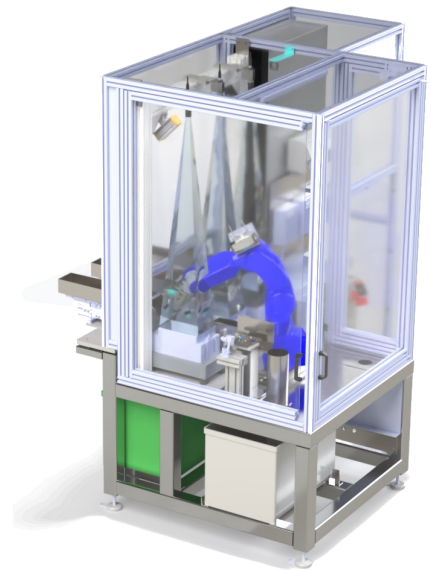


FlexType™ P Assembly

A STANDARD FLEXIBLE ASSEMBLY SOLUTION

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

The FlexType™ P Assembly 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. Integrated robot with machine vision provides **high speed** and **high precision** handling and assembly solutions.



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

High reusability

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

Fast implementation

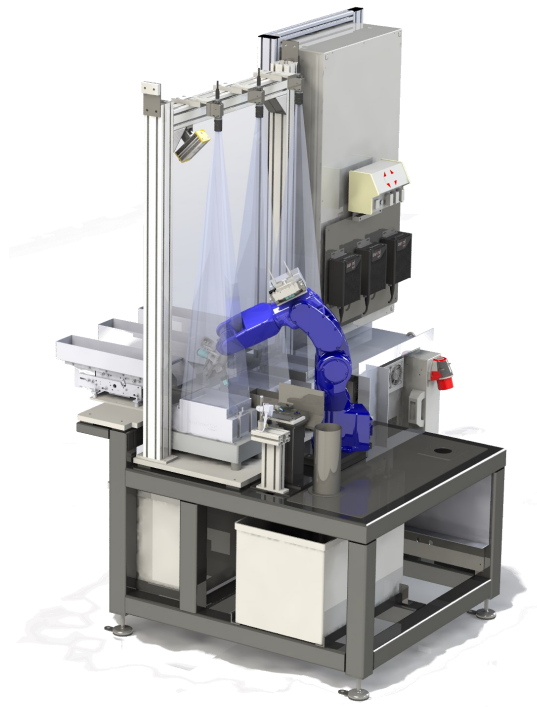
- Standard platform
- Standalone Package with Integrated Controls

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 ASSEMBLY IN 6 STEPS

- STEP 1:** Various parts to be bagged 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 places them in the proper orientation into the assembly nest.
- STEP 5:** The customisable nest is located by dowels for interchangeability and incorporate part present sensing. An overhead mounted vision system confirms positioning of the component parts before final assembly.
- STEP 6:** The robot unloads assembled component parts to a storage box via an unload chute.



Included in FlexType™ P Assembly

- RNA Bulk Hopper
- Flexible Feeder
- Vision System
- 6-Axis Robot with Custom Gripper
- Assembly Nest

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 & Assembly Nest

- Fully integrated
- Quick change
- Customised
- Double checked

FlexType™ P Assembly

SPECIFICATION	
Robot	6-Axis Robot with Custom Gripper
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
Assembly Nest	Fixture nest equipped with vision check to confirm efficient assembly, with good parts / bad part unload supplied as standard.
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