



06/07/2007 - Micra Goes Quietly

The recently launched Nissan Micra represents a major improvement over its predecessor, most notably in terms of space,

A refinement and comfort major contributor to this, and all modern cars, is the significant reduction in noise transmission from the engine bay and most manufacturers now employ a "dash insulator" component produced from felt or a moulded polyurethane / heavy layer composite.

With European production of the Micra based in Washington, U.K., leading French component supplier Faurecia has invested heavily in a purpose built plant close to the Nissan assembly lines to produce a wide range of interior components for the Micra and also Almera and Primera models.

For the production of the Micra dash insulator Faurecia invested in a new Dash RIM Plant supplied by OMS Group and capable of high volume production with a compact footprint.

The plant consists of two hydraulically powered moulding press each of which features a rotating upper platen to give easy operator access for part demoulding and release agent spray and a traversing lower tool trolley which presents the lower mould to a heavy layer sheet heater / dispenser centrally mounted between the presses.

Heavy layer sheet is picked up by a special motorised pick & place unit and is fed into the sheet heater where the sheet is heated to around 200°C to make it thermoformable over the lower forming tool.

After vacuuming heavy layer into shape the lower tool trolley enters the press which downstrokes, clamps and initiates the automatic foaming cycle. The presses are capable of carrying double impression tools so each foaming cycle produces 2 no. components.

The presses work on an alternating cycle basis so, as one press is in the injection / curing / demoulding phase the other press is in the cleaning / spray release / thermoforming phase. Utilisation of labour is therefore extremely high and the plant is highly efficient.

A special foam formulation allows rapid demoulding times to be achieved and, as a result, the plant can produce a total of 25 complete double press cycles per hour, yielding 100 parts per hour when double impression tooling is used.

Completing the installation is an OMS Ecomaster 60/30 Auto Data high pressure metering unit linked via a high pressure piping ring main to a total of 4 no. OMS Ecomix Y2K 10/14 mixing heads. The metering unit was fitted with magnetically coupled metering pumps to eliminate leakage and maintenance and all production variables and data is monitored and adjusted through the colour LCD operator interface.

