

# OmniVance Plastics Assembly – Clipping Cell

The next revolution in automotive plastics processing



Stay ahead of the curve with the OmniVance Plastics Assembly-Clipping Cell, a versatile, flexible assembly solution that enables auto companies to respond faster to evolving market needs.



## Flexibility

The standardized design of the Clipping Cell enables users to quickly and easily re-tool and reprogramme the solution to process different car parts and models, in less than half the time and at a fraction of the cost needed to set up a new dedicated cell.

The Clipping cell is ready to be integrated with autonomous mobile robots to automate parts feeding, enhancing flexible manufacturing and logistics efficiency.



## Modularity

The fully integrated solution comes in a modular yet compact design, available with the option to expand contract the frontal area depending on the part dimensions. An additional robot can be introduced to speed up production, while the entire cell can also be easily relocated only using a forklift.



## Innovation

The ABB SmartFeeder is a major improvement on vibratory bowl feeders. The SmartFeeder incorporates a SCARA robot and an integrated vision system to simultaneously process up to three different clip variants, without changing the gripper, saving operational costs as well as time.



## Performance

The Clipping Cell achieves clip insertion rates of 2.5 seconds per clip due to the linear arrangement and modular design of the gripper.

High-quality insertion is guaranteed, thanks to integrated quality control that allows the validation of 100% of the inserted clips, reducing rework.



## Applications

Automotive interior plastics assembly



## Industry

Auto Tier 1

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**OmniVance Plastics Assembly – Clipping Cell – Technical specification**

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Cell Width	1.692 – 2.904 mm
Cell Depth	5.022 mm
Cell Height	2.503 mm
Number of robots	1-2
Robot	IRB 2600
Controller	IRC5 & Omnicore (Smart Feeder)
Positioner	IRBPL 300
Payload	300kg
Tool Length	From 800mm to 1700mm
Tool swing diameter	From 800mm to 1200mm
Clip Feeding system	Smart Feeder with IRB920T Scara Robot
Clip Feeding sorting	Asyriil Asycube 240 + Cognex Camera
Safety Equipment	Light Curtains
PLC Control options	B&R
Power Supply	3 x 400V
Cable	5 x 16mm
Fuse	3 x 63A

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