

Complete Thermal System Solutions for Plastics Processing





Tradition of Excellence

Watlow® provides the plastics industry with product innovations for injection molding, hot runner systems, extrusion, blown film, thermoforming and blow molding. We understand how vital selecting the right auxiliary equipment can be in helping a plastics processor meet a goal of higher productivity and greater yield. It goes beyond the costs of heaters, sensors or controllers; it is performance that counts.

Quality, innovation and reliability are the hallmarks of our family of electric heaters, temperature sensors and controllers. Watlow provides not only traditional thermal solutions, but also innovative, high-performance technologies to meet the specific processing demands of industries that require highly-engineered resins and tight tolerances.

Watlow meets your thermal solution needs with our broad product offering, new technologies, engineering services and global manufacturing capabilities.



Watlow sales engineers provide the support plastic manufacturers need.

Global Manufacturing and Sales Support

To better serve the plastics industry, Watlow operates 13 manufacturing facilities and over 40 technical support centers in Asia, Europe and North America. As a global company, we support international design guidelines and agency approvals. We have hundreds of factory-trained sales engineers, each with an average of 15 years of experience, and distributors located throughout the world.

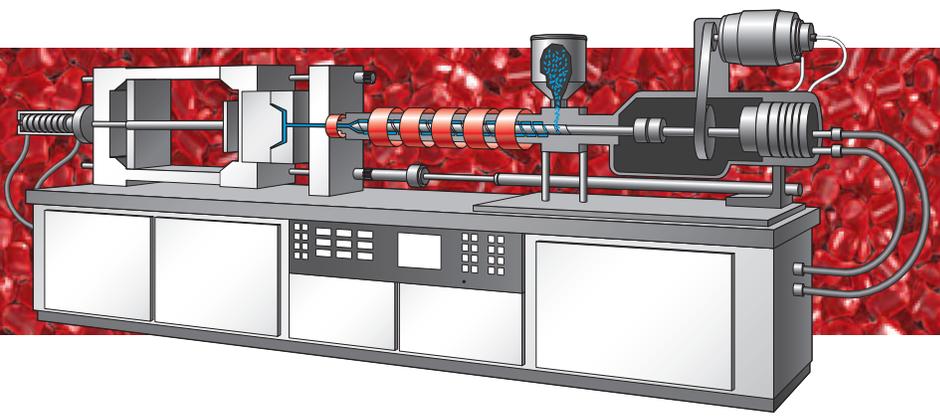
We invite you to blend the thermal expertise of our sales engineers with the existing capabilities of your engineering team. Our sales engineers are available to complement your team at any stage of your project from concept through prototyping and beyond project completion - one more way Watlow can help you build distinct performance advantages.

Table of Contents

Injection Molding.....1	Thermoforming.....4
Extrusion/Blown Film2	Heater Solutions.....5
Blow Molding3	Controller and Sensor Solutions8



Injection Molding



Watlow's history is highlighted with numerous innovations and thermal expertise in the plastics industry. The first to patent the cartridge-style heater in 1954, the tradition continues with new patented manufacturing technologies. Watlow also has experience in thermal system development with expertise in finite element analysis (FEA). This allows molders to optimize the thermal profile of their molds and the internal wattage distribution of heaters to insure that the most favorable patterns are realized. Regardless of your injection molding system, Watlow's thermal solutions provide the high-performance, reliability and accuracy needed to optimize your process.

Applications Watlow serves include:

- Agricultural equipment
- Aircraft, aerospace
- Automotive
- Building and construction
- Communications equipment
- Computer, business and office equipment
- Consumer products
- Containers and closures
- Electrical, electronics
- Foodservice, institutional products
- Furniture, fixtures
- Medical, dental equipment
- Personal care products
- Recreation, toys and sporting goods
- Small appliances, hand tools
- Packaging
- Transportation

Whether you require high performance, high temperature, high watt density, or all of these, Watlow has the product to best fit your application:



- Barrel heaters
- Cable heaters
- Cartridge heaters
- Hot runner nozzle heaters
- Hot runner manifold heaters
- Power controllers
- Temperature controllers
 - Single-loop
 - Multi-loop
 - Integrated
- Temperature sensors
- Data logging and trending software



For more than 50 years Watlow has provided thermal solutions for plastic applications.

Mineral Insulated (MI) Band Heater Case History

Problem:

A company needed to increase energy savings and reduce operations costs.

Solution:

Watlow's MI band heaters provide exceptional heat transfer, high watt densities and prolonged heater life. To improve efficiency, Watlow performed an energy assessment of Watlow's MI band heater versus the company's current mica heater solution. The MI band heater saved the company \$0.04 per kilowatt hour. This is a savings of over \$4,000 a year.

