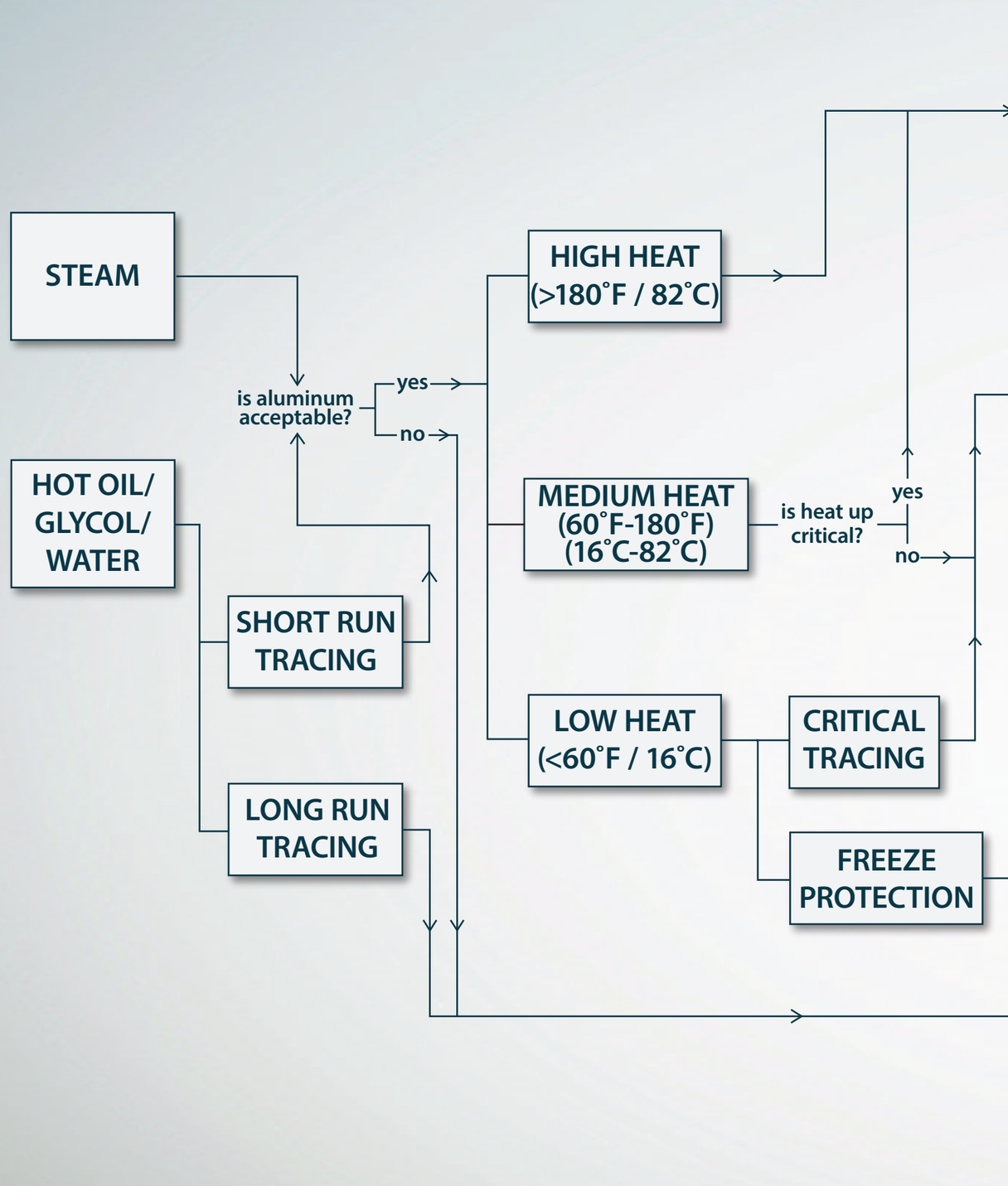
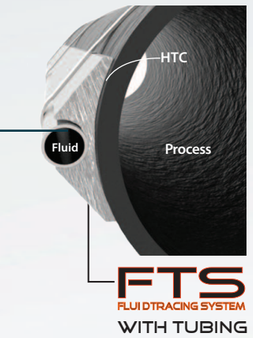
Steam Tracing Product Selection Guide

Selection Process



Product Description

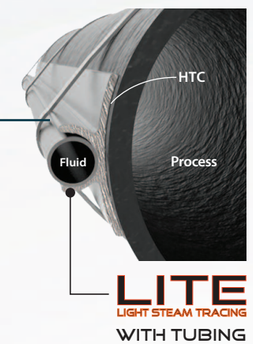


QMax FTS (Fluid Tracing System)

innovative design maximizes the heat input of regular stainless steel or copper tube tracer and offers guaranteed results.

