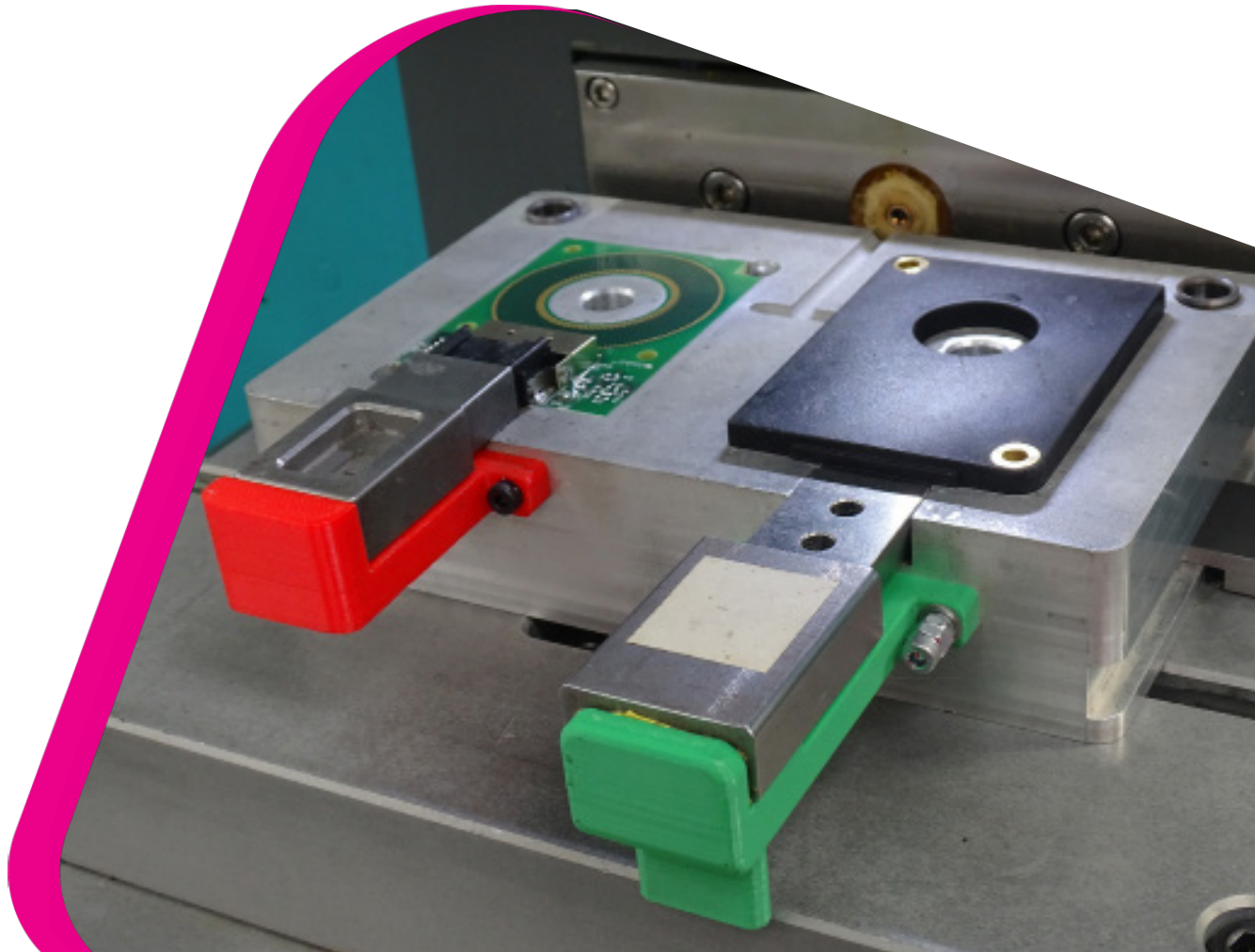


OVERMOULD™

Low Pressure Overmoulding



About Us

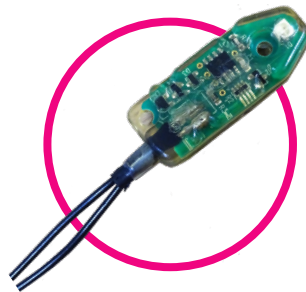
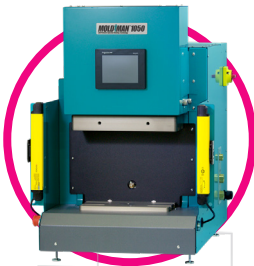
OVERMOULD™

Who We Are

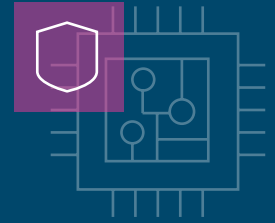
Overmould Ltd is a sub-contract manufacturer specialising in the sealing, encapsulation and protection of electronics using Low Pressure Injection Moulding (LPM) technologies. We work with our customers to provide complete turnkey solutions and support including: design, engineering, tool manufacture,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



