Empty pallet magazines $\langle \mathcal{E}_{\mathbf{x}} \rangle$ Available for use in hazardous areas!

Up to 15 of your pallets can be placed in the magazine (CP-, Euro- or special pallets).

The bottom pallet will be placed on the conveyor system.



■ Type LPM-2 Designed to handle both two and four-way pallets with automated forks.



Designed for four-way pallets with automatic lateral lifting hooks.

Manipulators

- Cost effective, safe and conve-
- The special gripper unit allows the operator to raise the containers easily and to place them onto a pallet.





The whole Manufacturing Programme

A range of products is available that has particularly been designed to meet your requirements on gravimetric filling of containers from 1 kg to 3,000 kg. You can choose from a variety of semi-automatic and fully automatic filling machines. We can offer complete systems for fully automatic packaging processes through the combination of filling equipment with our conveyor and palletising system. Please contact us for further information:









Our Services:



24h hotline: + 49-45 31/89 09-22 2



Teleservice: If required, we are immediately at your disposal via Teleservice. A special feature (optional) of our filling machines allows us to have access to your control system through a modem-to-modem connection. In this way, we can localise malfunction and take appropriate measures for fault rectification.



Spare Parts Services: We guarantee long-term and optimum supply of all required spare and wear parts for your equipment.



Inspection and Maintenance: Regular inspections and maintenance increase the availability of your equipment.



Equipment Optimisation: Your equipment should be adjusted to new fields of application.

- Revamping to latest design
- Revamping to new application
- Optimisation of output and availability

Training: Regular training of your operating and maintenance personnel guarantees a high level of efficiency of your equipment. We offer training in our works or directly at

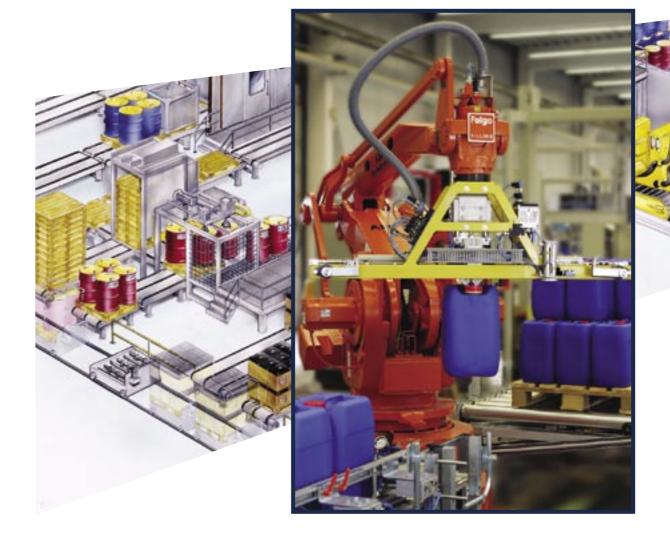




Rögen 6a **Gewerbegebiet West** D-23843 Bad Oldesloe Phone: +49-45 31/89 09-0 Fax: + 49-45 31/8 72 96 info @ feige.com www.feige.com

PAL/E/4804

Palletising Systems



FP-S = FP-V = IRP = LPM



FEIGE FILLING TECHNOLOGY USA LLC FEIGE FILLING FRANCE S.A.R.L. FEIGE FILLING TECHNOLOGY ASIA PACIFIC PTE. LTD.

The Palletisers

Palletising Robots

The Palletising Tools

Push palletiser type FP-S

- Plastic or steel drums are optimally palletised with slid plate
- Palletiser can be designed for different drum diameters and pallet schemes.
- Nominal output up to 60 pallets per hour referred to 4 drums in 2 rows.



■ Stackable containers can also be palletised in multiple layers with the push type palletiser.

(Ex) Available for use in hazardous areas!



(Ex) Available for use in hazardous areas!

Vacuum palletiser type FP-VH

- Compact design suited for smooth top containers such as steel drums.
- Vacuum grippers place containers in any combination.
- Nominal output up to 70 pallets per hour referred to 4 drums in 2 rows.



■ The pick and place vacuum palletiser can even be used with plastic drums with stable lids or tops.



When handling different container sizes, pallets and pallet schemes the use of palletising robot offers you one of the most cost effective and optimal solutions available today. Advantages include high palletising outputs, long term durability and future flexibility when new containers and palletising schemes are needed. All tooling design and programming is done in-house offering you a single source robotic palletising solution to meet your particular needs.

Palletising robot

type IRP6-420-2.8

Palletising robot type IRP4-160-2.9



- This four-axes robot shown above with a combination tool can handle pallet placement and containers up to
- With a maximum working range of 2900 mm this model performs 450 working cycles per hour.
- When additional articulation is needed at the tooling this model can be upgraded to six-axes.



- This six-axes robot shown above with another combination tool type can handle pallet placement, slip sheet placement and handle container loads of up to 300 kg.
- With a maximum working range of 2800 mm this model performs 450 working cycles per hour. Note: The nominal output is reduced as the container load reaches maximum handling capacity.

■ A safety fencing system protects your operators from the operating area of the palletising system.

The type of your containers, required nominal output and desired pallet schemes define the choice of palletising tools.

Vacuum tools

Where suitable, vacuum grippers offer several advantages. Almost any palletising scheme is possible and change over from one container size to the next is simple where vacuum pads can remain the same.

> Single tool In-line tool

Pneumatically operated mechanical grippers hold containers in various configurations. The change over of tooling to handle different con-

Mechanical tools

tainers is more complex than vacuum pads.

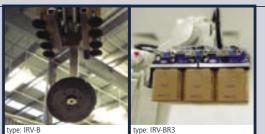
Single tool In-line tool

Vacuum grippers are mostly not suited for cans.

Boxes

Pails

Cans



Mechanical grippers are mostly not suited for boxes.

Drums

Pallets

Slip sheets





pallet grippers can be Pallets can also be supplied via pallet magazine (see page 5).

Container grippers and

Quick-change tool system



Where multiple tool sets are needed to handle complex palletising requirements we offer automatic quick-change tooling. This option requires limited operator intervention and ensures continuous operation of your packaging line.