

# SPIDER Series

Robotic case packing



Are you open to integrating another competitive edge in your company? Robotic case packing solutions add flexibility, versatility and speed to your case packing process. It is the most accurate way of packing your product into various secondary containers.

The Spider series is best in class in (vision guided) robotic case packing solutions. The in-house designed high-performing BPA robots have multiple axes, are equipped with our high speed collation systems and can perform on-the-fly picking and placing; both vertically and horizontally.

As with all other BPA solutions, we ensure full product monitoring before the product enters the case packer. This guarantees a highly accurate pick and placement of your product. Many reputable customers around the globe have opted for the Spider robotic solutions designed and developed by BPA.

With the introduction of the “Flex-Frame” concept, Spider solutions can be easily configured to comply with your specific application and needs.

## Markets

- Snacks
- Confectionery
- Personal & home care
- Ice cream
- Dairy
- Bakery
- Dry food
- Pet food
- Frozen food
- Fresh produce

## Different machine types

### • Spider 100

The Spider 100 fully automates bag handling and horizontal loading process into secondary containers, such as cases, trays and crates. It includes BPA's robotic platform provided with dedicated handling parts to match your specific application. For enhanced performance, the system can be optionally equipped with our patented SmartTrak system, which enables high-speed bag pre-collation. The smart construction of this system significantly simplifies changeovers.

### • Spider 100i

The Spider 100i combines horizontal case and tray loading with an integrated RSC case erector and top and bottom taper.

### • Spider 200

The Spider 200 fully automates bag handling and the vertical loading process of secondary containers, such as cases and trays.

### • Spider 200i

The Spider 200i combines vertical case and tray loading with an integrated RSC case erector and top and bottom taper. With a four-point changeover in under five minutes, Spider200i gives you more versatility. It allows you to run various product sizes and case types to be run on the same packaging line including RSC, reusables and display cases.

### • Spider 300

The Spider 300 enables you to pack flexible bags into cases, trays and crates, both vertically and horizontally. The process of this machine is as quick as it is innovative, and offers you a great deal of flexibility and versatility. For horizontal packing, products are picked up by the Spider robot and placed directly into the case. For vertical packing, the bags are pre-grouped on an acceleration conveyor by the Spider robot. Once the row of bags is complete, it's accelerated into the cassette, which is controlled by a Gantry system. After the full case load is placed in the cassette, the Gantry system moves above the case or tray and releases the bags vertically into the case. This seemingly simple process is an excellent result of technical ingenuity. Every aspect of the Spider 300 is aimed at enabling you to maximize efficiency in your case loading process.

### • Spider 300 Wraparound

The Spider 300 Wraparound combines advanced wrap-around case packing with delta robots for pick-and-place operations. Wrap-around technology reduces material usage, enhances stability for palletizing, and optimizes storage and transport space. This efficient and versatile solution is designed to meet specific customer requirements, complementing the Spider 300 lineup.

## Vision Guided Robotics

Vision Guided Robotic solutions are revolutionizing production processes worldwide, offering increased versatility, simplified implementation, and reduced costs compared to traditional robots. BPA leads in designing and manufacturing these advanced systems.

The BPA Vision system ensures precise product detection by combining an industrial camera, LED lighting, and a processing unit to identify location, orientation, size, and shape, rejecting items outside specifications. This reduces waste and ensures consistent quality.

The servo-driven product belt with an encoder provides accurate speeds, enhancing efficiency and minimizing misalignment. The motion controller synchronizes vision and belt data to assign products to deltas and cases, ensuring reliable, swift, and gentle placement, reducing operator intervention and improving throughput.

### • Spider V series

The Spider V series, equipped with BPA's in-house vision technology, offers maximum flexibility, reduces the need for format parts, and optimizes uptime in case packing processes. This versatile series efficiently handles a wide variety of flexible bagged products and secondary containers, packing them horizontally or vertically to meet your specific needs.

### • Spider Q series

The Spider Q series offers a fully integrated vision-guided case packing system in a compact, versatile design. This system handles various cases and bags at high speeds while minimizing its footprint. Built on a mono-block frame, the Spider Q series integrates every stage of the packing process—from bag quality checks to delivering checked, filled, and closed cases.

It also features a single, integrated HMI for seamless operation, reducing manual effort and simplifying system control. With 90% of changeover settings fully automated, recipe changes take less than 10 minutes, ensuring exceptional ease of use and increased productivity.

## Packaging specifications

### Package

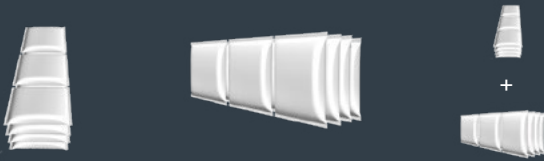


## Container



The BPA Spiders solutions can be used for many different applications, product, containers and packaging styles. To judge if your packaging challenge can be solved by one of the many BPA Spider solutions, please contact one of the BPA specialists at [sales@blueprintautomation.nl](mailto:sales@blueprintautomation.nl) (all countries except for North and South America) or [sales@blueprintautomation.com](mailto:sales@blueprintautomation.com) (North and South America).

## Pattern horizontal, vertical, both



## Main characteristics

- Modular and open design to create maximum flexibility for customized solutions
- In-house designed high performing delta robotic systems with a wide range of single and multi-pick heads systems
- In-house vision technology
- Minimize footprint and optimize plant lay out through mono block systems with fully integrated case & tray erectors and closers & lid applicators
- Remote access for efficient and quick online support

## Options

- Case or tray forming systems
- Case or tray closing system
- Lid applicators and stacking edge closers
- Plastic container de-stacking and stacking systems
- Missing bag and open case detection with reject
- Integrated bag inspection and reject systems (open bags, X-ray, metal detection, check weighing)
- Bag merging systems (infeed from multiple bag makers)
- Special feeder systems for handling WIP products
- Several washdown options available
- Layout specific up- and downstream product and case handling systems

## Contact us today

As every production environment is unique, every organization requires a tailored solution. Challenge us and put our experts to the test, to devise the solution that fits your process like a glove. Contact us today!

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international presence



flexibility and innovation



market specialist



frozen food and snacks market leader