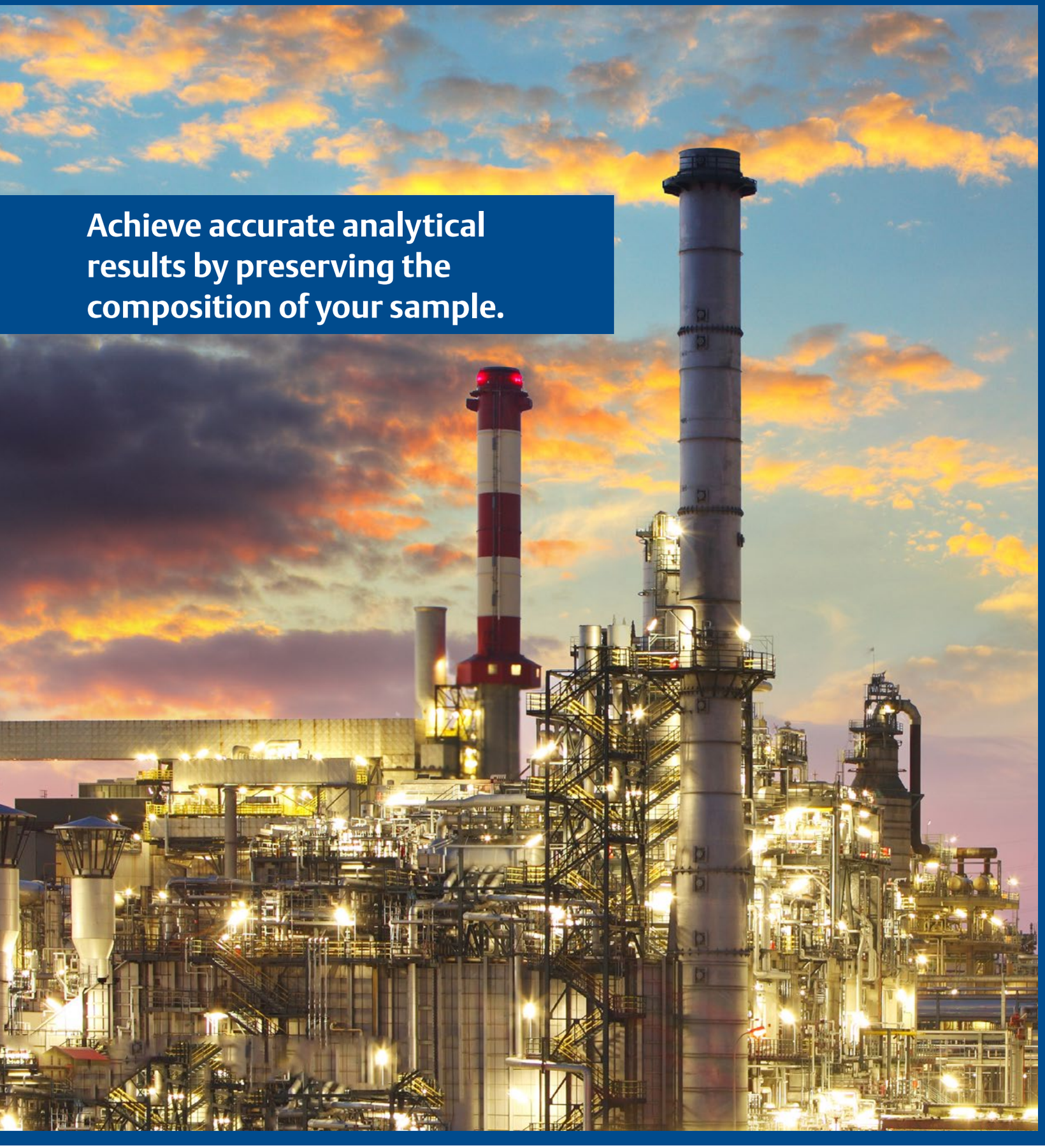


TESCOM™ 44-6800 Series Vaporizing Regulator

Boost the reliability of your sample conditioning system with superior sample quality.

