

# Temperature Calibration in Plastic Manufacturing

## Increasing Precision in Plastic Moulding and Extrusion

Plastic moulding and extrusion have undergone a transformation, transitioning from individual controllers to integrated control systems. At Isotech, we understand the pivotal role of temperature control in ensuring impeccable product quality. Our solutions cater specifically to calibrating thermocouples and resistance thermometers, underpinning these processes.

Our wide range of products, including Fast-Cal, Calisto 4953, Jupiter 4852, TTI10, and Semi-standard PRT, are all highly regarded for their unparalleled quality in the plastics manufacturing industry. This has made us a leading player in temperature calibration for plastic moulding and extrusion.

### Elevating Quality

In the realm of plastics manufacturing, precision temperature control is non-negotiable. Our products are ideal for extruders and injection moulding machines, which often feature multiple temperature-controlled zones. Maintaining the correct melt temperature at the nozzle is crucial, as deviations can lead to defects like brittleness or subpar tensile strength. Our technology empowers manufacturers to optimise control parameters, ensuring components of the utmost quality while maximising throughput.

### Addressing Challenges

Operating in the demanding environment of plastics processing takes a toll on temperature sensors. Whether it's barrel or nozzle temperatures, our custom inserts guarantee precise calibration as well as accommodating the diverse shape and size requirements of these sensors.

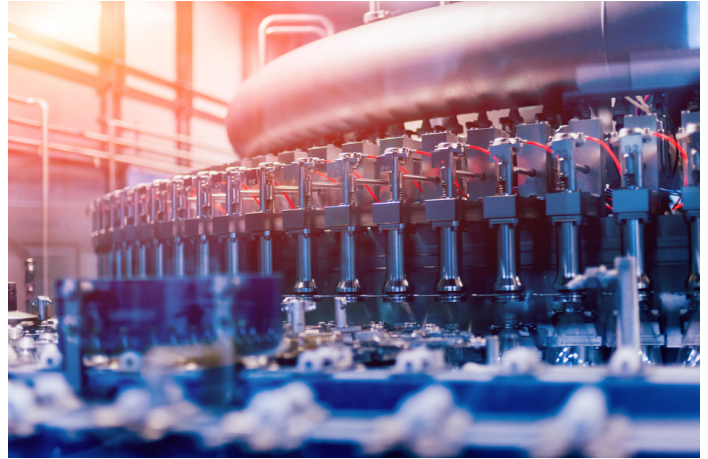
### Meeting Varied Needs

Melt Thermocouples, combination temperature and pressure sensors, are a cornerstone of plastics processing. Our custom dry block inserts seamlessly calibrate these sensors, characterised by their threaded bolt appearance with Thermocouple Protrusions.

### Precision in Practice

With acceptable uncertainties often hovering around  $\pm 1^\circ\text{C}$  to  $2^\circ\text{C}$ , our solutions represent the pinnacle of precision. Isotech's technology empowers plastics manufacturers to attain operational excellence, ensuring unmatched quality and performance.

Isotech's unwavering commitment to enhancing plastic moulding and extrusion processes through innovative technology and tailored solutions has redefined industry standards.



Our products enable manufacturers to optimise temperature control, ensuring top-tier component quality, and embrace a future marked by precision in plastics manufacturing.

