

inspired by technology



→ **pester\_robatic palletizing systems**

**GLOBAL FLEXIBILITY\_** We are a dynamic company with a global presence and operate as a network of specialists from various cultures and nations. With this global philosophy we have a unique insight into the latest trends and practices. We have learned to think in your dimensions and adapt ourselves to your needs in the diverse world-wide markets. **BRIGHT EYES\_** We are characterized by the unique quality of relationships we have with our customers. Be inspired by an open and creative corporate culture. Our highly motivated people make all the difference. **POWERED BY PARTNERSHIP AND NETWORKING\_** The technological perfection of our machines is one aspect, but developing long-term partnerships with our customers is equally important to us. These two together result in turn-key solutions.

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**INSPIRED BY TECHNOLOGY\_**Our strength is innovation. The distinct superiority in the life-cycle costs and machine availability in addition to straightforward programming and highest flexibility offered by robot systems convinced us to adopt palletizing systems based solely around an industrial robot. Equipped with a state of the art robot, gripping and process control engineering, the palletizing units demonstrate supreme precision and versatility in automated product handling. The modular conception according to GMP standards can be easily extended to accommodate any new requirements in the future. This provides machinery with intelligent technology, the highest levels of performance and enhanced operating comfort, making automated packaging easier and more efficient throughout the world. **PASSION FOR DESIGN AND QUALITY\_** Clearly set out, functional and easy to clean – experience modern machine design which satisfies all aspects of your production. Each Pester palletizer stands for highest quality, ranging from the adaptable construction to the hardware and software, up to the simplest operator guidance. Convincing machine technology with first class performance. **EASY TO BUY FROM\_** We have been active in the world of pharmaceuticals and cosmetics for many years – we understand your requirements and speak your language. Our project managers and a world-wide network of experts accompany you through the entire process. You benefit from competent advice, short project times and targeted implementation.



## PEWO-pal 6.1

► **COMPACT** Space-saving palletizer with one pallet station that is ideal for handling solutions at low speed. Ultramodern robot technology that is in operation thousands of times throughout the whole world guarantees top machine availability and low life-cycle costs over the entire productive life of the machine.

### TECHNICAL DATA

Length	2.300 mm
Width	2.750 mm
Height	2.250 mm
Max. performance	10 operating cycles/min.
Pallet size	all current pallet sizes
Max. pallet height	1.650 mm (including pallet)



## PEWO-pal 6.2

► **ECONOMICAL** Efficient robotic palletizer with two pallet stations for straight-forward line integration. Well-engineered safety technology and ergonomics provide for high user safety and excellent operating comfort. Twin pallet stations allow the exchange of pallets without having to stop the line.

### TECHNICAL DATA

Length	2.300 mm
Width	3.370 mm
Height	2.250 mm
Max. performance	10 operating cycles/min.
Pallet size	all current pallet sizes
Max. pallet height	1.450 mm (including pallet)







## PEWO-pal 6.4

► **FULLY AUTOMATIC** This palletizer with four pallet stations offers ultimate operating efficiency. An integrated adjustable pallet magazine with conveyor system for fully automatic pallet handling guarantees an unattended production. Extremely simple integration to automated guided pallet transport systems.

### TECHNICAL DATA

Length	3.915 mm
Width	3.100 mm
Height	2.250 mm
Max. performance	10 operating cycles/min.
Pallet size	all current pallet sizes
Max. pallet height	1.650 mm (including pallet)



## PEWO-pal 5.5

► **POWERFUL** Fully automatic palletizer with five pallet stations offering solid robotics for increased loads. An additional pallet buffer provides the operating staff with free space. Tried and tested gripping technology for safe handling of heavy packaged goods.

### TECHNICAL DATA

Length	6.280 mm
Width	3.800 mm
Height	2.250 mm
Max. performance	8 or 12 operating cycles/min.
Pallet size	all current pallet sizes
Max. pallet height	2.000 mm (including pallet)





## Palletizing for bottles / PEWO-pal 5.5

► State-of-the art gripping technology that enables the handling of multifarious packaged products such as individual bottles, dispensers, cans, shrink-wrapped collations, etc. The unified operating concept presented by an intuitive HMI facilitates adaptation, maintenance and service. Consistent communication with the entire packaging line is also ensured.



