

Stepan installs QMax FTS to replace concentric piping design

QMax Industries

The QMax Fluid Tracing System (FTS) combines performance comparable to jacketed pipe with the flexibility and low cost of standard steam tracing. Heating and maintaining temperatures in process piping is very important to the operation of sulfur recovery units and other sulfur operations. Key criteria in selecting heating systems include performance, cost, maintenance and ease of installation. For most piping systems, QMax FTS is the best overall heating solution.

Fully jacketed pipe is the most effective system for maintaining process temperatures in piping. It offers the greatest heating surface area around the process pipe and offers direct heating contact between the process and heating medium. However, jacketed pipe comes with inherent liabilities such as high cost, long deliveries and maintenance headaches.

Carbon steel tracing (contoured steam piping) has recently been an acceptable choice in sulfur operations because it reduces some operational concerns associated with jacketed pipe. However, many problems are inherent with the welded construction of this design:

- High capital cost (often higher than

jacketed pipe).

- Many leak points (as many as 10 per connection).
- Long lead times.
- Installation is very problematic, often leading to system failure.

QMax FTS is a patented, highly conductive aluminum channel that fits over standard stainless or copper tubing. Its aluminum body transforms the nature of the tubing from inefficient convective heat transfer to high-efficiency conductive heat transfer. Its enhancements maximize heat transfer from the heating medium to the process. Clear advantages of QMax FTS include:

- Fewer leaks.
- Lower cost.
- Easy installation.
- Engineered system.

Steve Pimplaskar is an engineer with Ambitech who has been contracted to work on-site for Stepan Co. at its facility in Fieldsboro, New Jersey. The facility installed QMax FTS on a molten sulfur metering system.

"The system we had before used the concentric piping design," Pimplaskar said.

"We made an overall evaluation with QMax FTS compared to the previous system. *We found the QMax FTS is more flexible and cost effective. Those two features made it very attractive, and we decided to go with it. QMax FTS was installed approximately a year ago and after using it, that assessment was very accurate.*

"The QMax FTS has cost advantages, and it also facilitates using the normal piping system instead of the specialized jacketed piping. The system can be modified for any piping configuration, and it is easy to make pipe modifications with QMax FTS in place. QMax FTS is much simpler to work with in regards to maintenance and installation."

QMax Industries provides qualified customers with detailed, complimentary thermal analysis on all applications to model the temperature profile of the system during the specification or estimating stage. This analysis is performed to optimize the system and ensure project success. Deliverables from this analysis include:

- Thermal guarantee for maintaining bulk process temperature and/or minimum

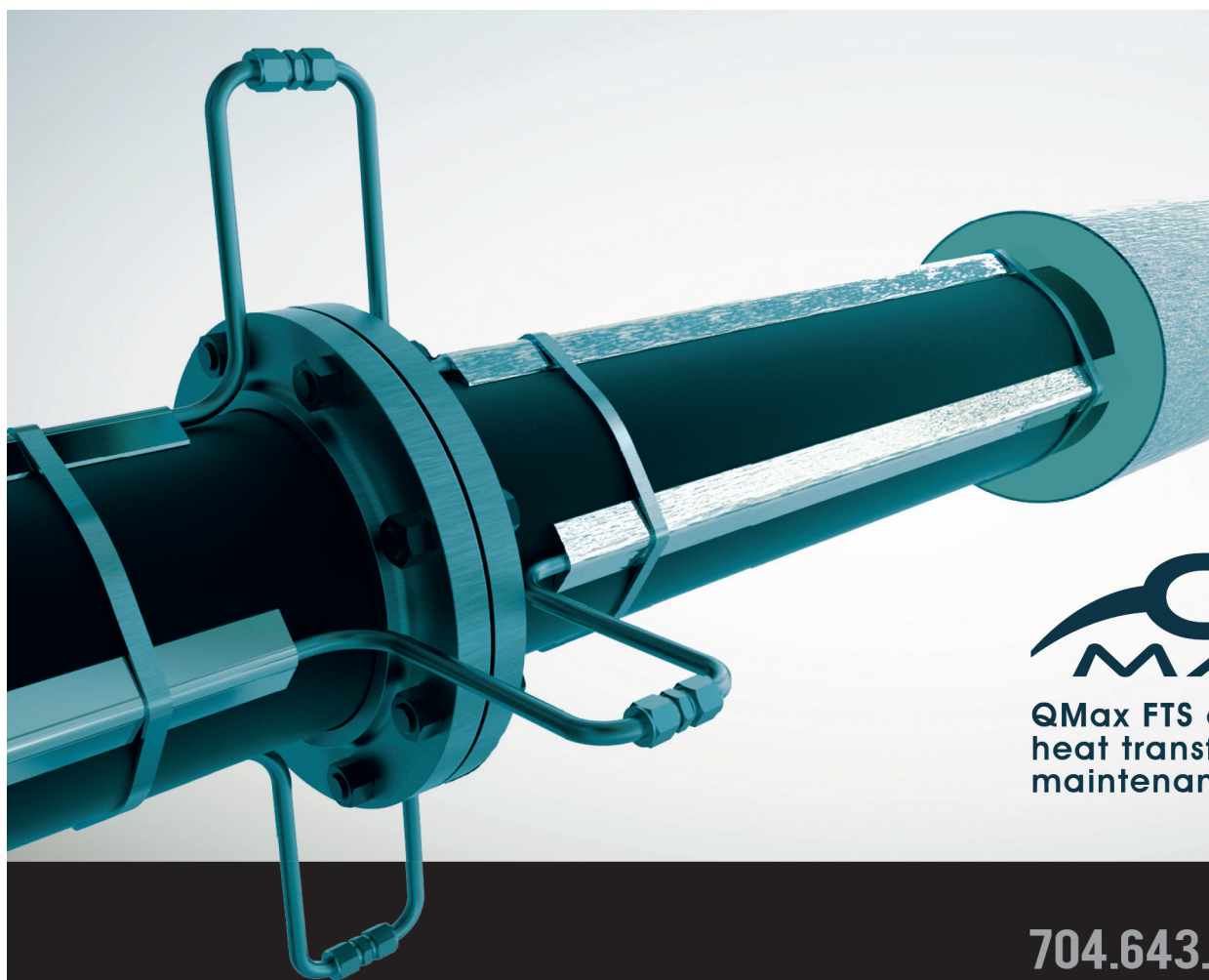
wall temperature.

- Heat-up and melt-out times.
- Steam consumption to help size steam traps and condensate system.
- Comparative system analysis (how QMax FTS compares to other systems).

"We used QMax FTS for a vessel replacement where we had trouble maintaining proper temperature," said a reliability engineer for a major refining company. *"We chose QMax FTS because it has a better ability to maintain proper temperature versus what's conventionally used out in the refinery for heat tracing. QMax FTS has a better ability to transfer more heat accurately, and it has been operating with no issues."*

"If you have a need for precise heat transfer and temperature control, QMax FTS is definitely superior over stainless steel tubing and other products on the market. If you have the need for large heat transfer, QMax FTS is especially better than what is out there, and I would definitely use it again."

For more information, visit www.QMaxIndustries.com or call (704) 643-7299. ●



HIGH PERFORMANCE STEAM TRACING



FTS

FLUID TRACING SYSTEM

QMax FTS consistently delivers a 6X increase in heat transfer - resulting in reduced capital and maintenance costs.

704.643.7299 | QMAXINDUSTRIES.COM