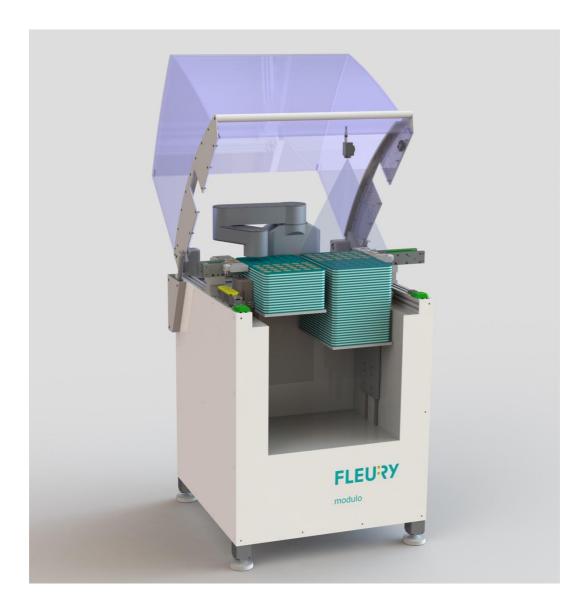


modulo PAL

The new palletising cell, an innovative and flexible concept for automatically feeding your production machines.



The economical and automated palletising cell, modulo PAL, significantly reduces handling.

Keep your standard packaging, eliminate useless handling.

99.5% reduction in transport pallets.

Sorting blanks, finished parts, and scraps is automatically managed.

Feed 1 to 2 machines simultaneously with a modulo PAL.



THE SMART COMPONENTS OF THE modulo PAL

- THe modulo PAL is equipped with 2 parts storage lifts, one for blanks and one for collecting finished parts.
- Thanks to our effective vision system, we can control the presence and orientation of the parts in your packaging. Using this system, your modulo PAL will ensure the part is properly positioned before it is placed in the transport pallet. Parts can therefore be fed randomly and you gain productivity.
- The modulo PAL is equipped with the MP robot, a 3-axis robotic arm developed by Fleury

HANDLE NUMEROUS COMPONENTS

Does your process require handling many different components, e.g. assembly components? No problem! Thanks to its design, modulo PAL can process a multitude of parts in the same work sequence.

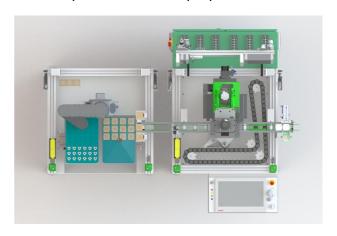
SA. It ensures the pick and place management of your parts.

- MP robot feeds your transport pallets and receives and stores finished parts in your packaging.
- Equip your modulo PAL with the turning option, to machine your parts regardless of feed direction.
- Equip your modulo PAL with the connections to work with two circular transports simultaneously.

As soon as a set of parts is finished, MP robot takes the transport pallet, immediately replaces it with a loaded pallet, and continues the process. This eliminates wait times and reduces useful transport pallets to two.

PAIR modulo PAL WITH modulo ATC FOR SEPARATING YOUR PLATES AND BRIDGES

- Feed your 50 x 50 mm trays packaged for separation by vertical machining of parts.
- Place the trays to be separated in the packaging specifically provided for feeding the 50 x 50 mm trays.
- Eliminate the de-palletisation handling of routed parts.
- Considerably reduce your transport pallet investment.
- Simplify the collection of your scrap in the container provided for that purpose.

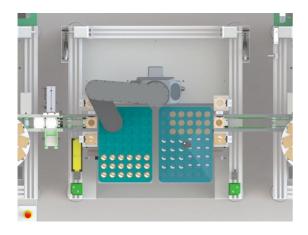


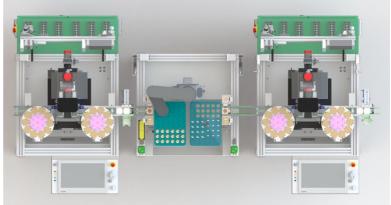
PAIR modulo PAL WITH modulo HA, LARGE LOAD CAPACITY MAGAZINE

- Obtain a perfectly automated palletisation and de-palletisation station.
- Fill your transport pallets in masked time.
- Recover your finalised parts packaged in masked time.

PAIR modulo PAL WITH ONE OR TWO modulo SP packing machines

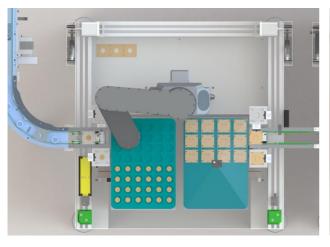
- Equip bridges and plates with axes, rubies, and other components.
- Feed packing machines with sets of parts to assemble your plates, bridges, and wheels.
- Automatically mount wheels, such as the reversing wheel for example, without handling.
- Store scrap parts in 50 locations provided for that purpose and evacuate them from on-going production to allow monitoring for anomalies.
- Considerably reduce your transport pallet investment.

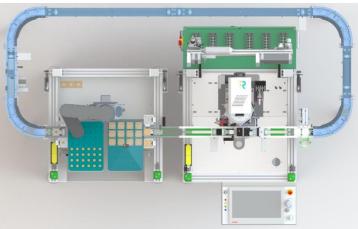




PAIR modulo PAL WITH modulo HO, FOR HORIZONTAL WORK

- Feed your 50 x 50 mm trays packaged for horizontal work, lapping and separation.
- Eliminate de-palletisation handling of routed parts.
- Considerably reduce your transport pallet investment.
- Simplify the collection of your scraps in the container provided for that purpose.





PAIR modulo PAL WITH AN AUTOMATIC BLASTING MACHINE

• Collect and store the parts in your packaging using the vision system.

SPECIFICATIONS modulo PAL

available magazine storage	L x D: 250 mm x 360 mm
height of storage column	650 mm
vision system resolution	approx. 0.01 mm
network connection	ethernet, RJ45
compressed air consumption	6 bar, 60 l/min
electrical consumption	400V, 3A
main dimensions H x L x D	1700 x 800 x 1200
overall dimensions H x L x D	1700 x 950 x 1400
weight	300 kg

OPTIONS FOR modulo PAL

preparation for two circular transports

extreme resolution vision system (approx. 0.005 mm) to identify miniature parts, e.g. wheels, pins, rubies, etc.

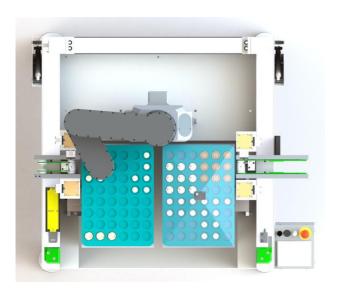
stand-alone execution with CPU and integrated console compatible with EIP control modulo

turner to orient parts to feed randomly placed parts

pick and place gripper for parts on sandwich support (for part output)

feed belt with vision system to recover parts from third-party machines

bin for collecting scraps







machines et composants

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