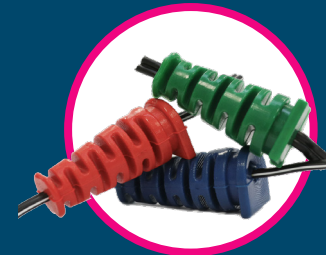
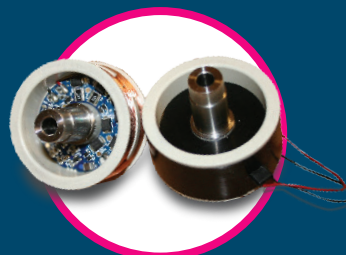
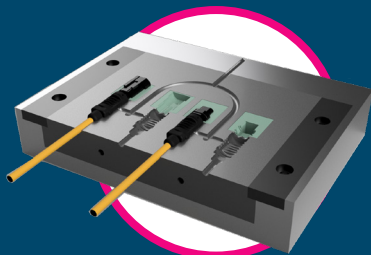
Advanced Protection for Electronic Circuitry



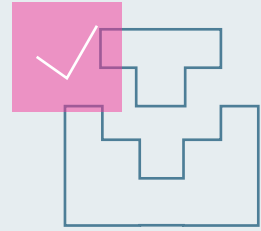
We Safeguard Your Electronics

Using Henkel Technomelt polyamides we are able to provide advanced protection for electronic circuitry in tough environments. In just one or two mould steps, assemblies can be converted from delicate electronic structures to robust, ready-to-market products.

The automated processing, throughput and cure time advantages that Technomelt delivers simply cannot be matched by older-generation encapsulation methods. Low Pressure Moulding provides mechanical integrity, protects solder joints from vibration fatigue and the entire assembly from the atmosphere and liquids that could promote corrosion or conductive paths.



We Turn Devices into Products



Versatile Application

Technomelt is a strong adhesive and will bond with many substrates. For instance, the grip onto PVC is excellent, making it perfect for sealing and anchoring cables. Technomelt also bonds to clean steel, solders and other metals commonly encountered in electrical modules. In fact, in our experience, nothing sticks better! When cool Technomelt is tough, retaining slight flexibility below zero degrees yet good rigidity to 130 degrees, or even higher with selected variants. Electrical insulation is excellent at typically 1012/cm and the dielectric strength is 20kv/mm.

High Performance

Low Pressure overmoulding of electronics provides a mechanical integration that enables fewer parts, higher reliability and cost savings. By creative involvement during the design phase, other benefits may also be enjoyed such as increased perceived value, additional functions, security of IP, electrical insulation and improved user friendliness.

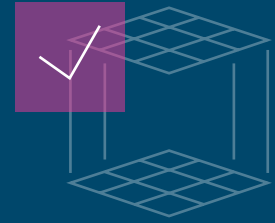
Product Advantages

Technomelt is a high performance technical polyamide designed to flow at low temperatures, and therefore low pressures. Delicate electronic structures can therefore be encapsulated without disturbance. The tooling can be made from aluminium, reducing costs and shortening lead times. Applications include component protection, reliability enhancement, insulation and security, whilst adding mechanical features and product appeal.

Advantages of Two-Stage Moulding

Many applications require only one injection process to complete. Some applications that are highly complex often benefit from two stages of moulding. The first for primary or bulk encapsulation, the second to ensure a uniform all-around thickness, coverage and finish. Both stages can often be incorporated into a single mould tool.

The Advantages of Overmoulding



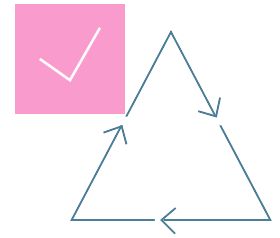
Sustainable, cost-effective & gentle

Because of the unique characteristics of Technomelt, the applied mould pressure is very low, especially compared to injection moulding. Consequently, the mould process is gentle on electronic structures - even surface mount components and lead free soldering are safe. Low mould pressure also enables the use of aluminium tooling so project costs are drastically reduced and lead times are cut. Even small batch sizes can take advantage of the many benefits of overmoulding.

The advantages of Technomelt go beyond simple enclosures and our designers can incorporate fixings, strain relief and product identity into your product design. Low Pressure Moulding encases, seals and adds value in one operation. Designing with Technomelt has become state of the art across many electrical and electronics industries increasing reliability, product performance, profit and competitiveness.



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.



TECHNOMELT®

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



OVERMOULD LIMITED

Unit 4, Commerce Way, Leighton Buzzard, Bedfordshire LU7 4WR
e sales@overmould.com t +44 (0) 1525 373800 www.overmould.com

