

MoldMan™ Equipment





Who We Are

Overmould Ltd is a sub-contract manufacturer specialising in the sealing, encapsulation and protection of electronics using Low Pressure Injection Moulding (LPM) technologies. We work with our customers to provide complete turnkey solutions and support including: design, engineering, tool manufacture, prototyping, assembly, overmoulding and testing.

Located in Leighton Buzzard, Bedfordshire, we've been established for over 20 years. Overmould was conceived out of the need for encapsulation of high voltage connectors in the electrical test industry. Using the knowledge and confidence in the technology gained from a project elsewhere, we founded a company dedicated to Low Pressure Moulding. With equipment from the two leading

Low Pressure Moulding machine manufacturers, Optimel & Moldman, and hot-melt materials designed by Henkel specifically for LPM applications, we deliver cost-effective, high quality overmoulding solutions specific to your needs in the timecales you require.







MoldMan ® 1050 Low Pressure Moulding Machine



A bench top Low Pressure Moulding machine, designed for prototyping and low volume production of coloured materials.

The same high quality design, engineering, and manufacturing for which MoldMan is known for, is integrated into a compact table-top unit that can be transported easily and set up just about anywhere.

The MoldMan ® 1050 has been designed to handle materials in a very efficient manner, with it's unique "On-Demand" type heat reservoir and "Temperature Controlled Hopper." This unique LPM system liquefies a minimal amount of material prior to injection into the mould to reduce material degradation. Therefore colours are not degraded! Melt on Demand Moulding is ideal for sealing electronics and PCBs and creating moulded-on strain reliefs.

Just like the big systems, a pressure feedback transducer monitors pressure of the material delivery to the cavity to better regulate pressure accuracy, for specific requirements of electronic components and PCBs.

The benchtop style along with the 0.5 - 05g shot weight, 1-30 (25 - 450 psi) injection pressure and 1.8kg melt reservoir makes the MoldMan ® 1050 a very versatile machine.

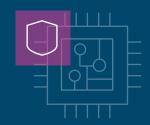
The Moldman ® 1050 system includes touch screen controls, melt temperature up to 260°C (500 °F) 1 ton clamping force, and optional 2-hand control.

Features

- Precision flow and matering system
- Light curtain and safety actuation
- 1 ton clamping force
- Intuitive touch screen operation
- Center core "On demand" type reservoir



MoldMan® 8200 Low Pressure Moulding Machine



A high-volume model low pressure moulding machine designed for dispensing thermoplastic materials.

The MoldMan ® 8200 is a large free-standing low pressure moulding machine, ideal for low to high volume manufacturing. A high volume thermoplastic option, the MoldMan® 8200 is perfect for large production runs above 250,000 units per year that require one or two melt/processing units, different moulding materials, or different moulding parameters at the same time. Shuttle table function ensures very high production capacity. However, this machine can also be operated in "single station" mode.

Equipped with MoldMan's proprietary pressure control system, it features a unique direct nozzle engagement system to the upper mould half, exactly where you need it. As an added benefit, Moldman ® 8200 melt units are interchangeable. This allows you to easily go from one compound or colour to another, or simply keep an extra melt unit as back-up.

Need more capacity, different types of moulding compounds or individual pressure control in seperate cavities? No problem, simply add an extra melt unit, as the MoldMan ® 8200 can also run melt units at the same time.

The system includes touch screen controls, 5.5 ton clamping force & exact pressure control.



Features

- Run one or two melt/processing units at the same time
- Run different moulding materials or parameters at the same time
- Two melt units can pump up to 40 grams/sec
- Designed for high volume production runs above 250,000 units per year
- Mould up to eight cavities at the same time (depending on part size)
- Fully independent adjustable process control (closed loop processing)
- Patented permanent nozzle engagement for fewer moving parts
- Precisely metered shot sizes, accurate control flow rates, and exact pressure control

MoldMan® 6000 Low Pressure Moulding Machine



A single station volume production machine.

The Moldman ® 6000 is a full size, single station low pressure overmoulding machine that offers simple versatility, and is capable of producing high volumes of production parts, consistently.

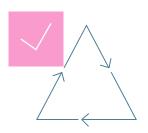
The Moldman ® 6000 includes a simple injection system, Quick Exchange melt reservoirs for rapid colour or material type change, 2 ton clamping force, and an easy-access open frame design.



Features

- No heated hose, exposed heated joints or exposed moving injector
- Precision flow & metering system via the gear pump & air pressure,
 allowing shot weights to be injected as fast or slowly as the moulding requires
- Open frame design for easy access to the mould tool and injection point
- Light curtain and safety actuation
- 2T clamping force
- Intuitive touch screen operation
- Quick Exchange melt reservoirs
- Simple injection via patented system

Materials Designed for the Best Results



Henkel Technomelt® Polyamide

Technomelt is a unique polyamide designed for the electronics industry. It delivers exceptional insulation properties, great physical strength and excellent adhesion to cable sheaths, metals, plastics and other materials. It is extensively used in aerospace, medical and automotive industries and is now readily available through Overmould, Henkel's UK partner. In house design, consultation, pre-production services and demonstration facilities are based in Bedfordshire, England, which is also our centre of expertise for service and support and the sale of LPM equipment and LPM materials. Technomelt is increasingly used in industry to achieve cost and performance advantages. As a robust alternative to traditional potting and encapsulation techniques, Technomelt brings improved reliability, reduced manufacturing times and ultimately superior products.





SPEAK TO A MEMBER OF OUR TEAM TODAY TO DISCUSS HOW YOU CAN IMPROVE THE ROBUSTNESS OF YOUR ELECTRONIC ASSEMBLIES.







