

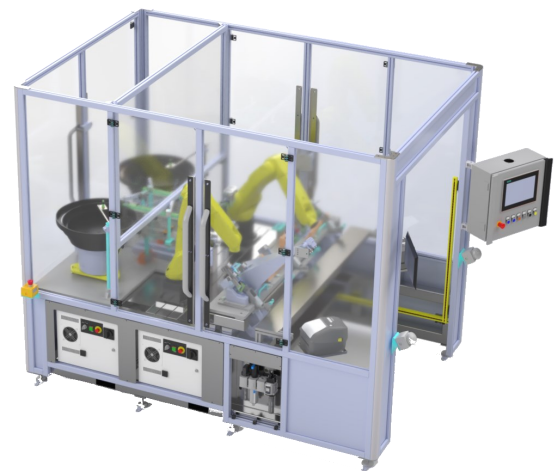
# FlexType™ Clip

## SEMI-AUTOMATED AND FULLY AUTOMATED ROBOTIC CLIPPING MACHINES

RNA FlexType™ Clip Robotic Clipping Machines provide a standardised platform offering ease of use and fast, high-quality assembly to customers in the automotive sector.

A robotic clipping machine is an automated system that uses robotic technology to perform clipping or fastening tasks in industrial settings. These machines typically feature robotic arms equipped with specialised tools, such as grippers or clip applicators, to precisely attach clips, clamps, or fasteners to products. They are designed to streamline assembly processes, improve consistency, and reduce manual labour, making them valuable in high-volume production environments.

The FlexType™ Clip range includes semi-automated clipping cells and fully automated robot clipping machines. The poka-yoke design ensures proper clip assembly of automotive interior and exterior moulded components.



### Short payback

Short payback period and fast return on investment (ROI). The system reduces labour costs significantly, minimises material waste, and enhances throughput to maximise revenue in a shorter timeframe.

### Great flexibility

The standard machine can be re-tooled and re-programmed to suit different products, and can also be re-engineered to suit special applications.

### Increased efficiency

The system performs clipping tasks much faster than manual labour, reducing cycle times and boosting throughput. Repetitive tasks are automated, allowing skilled workers to focus on higher-value activities.

### Compact design

Optimal utilisation of floor space through a compact and space-efficient design that can be integrated into existing production lines without major modifications.

### Poka-yoke design (Error-proofing)

Incorporates built-in mistake-proofing mechanisms to prevent defects before they occur, ensuring flawless production.

### Improved quality and consistency

Applies clips with exact positioning and force and minimises errors, enhancing final product quality and reducing rejects and rework.

## Machine Features

- Machine frame inclusive of base plate
- Machine guarding/safety (light guards etc.)
- Robot gripper system (bespoke EOAT)
- 6-axis robot(s) depending on payload and reach
- Clip feeding equipment – Bowl, Linear & escapement
- Integrated control system with HMI
- Pneumatics – air prep set/dump valve/valves
- Quick change facility on the machine for the component fixturing (option)
- Vision Inspection System (option)

## Applications

- **Clipping Application** Single or multi-robot cell, clip bowl feeder system(s), and full poka-yoke mechanisms to ensure quality.
- **Clipping & Ultrasonic Welding Application** Single or multi-robot cell with an ultrasonic welding system, integrating welding in with the clipping operation.

## Robot Clipping System

SPECIFICATION	
Product Type	Metal and plastic clips
Feeder(s)	Vibratory bowl feeder(s) to suit your application
Robot(s)	Industrial 6-axis robots for clip presentation and insertion
Fixtures/jigs	From manual clamping to complex automatic fixture to suit your application
OPTIONS	
Vision	High resolution vision inspection
Welding	Ultrasonic Welding
Quick change design	Quick change facility on the machine for the component fixturing
Poka-yoke design	Mistake proofing

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