W A T L O W

# Thermal Solutions for Foodservice Equipment



### Heating Up the Foodservice Industry

As a leader in thermal system design, Watlow has supplied thermal solutions for griddles, ovens, dishwashers, fryers and warming units in restaurant equipment all over the world. Watlow offers the broadest array of cooking computers, electric heaters, temperature sensors and software

for your foodservice equipment. Like your company, Watlow is interested in staying on the cutting edge of new innovations. With the newest technological advances in products like the E-SAFE® II hybrid power switch, Watlow has been supplying you with the most innovative thermal solutions on the market.

When you turn to Watlow for your foodservice needs, you are backed by over 80 years of heating expertise and technical



Watlow offers the broadest array of cooking computers, electric heaters, temperature sensors and software for foodservice equipment.

knowledge, which means energy efficient cooking, lower maintenance, easy operation, consistent, reliable food quality and innovative offerings to your customers. Watlow is a proud member of the North American Association of Food Equipment Manufacturers (NAFEM).

### **Global Engineering Services**

Watlow's global engineering staff can assist with the design and implementation of your foodservice applications. Watlow operates 12 manufacturing facilities in the United States, Asia, Europe and Mexico with engineering support centers in 17 different countries. Watlow is dedicated to providing solutions for our foodservice equipment partners. Our commitment to the foodservice equipment industry is backed by an engineering team dedicated to product design, innovation and solving your individual application needs. Watlow also provides superior manufacturing capabilities.

Watlow engineers will:

- Develop custom heaters, probes and cooking computers
- Model thermal systems
- Provide system development project management
- Provide NAFEM data protocol connectivity
- Lower operational costs increasing efficiency through automation
- Improve food safety by meeting HACCP safety regulations
- Improve food quality pleasing your customer and increasing revenues



Watlow's newest manufacturing facility is located in Shanghai, China.

### Want to operate dual-basket fryers independently?

Watlow's SERIES N7 cooking computers and temperature sensors make it happen. The SERIES N7 utilizes two sensors per basket. One monitors the oil temperature and the other monitors the heater's temperature. Custom recipes in the SERIES N7 monitor the heater directly to prevent the cooking oil from smoking or catching on fire. The customizable and easy-to-clean keypad on the SERIES N7 adds convenience and intuitive operator interface. The SERIES N7 is also NAFEM Data Protocol Compliant.



Watlow's SERIES N7 cooking computers are customizable and easy-to-clean.

## Interested in saving money?

Watlow's FIREBAR® flat tubular heaters operate at 23 W/in<sup>2</sup> compared to traditional tubular heaters' watt densities of up to 60 W/in<sup>2</sup>. Operating at a lower watt density requires a smaller pump and motor to circulate oil, which are less expensive to purchase and more economical to operate. A FIREBAR heater distributes heat evenly throughout the vat, not just around the outer perimeter, which also saves you money.

Watlow's FIREBAR heaters operate at a lower watt density than traditional tubular heaters.

### How do Watlow's thermal loop solutions enhance cook and hold restaurant ovens?

#### Tubular heating elements

- Operate at lower watt densities assuring food quality and safety
- Increase heater life by reducing sheath temperature while allowing for optimum air flow due to the shape
- Customizable MINICHEF® 2000 cooking computers
- Hold multiple, pre-programmed oven recipes

#### **RTD** sensors

- Ensure safe cooking operations
- Provide special foodservice product designs



Watlow's silicone rubber heaters are designed to the exact shape and size you need, conforming easily to your equipment. Watlow's silicone rubber heaters are also moisture and chemical resistant, which make them last longer in commercial kitchens.



Watlow's silicone rubber heaters can be easily conformed to your equipment.



Watlow manufactures and designs heaters, cooking computers and temperature sensors for cook and hold ovens.

Watlow's FIREBAR® flat heating elements' unique shape minimizes coking and oil degradation while enhancing the flow of oil past the elements surface. They are also used in griddle applications

because of their thermal conductance and larger surface area maximize uniform heating. These heaters also have over 36 standard heater formations. Plus, they have a virtually

limitless array of custom bend formations allowing you to maximize heating efficiency to your specific application.

> Watlow's WATROD round tubular elements are versatile and economic. They are available with contamination resistant end seals. They also allow for multiple bending configurations and meet

UL® 197. Watlow's WATROD heaters are virtually 100 percent energy efficient because of the way they generate heat through the process.

