

## Automotive Plastic - Rear Bumper Assembly and Press Machines

TQC have produced two similar machines for Decoma in Banbury for handling of BMW Mini rear bumpers.

The basic principle of the machines is to assist and check the rear bumper assembly process, the machines handle the following vehicle variants:

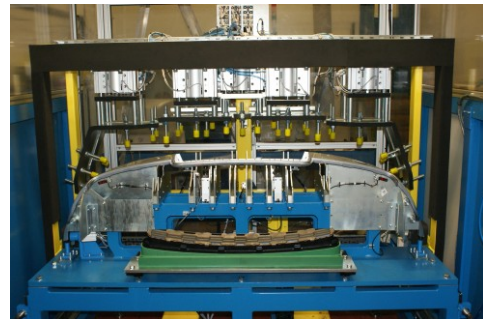
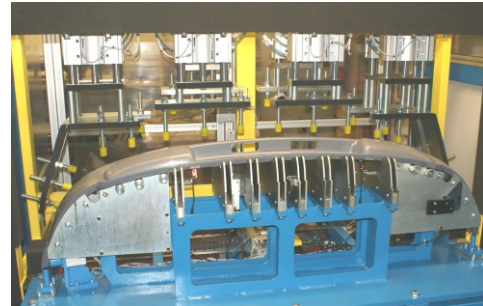
*Mini One, Mini Cooper, Mini Diesel & Mini Cooper 'S'.*

The machine tooling provides location for the main painted rear bumper mouldings to which the operator adds a number of trim pieces.

A barcode drives the assembly process for each part with the machine HMI indicating the required items for the operator to fit.

The operator manually loads all indicated parts onto the bumper, ensuring that clips are properly aligned before the machine completes the assembly automatically by pressing home the individual components.

The main bumper moulding is automatically clamped into the tooling and is only released once all the components have been assembled correctly.



### Main Features:

- Fabricated Frame
- Laser cut tooling
- Light curtain operator access
- HMI with graphical operator / maintenance prompts
- Barcode driven assembly sequence
- Automated pressing of parts with sensing.
- Part clamping, only released for passed parts