First, **QMax FTS** transforms the nature of the tracer from inefficient convective heat transfer to high-efficiency conductive heat transfer. Second, the heating surface area is increased to as much as 2 inches (50mm) using highly conductive aluminum.

A single tracer, with the addition of **QMax FTS**, can achieve the same results as multiple tube tracers or even jacketed pipe. This saves time and money on capital projects and reduces long-term maintenance costs.

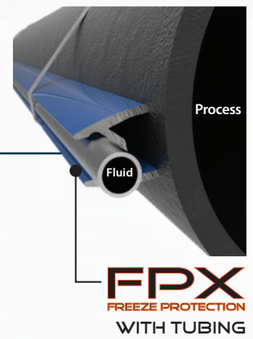


QMax LITE (Light Steam Tracing)

innovative design maximizes the heat input of regular stainless steel or copper tube tracer and offers guaranteed results.

QMax LITE transforms the nature of the tracer from inefficient convective heat transfer to high-efficiency conductive heat transfer. The heating surface area is increased to 1-1/2 inches (38mm) using highly conductive aluminum.

A single tracer, with the addition of QMax LITE, can achieve the same results as 2-3 tube tracers. This saves time and money on capital projects and reduces long-term maintenance costs.



QMax FPX (Freeze Protection)

is a continuous steam tracing standoff designed specifically for pipeline freeze protection.

The innovative **QMax FPX** design mitigates the heat transfer of regular stainless steel or copper tube tracer and offers guaranteed results. Most steam tracing standoffs are poorly designed or not designed at all. Tubing often touches the pipe which creates hot spots that can lead to internal corrosion.

QMax FPX continuous steam tracing standoff mitigates hot spots while offering predictable process temperatures.

QMax CST (Carbon Steel Tracing)

is a 1" x 2" (25mm-50mm) rectangular tube contoured on one side to match the outside diameter of the process pipe. Specifically designed for long-run hot oil tracing, **QMax CST** can be pre-fabricated from customer drawings or can be provided as parts and pieces to be fabricated in the field. In either case, QMax Industries, Inc. will provide a thermal analysis to size the system.

QMax CST is formed from SA 178 Gr. A, carbon steel boiler tubing. The elements are fabricated and tested in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Div. 1 or Section IX.

Heat Transfer Rate*

Best Heat Transfer

50% FTS

10% FTS

75% FTS

* Based on internal testing and research

FTS FLUID TRACING SYSTEM

Clear Advantages

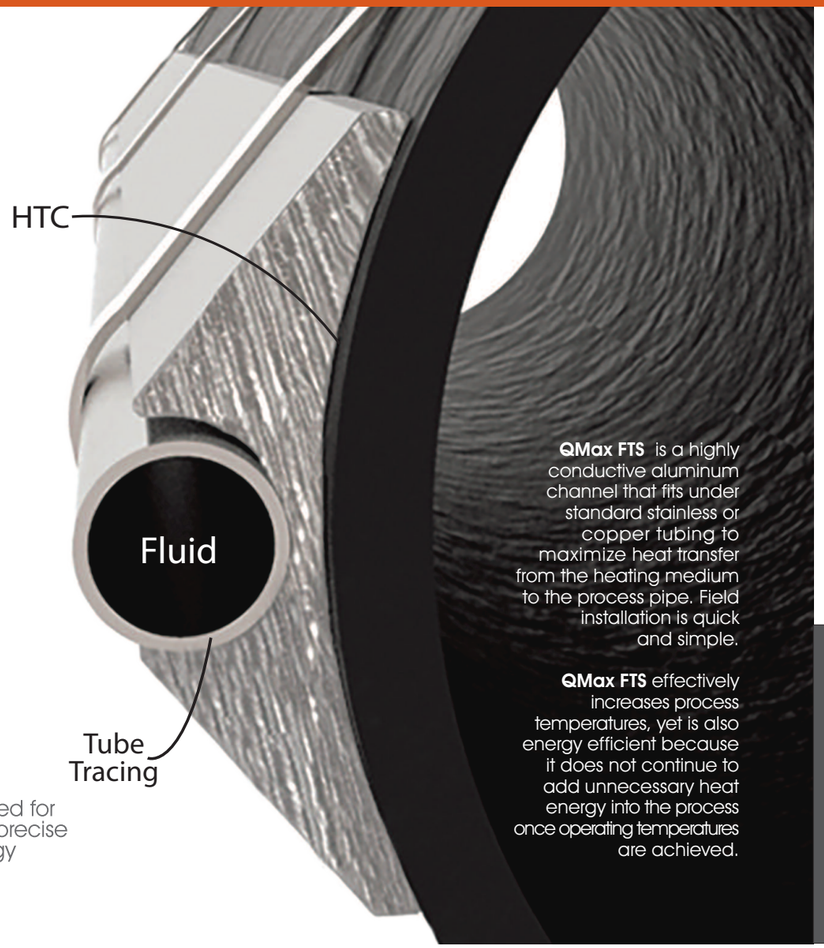
Lower cost
The total installed and long term maintenance costs of **QMax FTS** is consistently lower than jacketed pipe or tube tracers.

