angle	0-1809
Horizontal curves radius	300, 350, 500 mm
Maximum load of transport cart	230 Kg
Maximum speed of transport cart	8 Km/h
Maximum load on transfer bar	230 Kg

## APPLICATION GALLERY

## Most common ALMAFLEX applications:

- Shop Stock
- Work station stock
- Accumulation buffer
- Manual transportation of parts





































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