

Robot Feeding

## Vision Picker

Packaging process even more flexible, streamlined and cost-effective



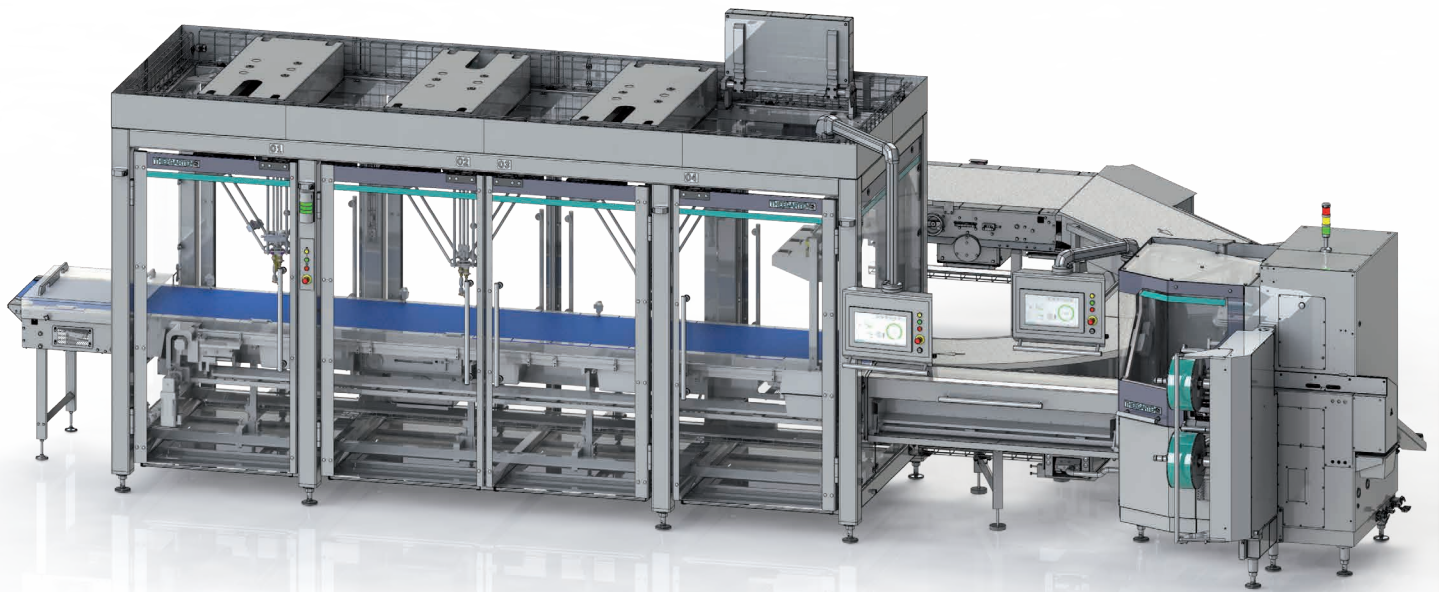
### Robot Feeding in General

If sensitive confectionery products that also have an irregular shape are supposed to be fed gently to the initial packaging machine, robot feeding is the tool of choice. Until now, the machines from Theegarten-Pactec had to work with counter-moulds for robot feeding. Due to the manufacturing process, there is a fixed number of products in the counter-moulds, which are inserted into the feed chain of the packaging machine by a robot using a multiple tool. This process is particularly suitable for high output quantities (approx. 1,000 products per minute per packaging machine) when rarely changing product formats. The complex counter-mould transport system can thus be linked to the production line and run fully automatically with the packaging systems. However, if medium output quantities (400 - 600 products per minute per packaging machine) with frequently changing product geometries are produced, robot systems with counter mould handling are generally too complex in terms of format changeover, require too much floor space and generate high investment.

### Vision Picker

Thanks to the new development "Vision Picker", time-consuming counter mould handling during the packaging process is no longer necessary. The products are transferred directly from the production line to the feed belt of the robot system. Alternatively, it is also possible to manually feed the products onto the manual feed belt. In both cases, a defined alignment of the product stream in front of the robot is not necessary. By means of an integrated image processing system, individual products are detected in the disordered product stream. Each product is individually sucked up by the robot and placed in the feed chain of the packaging machine, already correctly positioned, to be safely and reliably wrapped as usual. The advantages of the new development are obvious: thanks to the "Vision Picker," also different product formats can be wrapped even more flexibly and thus faster and more economically.





## Flexible Packaging

The new development can be vividly demonstrated, for example, by the packaging process of small, moulded chocolate bears. At a speed of 400 products per minute, the delicate chocolate figures are gently packaged by the CWM2 in a bunch wrap.

The modular design of the CWM2 enables reliable processing of different products. Changeover to different folding types is also possible without any problems. It is quick and easy to switch between double twist wrapping, side twist, top twist, bunch wrapping, envelope folding or protected twist. When it comes to combining the different types of wrapping, the CWM2 even proves to be particularly adaptable. Most of the units that are not required can remain on the machine. This means that Theegarten-Pactec customers can avoid unnecessary changeovers and downtimes, and thus costs.

The format change of the entire system (program change within the robot feed and the exchange of the feed chain, as well as the format parts of the CWM2) can be realized in approx. 45 minutes. If the folding type is also to be changed, the process requires approx. 2 hours.

## High Performance

In a modified configuration, the robot feeder can also be combined with high-performance machines from Theegarten-Pactec. Thus, it is also possible to feed the products with an output of more than 1,000 pieces per minute to the packaging machines.



1

### Flexibility

The system is changed over to a new product format within 45 min. Two hours are needed to change the product and the folding type.

2

### Space-Saving

The product stream does not have to be pre-assembled over several space-consuming belt stages. Camera detection allows the products to be removed from a disordered arrangement and fed to the packaging machine.

3

### Security of Investment

The streamlined packaging process saves investment costs compared to a system with removal of products from counter moulds. The system can be equipped for multiple folding types and product geometries from the beginning or added at a later stage if market requirements change.

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