Easy installation and maintenance
QMax FTS fits under common tubing so installation and maintenance are well understood.

Customized fit
QMax FTS is made from aluminum, making field installation quick and simple.

Fewer leaks
QMax FTS reduces the number of tracers required which reduces the number of fittings. No costly hoses are required with the system.

Engineered systems
Each application is specifically designed for specific heating requirements to offer precise temperature control and precise energy consumption.



QMax FTS is a highly conductive aluminum channel that fits under standard stainless or copper tubing to maximize heat transfer from the heating medium to the process pipe. Field installation is quick and simple.

QMax FTS effectively increases process temperatures, yet is also energy efficient because it does not continue to add unnecessary heat energy into the process once operating temperatures are achieved.

" If you're not using the QMax System, you're spending too much"

– Robert Hager
Manager of Special Projects
Eastman Chemical Co.

State-of-the-Art
STEAM TRACING
High Performance, Capital Savings

QMax Industries, Inc. designs and manufactures specialized process heating systems for industrial piping, vessels and equipment. We offer High Performance Heat Tracing (Steam, Hot Oil, Glycol and Electric), Equipment Jacketing and Tank Heating solutions. Our state-of-the-art, innovative systems help make us the world leader in Steam Tracing technologies. We help Asphalt Facilities, Oil Refineries, Chemical Plants and other operations to maximize process efficiency and minimize plant downtime.

QMax is the Steam Tracing Authority. We offer steam tracing solutions for any application. We have the engineering expertise to make the best recommendations based on the specific needs of a project.

Thermal Modeling
QMax provides qualified customers with complimentary thermal analysis on all applications to model the temperature profile of the system before it's put into service. Many different scenarios can be analyzed to improve the effectiveness and efficiency on a project.

From our flagship **QMax FTS** for critical tracing to our **QMax FPX** for freeze protection, we have you covered. Our systems help reduce your energy use and capital costs, saving you money.

QMAX INDUSTRIES INC.

QMax Industries, Inc.
is a technology company based in Charlotte, NC, with several innovations in the field of process heating.

Our specialties include:

>High Performance Steam Tracing
>High Performance Electric Tracing
>Equipment Jacketing
>Tank Heating

"We're committed to be the world leader in steam tracing technologies"

Thomas W. Perry
President

tperry@qmaxindustries.com
704-643-7299

Estimated Cost Savings Example

Companies that implement **QMax FTS** as an improvement to standard bare tracing often realize significant capital and maintenance costs savings. The largest impact is the **reduction of steam and condensate infrastructure**. The following example demonstrates the potential savings based on historical prices. The material savings alone more than offset the cost of the **QMax FTS** system. To run a more detailed analysis of savings, please send us the unit prices that apply to your site specifications (for example, welded versus seamless affects the tubing price).

Material Savings*	Tubing	Fittings	Steam Traps	Pre-Insulated** Tubing
Input Unit Price	$4.00 / ft	$25	$750	$8.00 / ft
(4) Bare Tracers	24,000 ft	1,200	160	8,000 ft
(2) QMax Tracers	12,000 ft	600	80	4,000 ft
Potential Savings	$48,000	$15,000	$60,000	$32,000

*Labor not included
**Pre-insulated tubing is based on 50 ft lengths per 150ft circuit.

Total Savings: $155,000

FTS FLUID TRACING SYSTEM

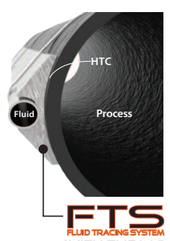
> **Energy Savings**
More heat energy is input into the crude instead of lost through insulation.

> **Energy & Maintenance Savings**
Fewer steam traps means fewer potential for traps failed open or closed.

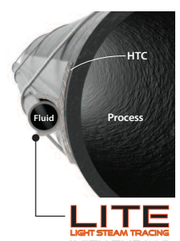
> **Energy & Maintenance Savings**
Less steam/condensate infrastructure means lower maintenance costs and less energy loss.

QMax Fluid Tracing Systems

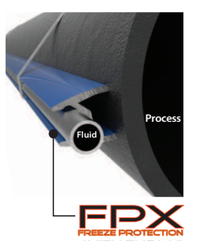
Best for most Steam Tracing



Best for most Glycol Tracing



Best for Freeze Protection



Best for Long Run Hot Oil