

# Heat Trace Tube Bundle

Mustang Sampling's Heat Trace Tube Bundle is the patented power connection that provides power to the sample conditioning system and transports the Analytically Accurate<sup>®</sup> heated gas sample to an analyzer. This unique dual functionality eliminates the need for additional power at the sample point and helps avoid Joule-Thomson cooling.

### **APPLICATION**

Small diameter lines are heated for many reasons including freeze protection (winterization), reduced viscosity, and keeping gas samples above their dew point. These can be critical for process accuracy, emissions compliance, and even plant operation.

Mustang Sampling's cut-to-length constant watt electric heat trace tube bundle is designed to provide freeze protection and temperature



maintenance. The construction of the heat trace tube bundle makes it exceptionally durable and suitable for process analyzer applications within Natural Gas, Natural Gas Liquid and Biogas Sample Conditioning Systems. The patented power connection heat trace tube bundle runs from the Analyzer building to Mustang Sampling's Systems and enclosures which are close couple to one another at the source.

### **FEATURES**

- Long circuit lengths
- Multi-Component Bundle
- Insulated heat trace
- Consistent watt density per unit length
- Not subject to high inrush current on start-up
- Integral 1/4" OD x 0.035" wall 316/316L SS Seamless tubing
- Maximum Pressure: 5100 psig

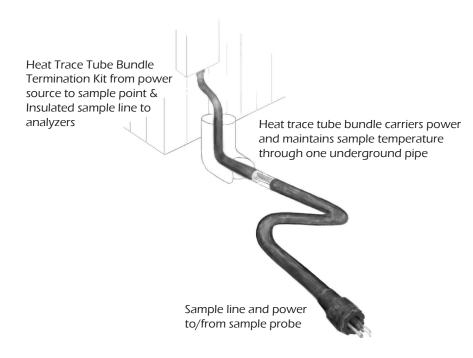
## BENEFITS

- Keeps gas samples above their dew point, helps prevent the Joule-Thomson effect
- Certified Electrical Heat-Tracing
  - Class 1, Division 1, Groups A, B, C, D
  - FM and CSA approved for use in hazardous areas
- Process tubing is MR0175; Petroleum and natural gas industries - Materials for use in H<sub>2</sub>S containing environments in oil and gas production
- Conforms to API 14.1 Guidelines
- Freeze protection
- No steam cleaning
- Excellent means of maintaining very long, continuous lengths of impulse lines and piping at consistent temperatures end-to-end
- Reduces installation and maintenance requirements

### HEAT SHRINK ENTRY SEAL AND HEAT SHRINK BOOTS

The heat-shrinkable entry seal provides a waterproof fitting where Mustang Sampling's heat trace tube bundle enters an enclosure such as a Pony<sup>®</sup> Heated Probe Enclosure, Mustang<sup>®</sup> P53<sup>®</sup> Sample Conditioning System, Pony<sup>®</sup> Sample Conditioning System or a Mustang NGL Sample Conditioning System. The thermally stabilized, modified polyolefin entry seal and boot combination consist of a threaded assembly that seals at the enclosure and a heat-shrinkable nose that seals to the heat trace tube bundle. Using a heat shrink end seal boot is suggested for all exposed ends. This installation will provide an ideal weather seal protection for gas sample conditioning systems.

#### PATENTED POWER CONNECTION



#### MAXIMUM HEAT TRACE TUBE BUNDLE LENGTHS IN FEET

		120 V				240 V			
	Ambient Temperature Start-up	15 A	20 A	30 A	40 A	15 A	20 A	30 A	40 A
5 Watts	50°F (10°C)	230	270	270	270	460	540	540	540
	0°F (-18°C)	140	190	270	270	285	380	540	540
	-20°F (-29°C)	125	165	250	270	250	330	500	540
	-40°F (-40°C)	110	145	220	270	220	295	440	540
8 Watts	50°F (10°C)	150	200	210	210	300	400	420	420
	0°F (-18°C)	100	130	200	210	200	265	400	420
	-20°F (-29°C)	85	115	175	210	175	235	350	420
	-40°F (-40°C)	80	105	155	210	155	210	315	420

Use the bold alpha-numeric characters from the table above to build your model number:



# Analytically Accurate® TECHNOLOGY

#### About Mustang Sampling

Mustang Sampling, LLC is the innovator of Analytically Accurate<sup>®</sup> solutions within sample conditioning systems. We provide custom solutions of products and services globally to the Natural Gas, Natural Gas Liquids (NGL), and Liquefied Natural Gas (LNG) industries. Mustang Sampling continues to pioneer integrated control systems, allowing our customers to maintain phase stability from sample extraction at the source through sample analysis. Our products are continuously improved and subjected to the highest quality standards which provides our customers with the best sample conditioning solutions.

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U.S. Patent 7,162,933 B2

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MS-CSHTTB.v4-EN-P July 2019 Supersedes: MS-CSHTTB.v3-EN-P