## Line automation / PEWO-pal 6.2

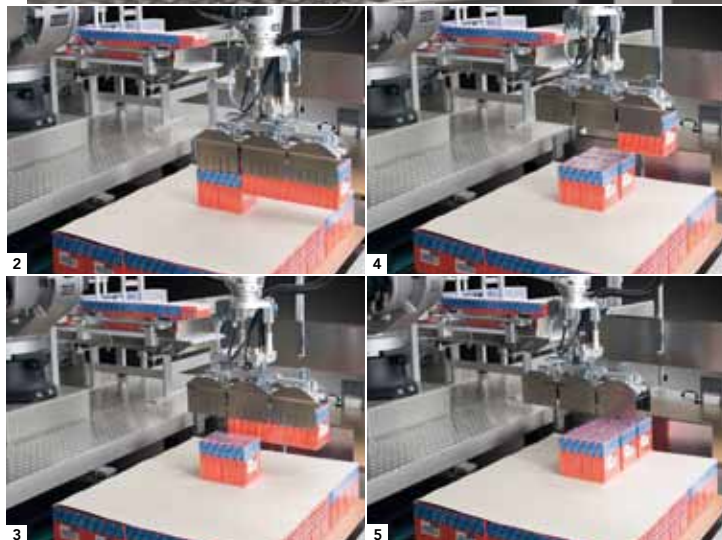
► The next step to a fully automatic filling and packaging line.  
Depalletizing: Camera-controlled robot navigation guarantees a precision tray selection and pick-up. Full trays are carefully presented to the filling line for onward processing.  
Palletizing: Withdrawal of finished individual products from the production line, loading on to trays and pinpoint positioning on the pallet.





## Multi pick-and-place

High-performance palletization by picking up multiple collations in one movement. The implementation of diverse palletizing schemes through intelligent software guarantees superior layer stability.



## Pester Pattern palletizing software

With the Pester Pattern palletizing software you can plan and create the optimum pallet scheme on your own without having to acquire prior programming knowledge. Our software offers you a whole variety of palletizing schemes that you can combine efficiently and individually.

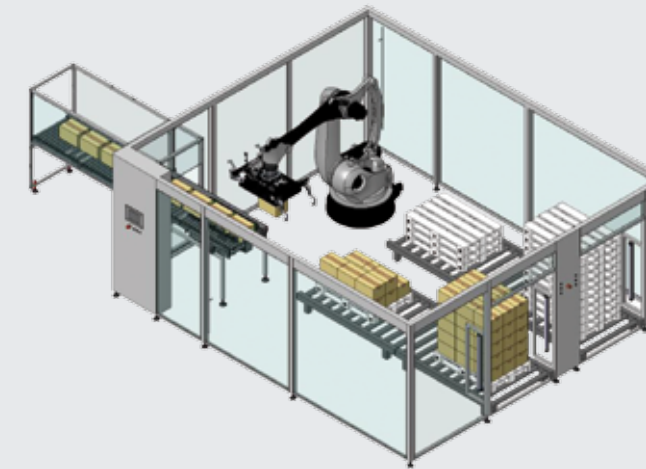


- 1 .....  
Entry of case dimensions  
and pallet sizes  
.....
- 2 .....  
Software generates the best  
capacity utilisation and creates  
proposals for palletizing patterns  
.....

## Alternative customized solutions

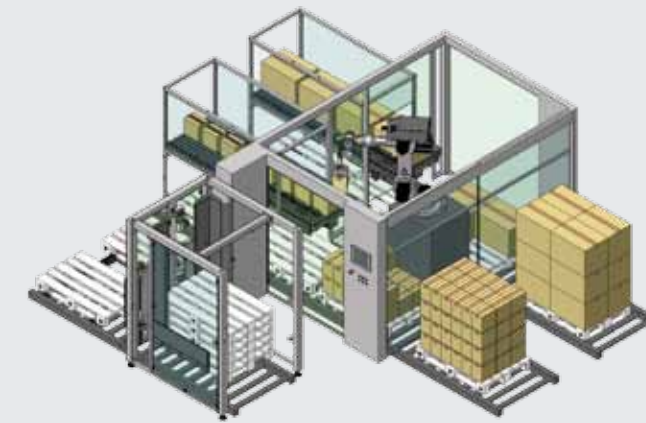
### MULTIFUNCTION TOOL GRIPS PALLETS AND PRODUCTS

Economical solution where the robot takes over the magazine function by selecting and positioning empty pallets and exchanging its gripper tool automatically to begin the next loading cycle. Integrated pallet buffer for the loaded pallet.



