



**QJET DSI INC.**

**DIRECT STEAM INJECTION PROCESS HEATERS**



**THE DIFFERENCES APPEAR SMALL...  
UNTIL YOU SEE  
THE IMPACT ON YOUR OPERATION.**

**You've gone over all the process requirements** - you need a system that can take your process stream up to temperature instantaneously - with excellent control over temperature - a unit that is energy efficient with low maintenance and upkeep.

**Conventional heat exchangers were ruled out right away** - too expensive - require a lot of auxiliary equipment - subject to fouling - energy inefficient - take up considerable space.

**The obvious solution** - *Direct Steam Injection Heaters* - but which one? They all seem about the same - until you see the differences that make the **Q-JET DSI Direct Steam Injection Heater** the right choice.

**Lets start with the design process itself** - We don't ask you to size the heater by picking a point off a graph or chart - instead, we ask you all the details about your process. We do our calculations based on worst-case to assure that the heater can hit process targets in spite of changing conditions.

**Fabrication.** We use only precision machined components that go through rigorous quality inspections to assure reliable, trouble free operation. The fact that some of our units have been in continuous service for five years confirms the quality of our design and workmanship.

**Ease of operation.** With no parts to adjust, there is no need to shut the process down to make hit-or-miss adjustments that are required in some other units, maximizing up time and productivity.

**Pulp and Paper    Chemical    Food Processing**

**Bottom line...your heater exceeds expectations from day one...  
and every day thereafter.**

**Q-JET Heaters:**

**Low Maintenance**

**Lower Installed Cost**

**Standard Heaters  
to 16 Inch Diameter**

**Custom Sizes Available**

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## Q-JET DSI DIRECT STEAM INJECTION PROCESS HEATERS

Q-JET Process Heaters are sized to achieve the specified heating objective for each application. The benefits provided include:

**Rapid, controlled steam condensation:** Steam hammer and its destructive vibration and noise are eliminated from your system.

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

**Quick start up:** Near instantaneous performance - fluids start to heat up the instant the steam supply is opened. Since steam hammer is not an issue, steam can be added faster, resulting in shorter heating cycles.

**Compact design and ease of installation:** Integral steam control. Adapts to any piping layout - steam supply can be oriented at any angle (consistent with interface flange hole pattern) relative to the process fluid inlet.

**Energy efficient:** 100% of the BTU's in the incoming steam are utilized - something not possible with other heating technologies such as heat exchangers.

**Quality:** Quality is built in at every step - from using close tolerance parts machined from stainless steel - through to final testing under the provisions of our ISO 9001 Certified Quality Program. Also available in other alloys to match your process requirements.

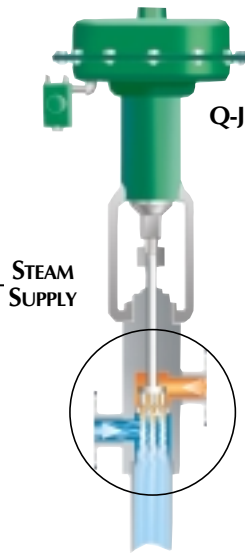
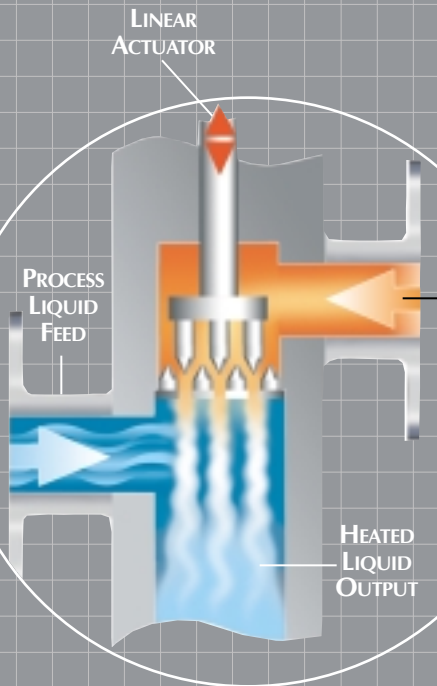
### *Q-JET DSI experience...the most important advantage of all.*

Our years of experience in the design, fabrication and testing of process heating and cooking devices for the pulp, paper and chemical process industries assures the perfect match between the heating system and your process requirements. Call one of our application engineers today to see how we can help save you money in all your direct steam injection heating applications.

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Foreign Patents Applied For  
Q-JET is a registered trademark of Q-JET DSI Inc.



### THE INSIDE STORY

*The secret behind Q-JET Process Heaters superior performance is the design of the unique Micro-Jet Array. Steam is introduced into your process fluids or slurries through an array of multiple small jets, not one large jet, transferring heat energy over a much larger surface area than possible with a single jet of equal cross section. The steam required for your specified temperature increase is precisely controlled by the orifice array, and the steam is more dispersed than in comparable single jet heaters, allowing it to condense immediately, preventing steam hammer.*

ISO 9001 Certified



TUV Rheinland  
of North America



RvC  
Accreditation