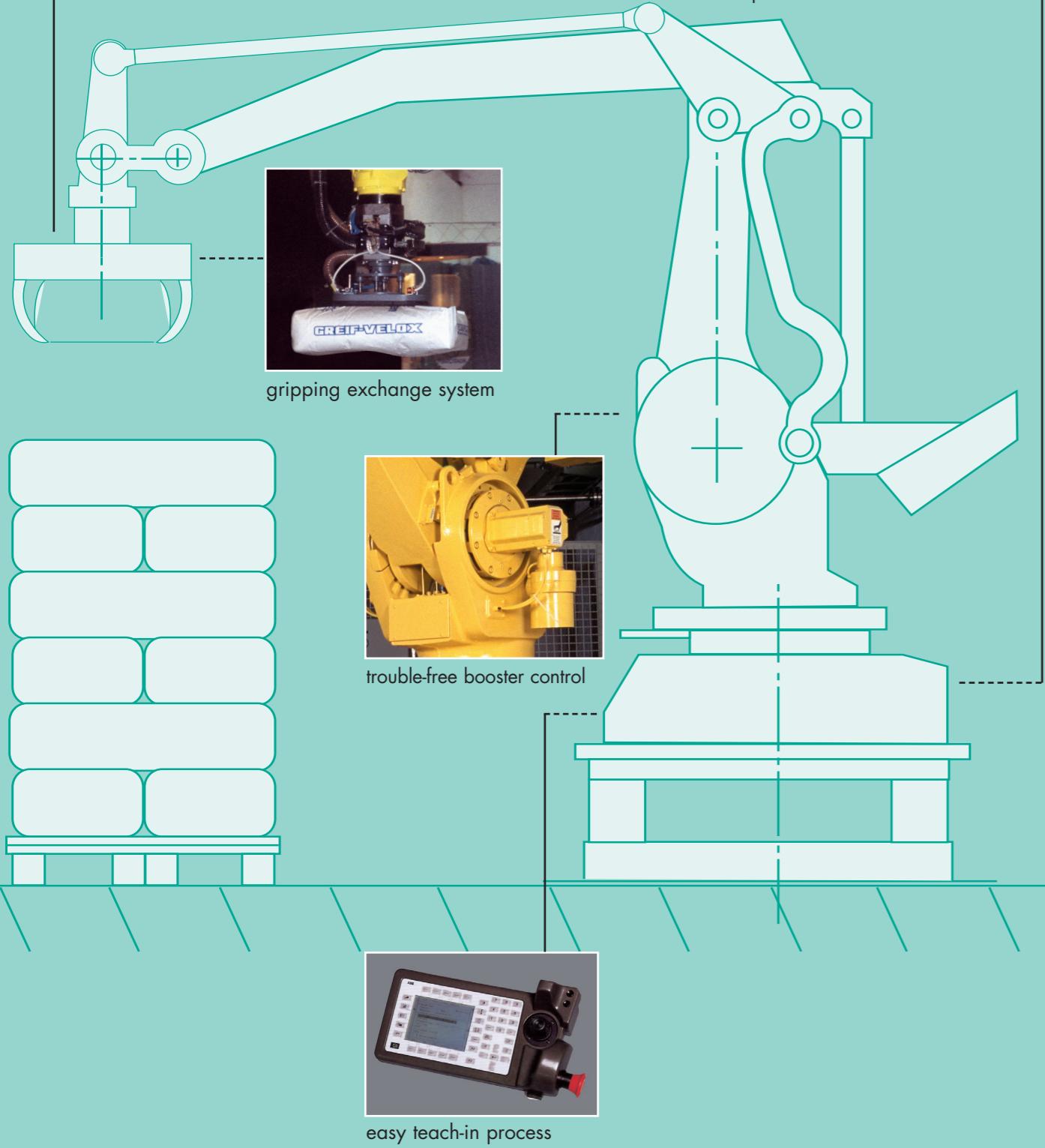


variable gripping systems



central control and voltage supply as well as central compressed air connection



GREIF-VELOX

packaging solutions

- Filling systems for valve bags**
- Filling systems for open-mouth bags**
- Filling systems for big bags**
- Emptying systems for big bags**
- Palletizing and robot systems**

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**Palletizing and Robot Systems**



Palletizing and handling robots



A plenty of new possibilities

Model VELOPACK

The flexible robot solutions of Messrs. GREIF-VELOX may be adapted to each customer specific application. Depending on palletizing material, as for ex. bag material, drums, cardboard boxes, empty pallets or cover sheets, the new or old plants are integrated into the planning. In view of gripper- and control technics, self-developped by GREIF-VELOX, the VELOPACK robot may flexible be used.

Extremely flexible

The new VELOPACK does not handle only pallet exchange, flat and shaped intermediary deposit as well as automatic cover layers, but also all versions of a product. The robot palletizes as well single products as also multiple products, which distinguish by different sizes and weights - from different boxes to tins, cases, bags and other stiff products. It organizes full pallets, blend loads, several pallets or pallet parts. The VELOPACK coordinates several palletizing stations, which are fed by different feeding belts.

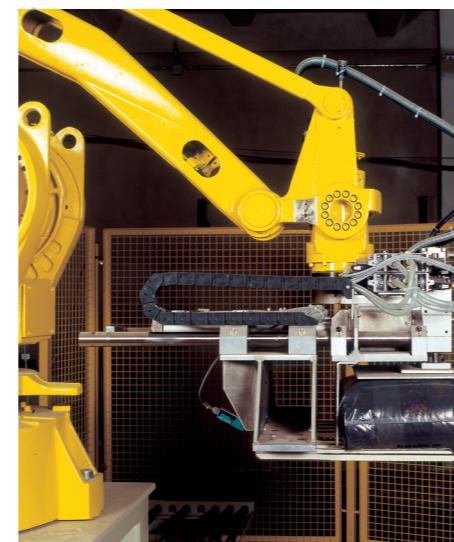
High availability

The VELOPACK is assigned for the use in traditional work environment with hard requirements of availability, low maintenance expenditure and long service life. Moreover the new VELOPACK has excellent MTBF (Mean Time Between Failure)-results and is supported by extensive services: after-sales service, maintenance, spare parts, training and more.

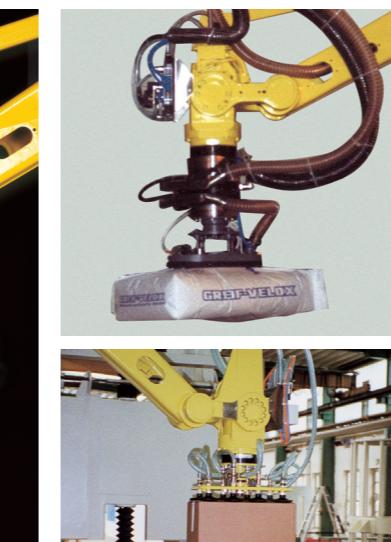


VELOPACK-use under minimum space conditions

Handling devices for the various applications



gripping systems for protective bag palletizing



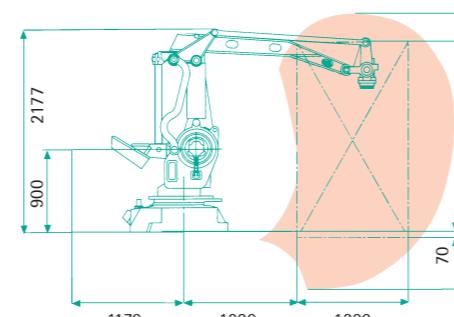
suction grippers for bags, cardboards, drums or cover sheets



complete robot cell including empty pallet magazine, cover sheet placer and stretch wrapper



load protection including conveying technology from one supplier



optimum equalization of the bags before palletizing

Optimized for palletizing

The VELOPACK is optimized in order to reach quick movement from position-to-position. It is characterized by 4 axis, a long arm for bigger ranges and shorter cycle times for capacity increase. As it can be programmed, it can be adapted to new problems within short time. As it is based on a standard robot and standard software modules, the level of the investment is a pleasant surprise.

- 160 kg handling weight
- selectable layer patterns
- handling of bag material, drums, cardboards, cover sheets and empty pallets
- capacity up to 600 handlings/h
- positioning accuracy $\pm 0,5$ mm
- way repeat accuracy $\pm 1,5$ mm
- radius of operation max. 2,9 m
- automatic gripping-change systems
- easy programming in teach-in process
- optional process device

Tracking

The VELOPACK handles the most complex palletizing problems with extreme accuracy and fast. Because of the TrueMove functions the robot works with exact channels, independant of the speed. This allows that corners are defined independant of the selected speed and tested and the optimization periods are drastically reduced.