### ROBOT OPERATES SEVERAL LINES AT A TIME

A centralised system to palletize various products from multiple production lines simultaneously. Automatic pallet feeding from a central pallet magazine.

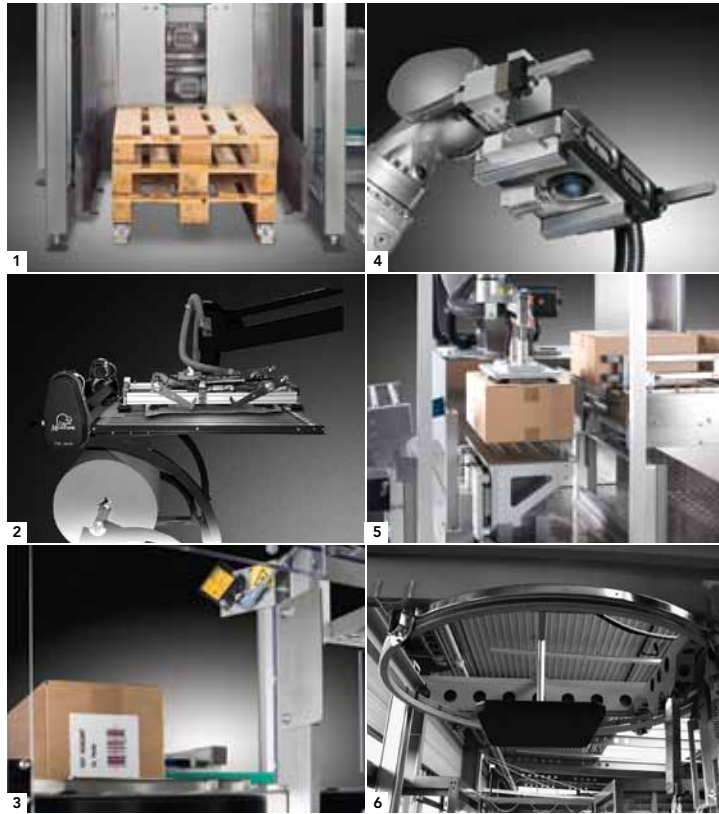


### PROGRAMMING CAN BE SO SIMPLE:

- Time-saving: create a new palletizing scheme in less than five minutes at the click of a mouse
- Flexible: free selection of any format parameters, layers and layer card positions
- Efficient: the optimum utilisation of the pallet capacity is calculated automatically
- Easy: comfortable operation through graphic user interface and menu navigation
- Clearly arranged: depiction of palletizing process and robot handling through 2D und 3D simulation
- Faultless: direct data transfer of all format parameters to the robot
- Fast: format changeover without the need for reprogramming
- Versatile: single pick-and-place, multi pick-and-place and single place

## Optional equipment

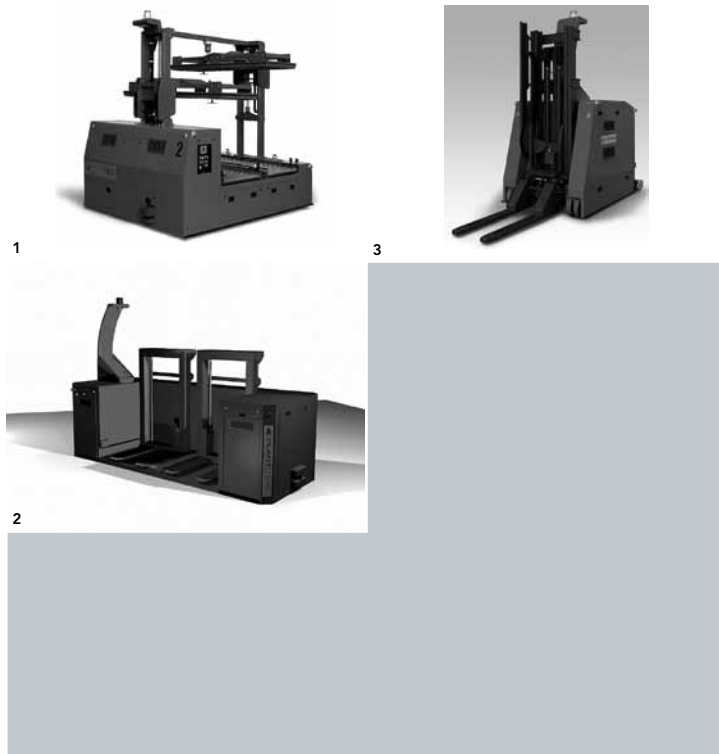
Diversification over the entire line: numerous options provide maximum compatibility for fully automated product handling right up to the stretch-wrapped pallet



