


## Persuasive answers to tomorrow's challenges


The increasingly sophisticated tastes of consumers have led to an incredible variety on the savoury snacks market. Trends and innovations are changing at an ever-faster rate. PWR Pack's future-oriented technical solutions prepare you today for tomorrow's needs.





Handling savoury snacks can be a tough nut to crack. Pick & Place systems by PWR Pack give you smooth, continuous and highly efficient operational processes.

**Advanced mixing functions:** Bundle packs are becoming increasingly popular, but they can be complex and time-consuming to handle. Pick & Place systems by PWR Pack allow any combination of units to be packed together, regardless of whether the products are from previously sorted or unsorted lines. Thanks to PWR Pack's high performance vision systems all items and their positions on the conveyor belts are recognised, ensuring that the right items are fed into the correct position on the in-feed belt – fast, dependably and efficiently.

**Gentle product handling:** From potato crisps or crackers with toppings – even when packed, savoury snacks are delicate products that need to be handled with the utmost care. This is where the highly sensitive mechanical-pneumatic gripping systems developed by PWR Pack can truly play their strengths.



**Persuasively efficient:** Thanks to their advanced technology, handling systems by PWR Pack provide maximum performance and consistently high precision, allowing you to continually optimise your production processes, increase your **profitability** and gain decisive advantages in the market.



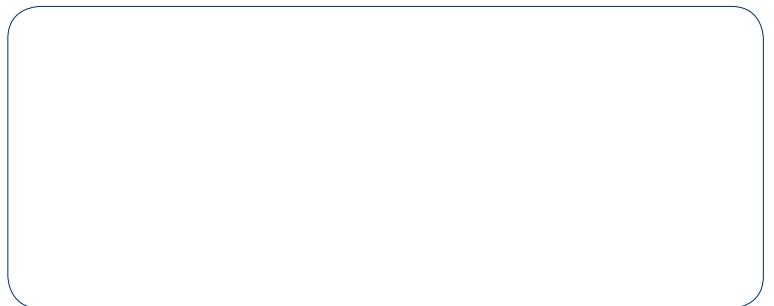
## Progress opens new perspectives

Whatever your concern – look to our technological solutions with a multitude of applications that can be individually developed for you.

Experience how innovative technology opens new possibilities for fast and precise production processes with the utmost in reliability.

In short: More precise, efficient handling.

Your agent



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## Precision Handling

Innovative technological solutions  
for the savoury snacks industry



## PWR Pack Handling Systems - the advantages

**Packaging of snacks has become a highly complex process. Handling of sensitive products in ever changing new varieties presents enormous challenges for automation. Speed and precision are as much in demand as reliability. With its innovative solutions PWR Pack sets new standards.**

Always a step ahead of progress – PWR Pack unlike any other technological enterprise succeeds in meeting the demands of the packaging industry to provide new developments of future-oriented solutions.

In the area of delicate high speed handling tasks as those in food production we can fully display our strengths. The unique advantages of PWR Pack lie in the integrated procedural method.

We ensure that all components are perfectly matched with each other and provide a function that is both reliable and powerful in performance. In addition the modular construction provides high flexibility. Our systems can be easily integrated in existing processing lines and are extremely flexible thanks to a simple change in format. This allows you to quickly and easily respond to new requirements – and as a result, gain advantages for yourself in the market.

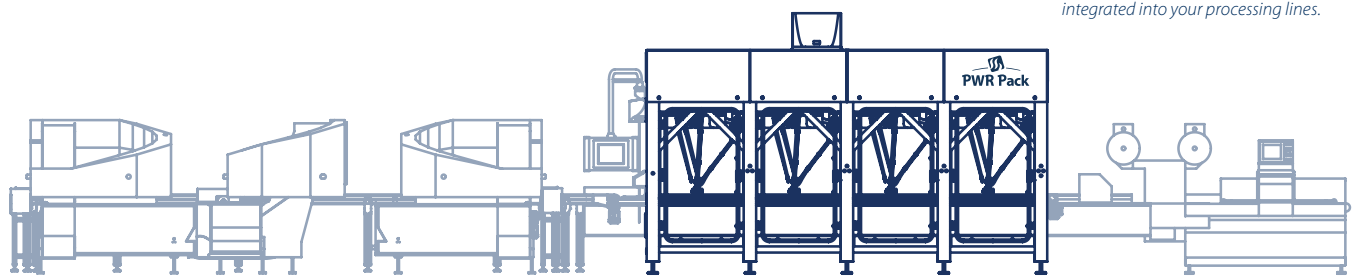


*Where previously costly personnel were required for manual work, today highly efficient Pick & Place systems by PWR Pack are used.*

Our systems are designed for the most diverse applications and are used in more and more processing lines.

Here our expertise covers the entire spectrum of modern robotic systems – from vision and gripping technology to the programming of complex software applications.

*PWR Pack delivers high performance solutions that can be quickly and easily integrated into your processing lines.*





## Sensitive products **safely handled**

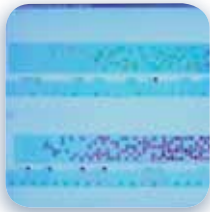
The options for the application of Pick & Place systems by PWR Pack are as varied as the snacks itself. Mechanical-pneumatic and highly sensitive gripping systems can take hold of and position even the most sensitive products without deforming them.



### Complex procedures, clear structure

The latest generation of our comprehensive, platform-independent distribution software simplifies the entire complexity of logistics:

- TCP/IP-based, web-supported communication
- Optimum speed control for all Pick & Place modules
- Adjustment of speed to prevent wear and tear
- Scalability
- Safe in-feed of the products even during fluctuation of product supply
- Real-time representation with direct visualization in the display



### Precise activation, safe transport

PWR Pack is an expert in the successful combination of machine construction and system integration:

- Robots designed and manufactured in house
- Precise point-to-point activation, reliable design for the most varied handling tasks
- Even faster processes through the most modern servo technology
- Low maintenance costs due to optimum internal motion control and dynamic low-wear loads on the robotic system



### PWR Pick & Place systems in detail

High-performance special grippers guarantee safe handling of goods with no product damage:

- Mechanical-pneumatic high-speed gripping systems
- Safe sequence of complex in-feed processes
- Zero product damage and exact placement of the most sensitive baked goods or products with uneven contours

Pick & Place systems by PWR Pack are suitable for all products – from snacks in pillow packs to fresh products in trays.

## Proven robotics in continuous running

For the application shown here our Unigrabber UG-D4 is the perfect performer:

Unigrabber UG-D4	Specifications	Performance	
▶ We have over 500 robots already in use in the most demanding environments!	<b>Kinematic structure</b>	Parallel type	
	<b>Degrees of freedom</b>	3+1 (rotation optional)	
	<b>Noise level</b>	< 68db(A)	
	<b>Weight</b>	65 kg	
		<b>Rotation</b>	Angle unlimited
		<b>Payload</b>	1 kg
		<b>Pick &amp; Place actions</b>	up to 150 p/min
		<b>Workingarea</b>	up to 1.300 mm





## High-tech quality control

*Our innovative Vision Control systems detect position and contour of the passing baked goods with the utmost precision and detail:*

- *Detection via the most-modern BLOB analysis or SBM*
- *Identification software which works with changing sizes, twisting and overlapping*
- *Automatic quality control by means of optional 3-D product measurement*
- *Innovative colour camera technology with colour differentiation*
- *Determining of deviations in real-time*
- *Reliable rejection of defective products*
- *User-friendly icon touch screen with 3D-HMI*

