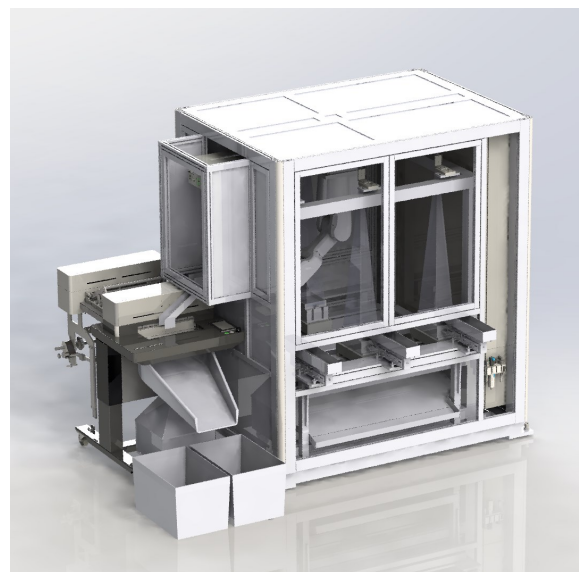# FlexType™ P Pack

A STANDARD FLEXIBLE PACKING SOLUTION

RNA's FlexType™ P Pack presents a flexible packing solution that utilises intelligent vibration platforms, coupled with industrial machine vision recognition and a 6-axis robot to feed and pack component parts of **various shapes** and **sizes**. The FlexType™ P Pack offers flexibility, quick delivery time, reusability and speed.

The FlexType™ P Pack is best used in applications where conventional bulk feeding systems find limitations such as fragile or complex parts, multiple variants requiring fast changeover, and evolving component design. Guiding robot with machine vision provides **high speed** and **high precision** handling and packing solutions.

YOUR BENEFITS

Flexible feeding

- Alternative for vibratory bowl feeders
- Experience seamless, software-based part changeovers in minutes
- Easily process a wide range of part sizes and shapes
- Handle multiple variants of a component part or parts with complex geometry

Flexibility for part changeover

- **Interchangeable FlexCube™ platform** for pre-orientation of the parts
- Teachable vision system
- Auto calibration of the vibration parameters

Easy handling of variants

- Variants are stored by the controller
- Only 2 minutes to bring a new variant into production

Short delivery time

- Fully standard
- Pre-designed

Flexible packing solution

- Can accommodate multiple variants
- Robotic part transfer
- Multiple bagging machine options

High reusability

- More than 95% reusable (less investment)
- Specific tooling reduced to the minimum
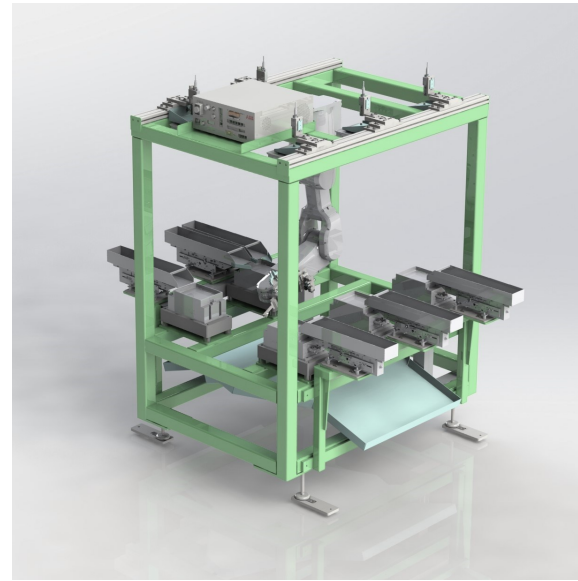
Fast implementation

- Standard platform
- Standalone Package with Integrated Controls

Easy configuration and installation

- Quick setup and reprogram to perform a different application
- Fast and easy configuration adjusting to changes and demands

FLEXIBLE, RELIABLE AND STANDARD SOLUTION FOR THE AUTOMATED HANDLING AND PACKING IN 5 STEPS

STEP 1: Various parts to be packed are loaded in bulk into hoppers. Parts drop by vibration from hoppers onto flexible feeder platforms on demand.

STEP 2: The flexible feeder complete pre-programmed vibratory cycles to orientate and separate component parts, presenting them to an integrated vision system for robot pick.

STEP 3: The vision system inspects the component parts on the flexible feeder platforms and identifies which are laying in a position suitable for being picked. The coordinates are sent to the robot.

STEP 4: A 6-Axis Robot, with suitable end of arm tooling picks all identified component parts and transfer them to the bagging machine.

STEP 5: Component parts are loaded to the bagging machine via a chute. The bagging machine presents a single opened bag per cycle, before sealing and dropping the bagged parts into a rotating chute which diverts bags into the designated storage box.

Included in FlexType™ P Pack

- RNA Bulk Hopper
- Flexible Feeder
- Vision System
- 6-Axis Robot with Custom Gripper
- Bagging Machine
- Rotating Chute - Box Filling System

FEATURES

Flexible Feeder | Pre-orientation of the components

- Compatible with all parts geometries
- Minimum change-over times
- Extremely gentle part handling
- Free movement of parts
- No transmission of vibrations to the rest of the line
- Systematic part orientation
- Easy configuration with the feeding software

Bulk Hopper

- Compatibility
- Plug and play
- Demand-based feeding
- Enhanced autonomy

Vision System

- Easy to use
- Intuitive recipe creation and configuration
- Plug and play
- Highly competitive system costs
- Compatible with any PLC & industrial robot brand

6-Axis Robot & Packing Machine

- Fully integrated
- Automatic bagger
- Quick change
- Customised

	FlexType™ P Pack
SPECIFICATION	
Standard Robot Payload (kg)/reach (m)	ABB IRB1100 - 4/0.58, 0.475m ABB IRB1200 - 5-7/0.7, 0.9m Other robots available on request
Standard Hopper	RNA BVL-P Various hopper sizes to suit your application
Flexible Feeder	FlexCube™ 50/80/250/380/530 FlexiBowl® 200/350/500/650/800/1200 Other flexible feeders to suit your application
Vision	High resolution vision system
Integrated LED lighting	Backlight / toplight in various colours
Bagging Machine	Compatible with customer preferred bagger, with customising options to suit the application
OPTIONS	
End of Arm Tooling	Application specific gripper system
Control System	System control with integrated HMI designed to your specification

* Get in touch for any specialised options