> The RAYMAX® 1010 radiant heaters are perfect for food warming applications. These heaters have a "sealed face" keeping contaminants away from the

heating element. The RAYMAX heater comes in a convenient, ready-to-use package. They also have a uniform, full surface heat source, which provides better, more even heat.



Optimized aluminum cast-in heaters containing WATROD tubular heating elements ensure temperature variations in your equipment are

minimal. A cast-in heater is a "heated part" that becomes a functional component of your equipment, designed in the exact shape and size you need.



Watlow's silicone rubber flexible heaters are rugged, yet thin, flexible and lightweight. Plus, these heaters conform to your equipment. Watlow also supplies subassemblies with a

silicone rubber heater bonded to an aluminum part.

Watlow's custom cooking computers have variable, audible, on-board alarms that provide a flexible and practical way to alert the cook when attention is required. They are



also customizable and provide easy programming and operation. Plus, they are NAFEM Data Protocol Compliant.

Watlow's MINICHEF® 2000 cooking computers were the industry's first on-off or PID configurable temperature/time and machine function controllers.



These cooking computers are preprogrammed for multiple applications and ready to be installed.



Watlow's EZ-ZONE™ PM panel mount controllers have an integrated limit, power switch and a PID temperature controller all in one package. It offers control options to reduce system



complexity and the cost of thermal loop ownership. The EZ-ZONE PM comes in a touch-safe package with a programmable menu system saving your operators time and money.

The E-SAFE® II hybrid power switches provide food safety assurance. They have reliable, accurate power switching at high amperage



and high ambient temperatures in

foodservice kitchens, Watlow's E-SAFE II meets CE requirements and is RoHS compliant by design for the elimination of toxic metal contamination in foodservice applications, because it is mercury free. The E-SAFE II also has extended contact life in a compact size.

Watlow's RTD tube-style (RB) sensors let you know when your fryer basket is ready and are ideal for grill and griddle applications. They are sealed, have dependable readings, quick-time response

and customized diameters.



Rigid sheath thermocouples provide protection and accurate placement in your commercial oven through water-tight bulkheads. Threaded fittings and encapsulated styles are also available. The PFA encapsulated style is corrosion

resistant and is sealed to improve moisture resistance.



Watlow's ENVIROSEAL<sup>™</sup> HD sensors keep out moisture, oil and contaminants and are perfect for steam table applications. The ENVIORSEAL HD

has a time response of two seconds and is designed with a submersible and 1200 psi pressure-wash rated seal.

### Watlow's Foodservice Solutions at Work



#### Why fry with Watlow?

Because Watlow has FIREBAR® flat tubular heaters! Watlow's FIREBAR heaters have a streamline shape, which allows shortening to flow past the surface without back eddies found with traditional round tubular heaters. Other FIREBAR benefits include:

- Provides increased height, relative to flow, which increases this in viscous liquids; up to 10 times greater
- Reduces drag on moving oils in fry pots due to the flat construction
- Reduces coking and oil degradation
- Allows for increased temperatures without additional energy consumption
- Increased product efficiencies help cook food faster



Watlow's FIREBAR flat tubular heating elements' unique shape minimizes coking and oil degradation.



12001 Lackland Road • St. Louis, Missouri 63146 USA Phone: 314-878-4600 • FAX: 314-878-6814 e-mail: info@watlow.com • www.watlow.com

Watlow Products and Technical Support Delivered Worldwide



#### Australia +61-3-9335-6449 China

China	+86-21-3950-9510
Japan	+81-3-3518-6630
Korea	+82-2-575-9804
Malaysia	+60-3-7980-7741
Shanghai	+86-21-3950-9504
Singapore	+65-6773-9469
Taiwan	+886-7-288-5168

**North American Technical** 

Support & Sales Offices

France +33 (0) 3073-2425 Germany +49 (0) 7253-9400-0 +39 (0) 2 458-8841 Sweden +46 35 27 1166 United Kingdom +44 (0) 115-964-0777 +34 91 675 1292 Spain

Italy

#### Latin American Technical Support & **Sales Office** Mexico +52-442-217-6235

### To be automatically connected to the sales office nearest you call:

### 1-800-WATLOW2 www.watlow.com

Your Authorized Watlow Distributor is:

