

Watlow FLUENT Heaters – A Rapid Prototyping Dream

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Watlow® FLUENT® in-line heaters are a space-saving heating solution. Get the most out of your application by installing a lightweight, high-watt-density heater in your industrial or process heating application. Watlow FLUENT in-line heaters are designed to save you space and installation because they are designed as an integrated solution that replaces multiple components in a system. FLUENT heaters come in two diameters, many lengths and some can even operate on 120V or 240V. Learn more about these innovative heaters and how you can reduce the footprint of your heating system and accelerate your time to market.

Versatile installation and performance

Watlow FLUENT heaters are in-line – meaning, you can integrate this compact heater into your solution by simply connecting tubing to the FLUENT’s inlet and outlet. A robust and powerful in-line heater saves not only installation time compared to a traditional immersion heating solution but eliminates additional components necessary such as: large inlet/outlet fittings, immersion tank, flange and professional installation and commissioning. FLUENT heaters can provide up to 8,000 watts at 240VAC in a heater only 1 5/8-inches in diameter and 12-inches long.

Patented thermal spray technology

Watlow's patented thermal spray technology, which is the core heating technology driving a FLUENT heater, delivers consistent and reliable thermal energy when needed. Despite the compact size of this in-line heater, it can deliver maximum heat and improved temperature uniformity across its entire surface. The FLUENT heater engine sits within one millimeter of the media being heated, allowing for quick response times and unmatched efficiency.

Lightweight, robust heating

When you compare FLUENT heaters with cast-in or circulation heaters, you can enjoy up to [\(http://fluent.watlow.com/\)](http://fluent.watlow.com/)98% reduced weight and size [\(http://fluent.watlow.com/\)](http://fluent.watlow.com/). Other heating technologies require more weight and components, which can increase the risk of breakdowns or more frequent maintenance intervals. Replace your existing immersion heater or heater wrap to decrease the size and complexity of your heating system without compromising on efficiency, performance or control.

Tools for Rapid Prototyping

The Watlow VISUAL DESIGNER™ tool is available 24-hours per day, seven days a week, 365 days per year to help you specify the FLUENT heater you need for your application. There are two paths within this tool: "I Know What I Want" and "Help Me Choose." Under the "Help Me Choose" option, you will need to know your desired temperature change, flow rate and media you are heating (air or water). Once you input this information, the VISUAL DESIGNER™ will do the math for you and recommend (a) heater(s) that will fit your application. You can then pick from a selection of inlet and outlet fittings that will fit your desired pressure drop conditions. Once complete, you will receive a .pdf summary of your build. Any FLUENT heater you build in our VISUAL DESIGNER tool is available to ship in one to five business days after order placement under our Watlow® SELECT™ offering! Sound like a rapid prototyping dream? Click [here \(https://www.watlow.com/design-a-product\)](https://www.watlow.com/design-a-product) to design your own heater now. After you have taken advantage of the VISUAL DESIGNER and a Watlow team member is working on your quote, you can visit the [FLUENT landing page \(http://fluent.watlow.com/\)](http://fluent.watlow.com/) for a Quick Start Guide, Safety and Control information, download drawings and more.