

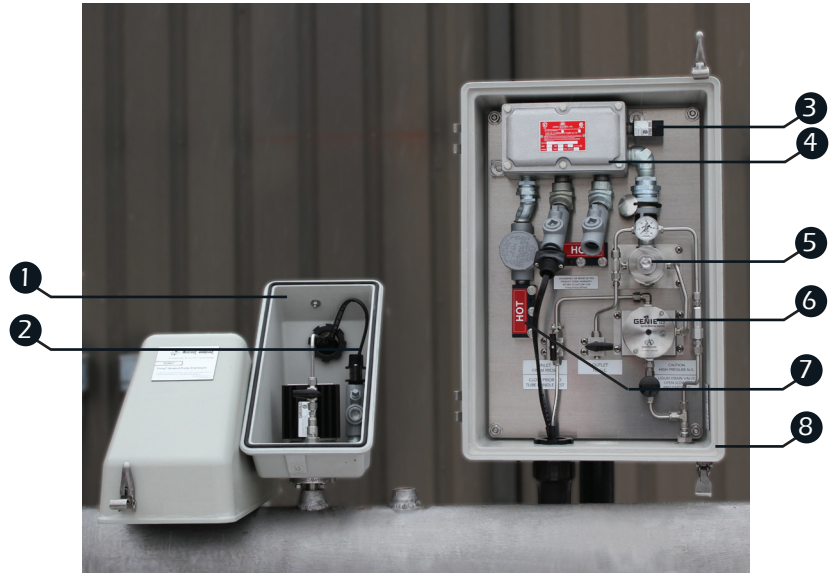
MSCS®



Mustang Sampling®

Mustang® Sample Conditioning System

Item Number	Description
1	Pony® Probe Enclosure
2	Patented technology utilizing existing power supplied by electric heat trace tube bundle
3	System Temperature Limiter
4	PID Temperature Controller
5	Single or Multi-Stage Heated Regulator
6	Liquid Membrane Separator
7	Self-Limiting Block Heater
8	Mustang® P53® Remote Mount Sample Conditioning System



APPLICATION

The Mustang® Sample Conditioning System (MSCS®) provides an Analytically Accurate® solution for natural gas sampling applications.

The Mustang® P53® Remote Mount Sample Conditioning System and the Mustang Pony® Probe Enclosure are integral parts of the MSCS. The Pony Probe Enclosure is installed on a threadolet in proximity to the Mustang P53.

The MSCS solves the problem of hydrocarbon liquid condensation from Joule-Thomson cooling in natural gas analysis systems. High pressure natural gas samples are transported at a temperature well above the expected hydrocarbon dew point, which is maintained throughout the pressure reduction process, delivering a representative sample to the analyzers.



Natural Gas

FEATURES

- Patented technology utilizing existing power supplied by electric heat trace tube bundle
- Remote Mounted
- Rated for Class 1, Division 1, Group D Locations
- Steel latching closures
- NEMA 4X Enclosure

BENEFITS

- Requires no external power or natural gas for proper operation
- Conforms to the API Manual of Petroleum Measurement Standards chapter 14.1



PRODUCT DIMENSIONS

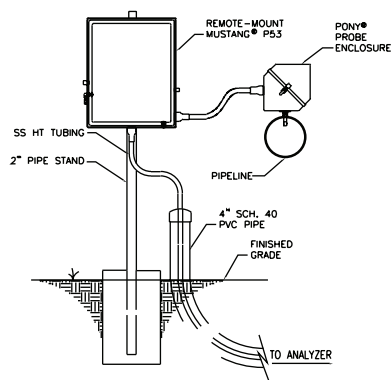


Figure 1 - Mustang® P53® Remote Mount Sample Conditioning System with Pony® Probe Enclosure

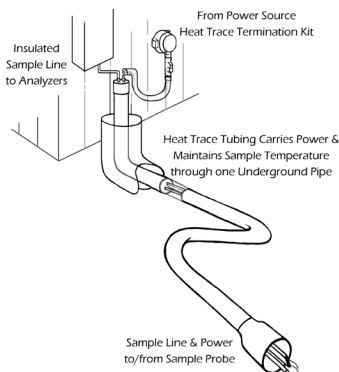


Figure 2 - Mustang® Patented Power Connection

PRODUCT SPECIFICATIONS

Wetted Parts	316 SS
Maintains Sample Gas	Mustang P53 Sample Conditioning System Standard set point at 120°F (49°C) Adjustable from 60°F to 400°F (16°C to 204°C)
	Mustang Pony® Probe Enclosure 98°F (37°C)
Heating Components	80 watt self-limiting block heater
Cabinet Construction Options	Hotpressed Glass Fiber Reinforced Polyester (GRP) Stainless Steel
Regulator Options	MHR® Single-Stage Regulator MJTHR® Multi-Stage Regulator
Input Supply Voltage	115 VAC 240 VAC 24 VDC
Maximum Allowable Operating Pressure	2000 psig @ 60°F (138 BAR at 16°C) (Standard Design - Liquid membrane separator upstream of MHR Single Stage Regulator)
	3750 psig @ 60°F (259 BAR at 16°C) (Liquid membrane separator downstream of MHR Single-Stage Regulator)
	6000 psig @ 60°F (414 BAR at 16°C) (Liquid membrane separator downstream of MJTHR Multi-Stage Regulator)

HEAT TRACE TUBING SPECIFICATIONS

Maximum Heat Trace Tubing Lengths Per Circuit Breaker Sizes (in feet)

	Ambient Temperature	120 V				240 V			
		15 A	20 A	30 A	40 A	15 A	20 A	30 A	40 A
5 Watts	Start-up								
	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
8 Watts	-40°F (-40°C)	110	145	220	270	220	295	440	540
	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	10	155	210	155	210	315	420

Analytically Accurate®
TECHNOLOGY

About Mustang Sampling

Mustang Sampling, LLC is the innovator of Analytically Accurate® 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.

Mustang Sampling, LLC
43 Ritmore Glen
Ravenswood, WV 26164
P: +1 304 273 5357
F: +1 304 273 2531

info@MustangSampling.com
www.MustangSampling.com

Copyright © 2017-2019 Mustang Sampling.

All rights reserved. Mustang Sampling®, Mustang®, MSCS®, MHR®, MJTHR®, P53®, Pony® and Analytically Accurate® are registered trademarks of Mustang Sampling, LLC.

U.S. Patents 7,162,933; D674,052 S

No part of this publication may be reproduced in any material form without the written permission of Mustang Sampling, LLC.

MS-MSCS.v8-EN-P September 2019
Supersedes: MS-MSCS.v7-EN-P