	(without illustration)		
	Rejection		
1	Pallet magazine	4	Camera technology (layer and position monitoring)
2	Slip sheet magazine	5	Weighing
	(without illustration)		(without illustration)
	Labelling technology		Strapping
3	Monitoring by Bar Code Reader and scanner	6	Integrated pallet stretch wrapper

## Link to AGV

Fully automatic line integration across the entire logistics chain through link to automated guided vehicle systems with varying navigation systems.



1	AGV with two roller sections for conveying one to two pallets
2	AGV with forks for free movement in all four directions for conveying two pallets
3	AGV with forks for conveying one pallet

## Robot technology

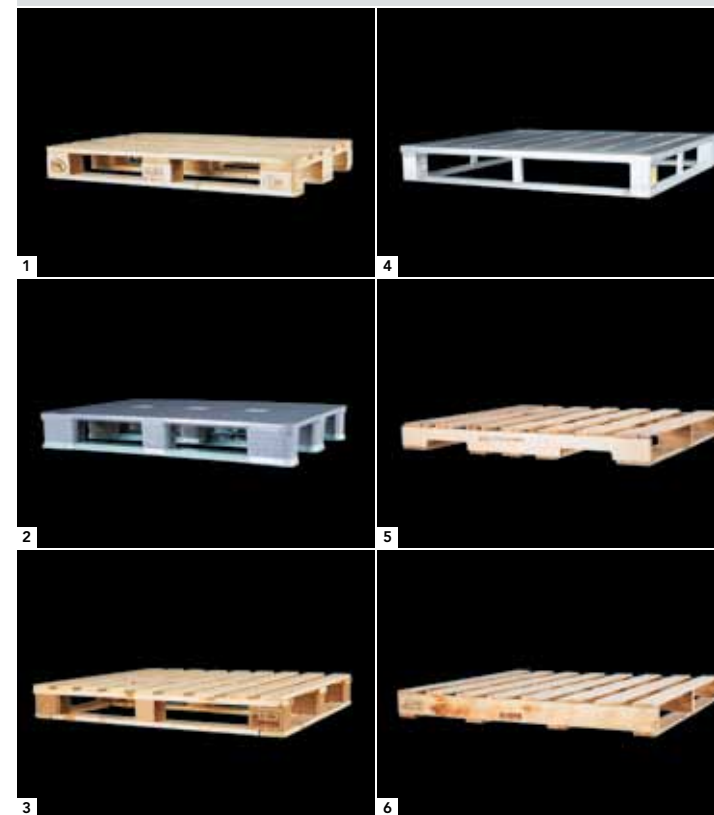
We ensure that the optimum robot model is installed into the palletizing system depending upon the given task, available space, load capacity and performance. While offering virtually 100 percent availability, the KUKA robots combine reliable, flexible and precision product handling on our palletizing systems. Other robot systems can be integrated alternatively.



<b>1 KUKA KR 180 PA</b>	
Robot axes	5
Working envelop max. reach	3.200 mm
Performance (cycles/min.)	8
Payload	180 kg
<b>2 KUKA KR 40 PA</b>	
Robot axes	5
Working envelop max. reach	2.091 mm
Performance (cycles/min.)	12
Payload	40 kg
<b>3 KUKA KR 16</b>	
Robot axes	6
Working envelop max. reach	1.610 mm
Performance (cycles/min.)	10
Payload	16 kg

## Pallets

Flexibility to operate with any of the world's pallet systems and sizes, even insulated pallet boxes.



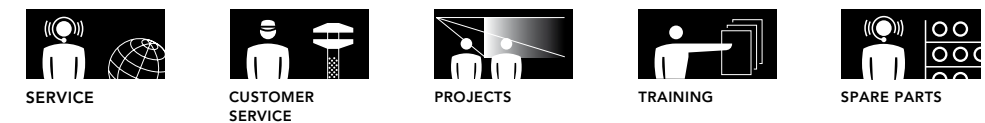
1	Euro-pallet	4	Aluminum pallet
	Industrial pallet		Four-way-entry-pallet
	Wooden / four-way-entry-pallet		
2	Plastic euro-pallet	5	Wooden US-pallet
	Four-way-entry-pallet		Four-way-entry-pallet
3	Wooden pallet	6	Wooden US-pallet
	Four-way-entry-pallet		Two-way-entry-pallet
	<b>Pallet size (L x W)</b>		
	1.200 x 800 mm		
	1.200 x 1.000 mm		
	1.220 x 1.016 mm		
	special pallet sizes are possible		



# INDIVIDUAL SERVICE PERFORMANCE



► Experience the benefits of a long-term partnership. We accompany our customers from the initial idea to the fully automated packaging process. Our experts provide the right packaging solution, with complete service, for each phase – all from one source. With individual and personal attention over the whole lifetime of our machines we ensure highest productivity and maximum availability for your Pester machine. Our service network makes the professional know-how of our technical specialists available to you throughout the world. You can decide upon the level of service convenience you require:



## □ 24-HOUR TELEPHONE SERVICE

Whenever you need help quickly, we can be reached through our 24-hour service number, around the clock, seven days a week, even on Sundays and public holidays. Our service specialists are fully prepared and have direct access to your machinery data.

## □ ONLINE-SERVICE

With remote diagnostics we ensure that you have short reaction times and optimize your maintenance costs.

## □ SPARE PARTS MANAGEMENT

We support your spare parts logistics and ensure the highest efficiency of your machine through the use of original spare parts. Try our preventive spare parts package, or use our Express Service. Spare parts depots throughout the world guarantee highest levels of availability and rapid dispatch.

## □ ELECTRONIC SPARE PARTS CATALOGUE

With a single mouse-click you can find the correct spare part and can generate queries or orders from the system. This user-friendly and clear spare parts administration package with 3-D visualization is also available on CD-ROM.

## □ FORMAT PARTS BUSINESS

You change your range of products – we deliver the correct format parts for the new requirements. Each tool is unique. Within a very short space of time you receive the format part required, wherever you need it. If you wish, our experts can carry out the installation, start-up on site, and also provide production support.

## □ INDIVIDUAL MAINTENANCE PACKAGES

Here, you can decide how much service you need, and choose the right service package, adapted to your production conditions: Service-Basic, Service Plus, or Service-Individual. One thing is certain – your machinery will give reliable production at the highest level, just as on the very first day of installation.

## □ ON-SITE SERVICE

Whether in an emergency, just-in-time, or at an agreed date, our service specialists offer you flexible and efficient support. Our world-wide service network of qualified technicians ensures a rapid solution for you.

## □ MACHINE UPGRADES

Optimize the efficiency of your lines. With our machine upgrades we bring your Pester machinery up to date with the latest state-of-the-art technology.

## □ PROJECT MANAGEMENT

Your requirements in experienced hands. Our project managers, who have a wide range of pharmaceutical experience, accompany you from the coordination and handling of your project through to the delivery, installation and start-up of your machine – right on schedule. You receive all-round service from a single source with a fixed contact partner for the entire period of the project.

## □ PHARMACEUTICAL CONSULTING

What will tomorrow's optimum packaging process look like? External project support, line-integration, line functionality, development of specifications and capacity studies – these are only a few of our fields of competence. Our pharmaceutical consulting team is your partner for highly effective production performance.

## □ VALIDATION – QUALIFICATION

We show you what we are capable of. Our validation experts provide you with a comprehensive package of services for the qualification of your processes. We provide consistent implementation ranging from risk analysis of DQ, IQ, OQ up to FAT /SAT documents. The knowledge of our staff is always up to date, because we know that every day counts.

## □ DOCUMENTATION

We pass our knowledge on to you and speak your language. Whether operating instructions, parts lists or circuit diagrams, our documentation is attractively designed and clear. And should you want more than the standard – we also write special documentation according to your exact requirements.

## □ GMP, GAMP, 21 CFR Part 11, PAT...

Always a step ahead in order to stay in the lead. Our experts are constantly at the leading edge and expand their know-how about the latest regulations, requirements and developments in the world of pharmaceuticals on a daily basis. We speak your language and implement your pharmaceutical packaging needs of tomorrow, today.