EMERSON™

Your online gas chromatograph analyzer system faces several obstacles that diminish the accuracy of its analysis.

Are your analytical results representative of what's flowing through your pipes? If not, chances are your sample conditioning system is not delivering the single-phase vapor samples that are required for proper analysis. Lacking accurate and reliable measurements can make it difficult to assess the health of your process and create corrective action plans to minimize the financial impact of any off-specification product. To guarantee the performance of your analyzer, you must take steps to ensure the best sample quality—every time.

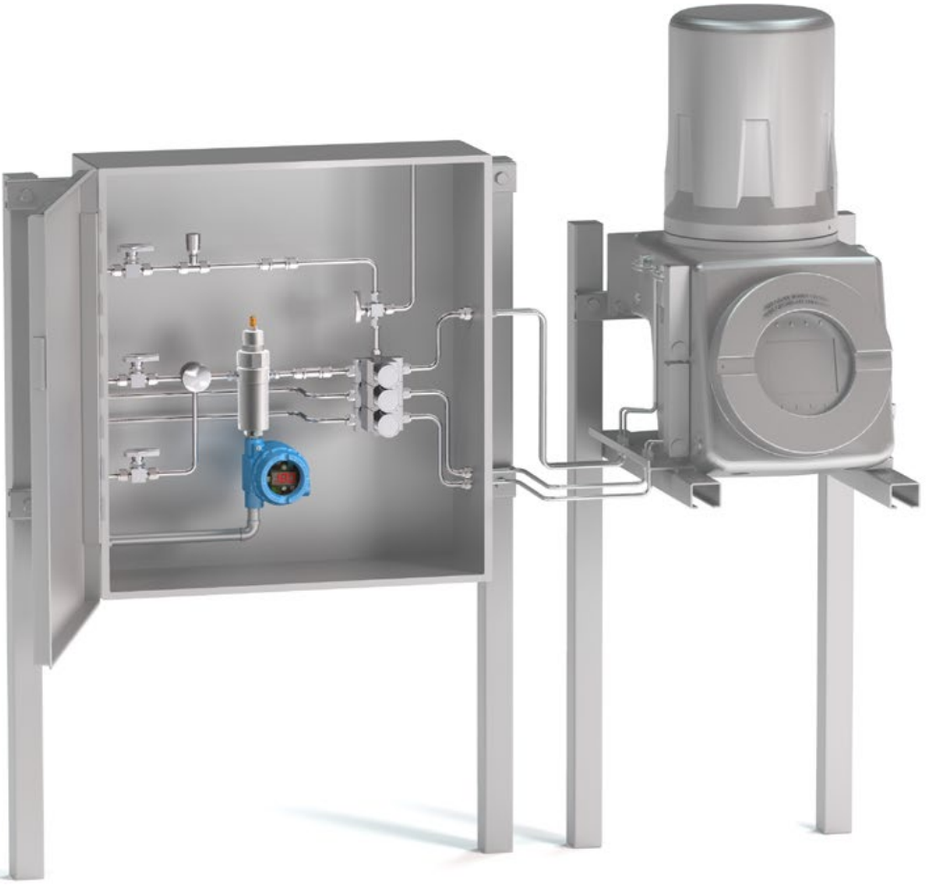
"Greater than 70% of the issues experienced in online gas chromatography analysis are caused by unreliable sample conditioning systems."
– Major Gas Chromatograph (GC) Manufacturer

"Excessive repairs and product replacements of faulty components increase my maintenance costs."
– Petrochemical Plant Manager

"I need to be able to trust my analytical results when I'm troubleshooting my unit so I know which operating variables I need to adjust."
– Refinery Process Engineer

What if, instead of worrying about the accuracy of your analytical results or the reliability of your analyzer system, you could focus on more important things – like optimizing your plant's operations to maximize profits?

The TESCOM 44-6800 Series Vaporizing Regulator boosts the reliability of your sample conditioning system.



The TESCOM 44-6800 Series Vaporizing Regulator delivers single-phase vapor samples every time. Its patented heat transfer technology provides greater surface area and longer residence time for maximum heat transfer. The 44-6800 offers certified separability that provides greater installation flexibility in environmental extremes. Features include remote and local monitoring capabilities, standard thermal cutoff (TCO) fuse, PID heater controller, and optional coatings for corrosive environments and inert applications.

TESCOM™

"The TESCOM 44-6800 is a key component of our sample conditioning system that meets all safety standards in applications where we need to install the electrical housing outside of the heated enclosure."
– Process Engineer, Major Refinery

Achieve the best sample quality every time.

Superior heat transfer technology and steady heater temperature control ensure the delivery of a single-phase sample at all times – promoting greater accuracy from your analyzer.

Superior heat transfer ▶ p6

Installation flexiblility.

The 44-6800 Series separable version allows you to install the electrical housing in a lower-temperature environment without losing CSA, ATEX and IECEx hazardous location certifications.

Certified separablity ▶ p6

Ensure safety with built in redundancy.

A standard TCO fuse inside the regulator body shuts off power to the heater in case of a thermal event – ensuring your equipment safety.

Safety ▶ p6

Monitor and troubleshoot remotely or while in the field.

The 4–20 mA analog output and LED display enables you to remotely and locally monitor heater temperature. This helps you detect abnormal situations before they escalate and compromise system reliability.

Connectivity & troubleshooting ▶ p6

The TESCOM 44-6800 Series: Greater reliability for your analytical needs

Installation flexibility

- Customized installation based on your unique application needs
- Protect sensitive electronics by installing the electrical housing in a lower temperature environment
- CSA, ATEX, and IECEx T3 (200 °C) rating for hazardous locations

Superior heat transfer technology

- Flow path geometry provides greater surface area for maximum heat transfer
- Prevent condensation and preserve sample composition to achieve superior sample quality
- PID heater controller ensures steady heater temperature control

Advanced features

- Monitor and troubleshoot remotely or while in the field
- TCO fuse shuts off power to the heater during a thermal event to ensure equipment safety
- Specialty coatings for corrosive environments and inert applications

TESCOM 44-6800 Series Overview

The 44-6800 Series features superior heat transfer technology that promotes greater system reliability and analytical accuracy. It integrates remote and local monitoring capabilities, PID heater control, and safety features that make 44-6800 Series the best vaporizing regulator for sampling systems.

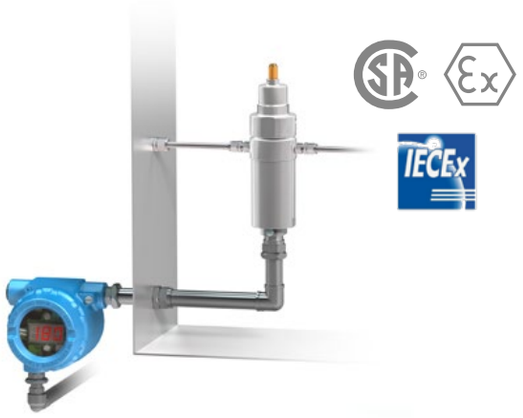
Thanks to its certified separability and rugged design, you can customize this regulator to meet your toughest operating requirements. Engineered for dependability, it can handle voltage spikes and extreme ambient temperatures. **Emerson.com/TESCOM**

Specifications

Features	Specifications	Features	Specifications
Maximum Inlet Pressure:	Standard 3500 psig / 241 bar / 24,132 kPa Optional 6000 psig / 414 bar / 41,370 kPa	**Operating Ambient Temperature Limit:**	Regulator body: -40 °F to +185 °F (-40 °C to +85 °C) Electrical housing: -40 °F to +149 °F (-40 °C to +65 °C)
Maximum Outlet Pressure:	0-25, 0-50, 0-100, 0-250, 0-500 psig 0-1.7, 0-3.4, 0-6.9, 0-17.2, 0-34.5 bar 0-172, 0-345, 0-690, 0-1724, 0-3448 kPa	**Connections:**	NPTF, