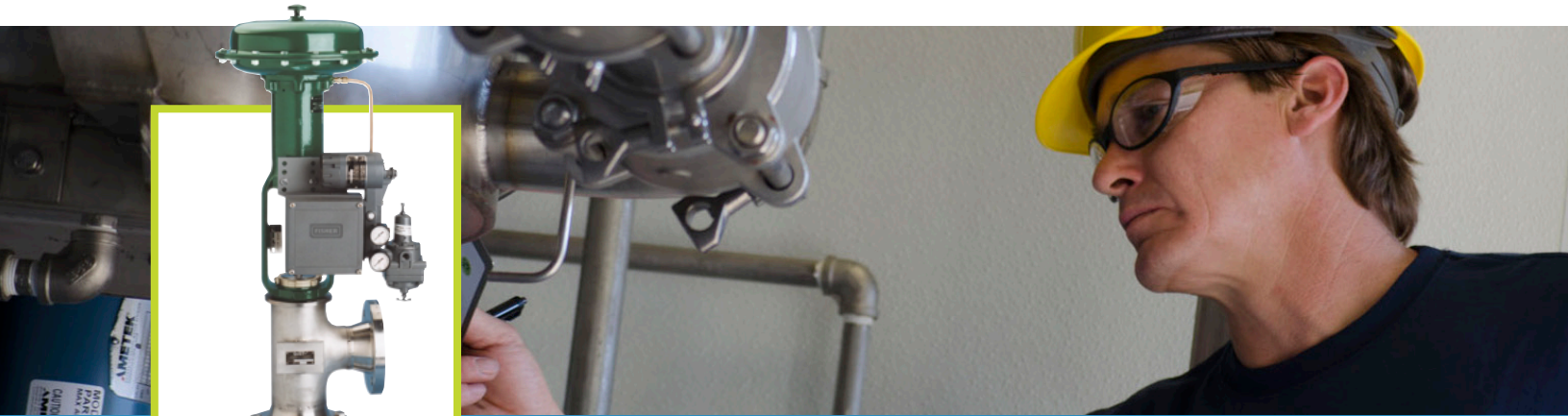


# Q-JET™

## Direct Steam Injection Process Heaters



**Customized to Meet the Unique Heating Requirements for Each Application**

### OVERVIEW

When the success of your operation relies on the ability to bring your process fluid up to temperature instantaneously, it is important to choose a heater that offers tight control, quick startup, and low maintenance.

ProFlow's Q-Jet™ Direct Steam Injection Process Heaters bring your process up to temperature using our unique micro-jet array, featuring multiple controlled nozzles, to introduce steam into the process liquid. Faster and more controlled, this method transfers heat energy over a much larger surface area than a single-jet method. Steam disperses more thoroughly with Q-Jet than with single-jet, uncontrolled heaters, allowing it to thoroughly condense, thereby significantly reducing the destructive vibration of steam hammer.



**Rapid, controlled steam condensation** eliminates vibration, noise, and steam hammer.



**Quick startup of multiple jets** means the steam supply can be opened faster and added faster, resulting in a shorter heating cycle without the risk of steam hammer.



**The highly energy efficient system** uses 100% of BTUs of the incoming steam, eliminating wasted steam.



**Fully customizable to specific requirements,** the Q-Jet Direct Steam Injection Process Heaters can be adapted to any pipe layout or steam supply angle.

# Every Q-Jet process heater is customized for the unique requirements of each application.

ProFlow evaluates the flow rate, temperature coming in, temperature rise requirements, available steam, and physical properties of the process for each application. ProFlow's project engineers run calculations to select and size every Q-Jet process heater to achieve their customer's specific process goals.

ProFlow's team of engineers works directly with each customer to understand their challenges, process goals, and budgetary requirements. Whether it's part of a continuous manufacturing line, mounted to a vessel, or integrated with a process skid, the Q-Jet Direct Steam Injection Process Heater will help you meet your process targets.

### ***Committed to Quality***

Our highly trained team uses industry-leading components that undergo rigorous quality testing in our ISO-certified facility.

### ***Low Maintenance, High Productivity***

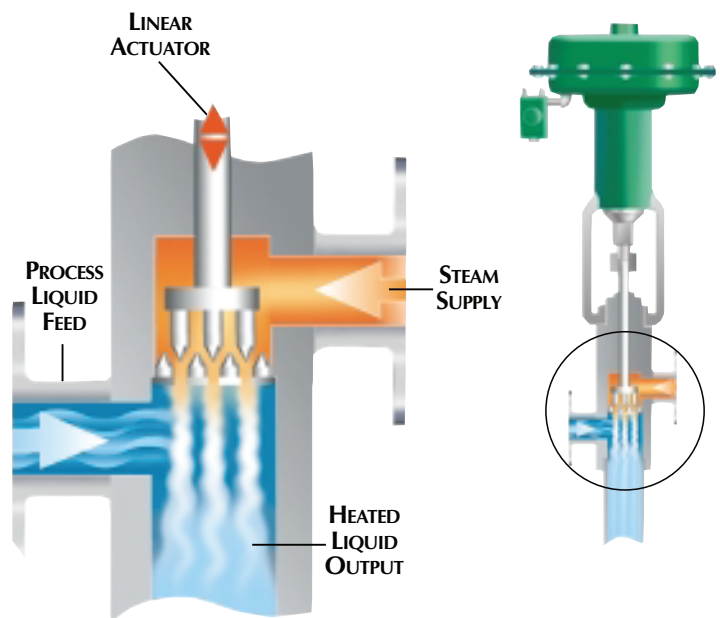
Our relatively simple design means there are no parts to adjust, no routine cleaning, and minimal recalibration requirements. Q-Jet process heaters typically last in continuous service for many years.

### ***Precise Temperature Control***

The heaters offer a high degree of process control and have high turndown ratios (up to 10:1).

### ***Years of Experience***

For more than 30 years, ProFlow has been engineering modular flow solutions for industrial markets. Our Q-Jet Direct Steam Injection Process Heater ensures rapid, controlled steam condensation to efficiently and thoroughly bring your process to temperature.



### **ABOUT PROFLOW**

ProFlow specializes in fluid handling systems and solutions serving critical applications in a variety of industries, including pulp and paper, chemical, biopharmaceuticals, personal care, and other industrial markets in more than 30 countries worldwide.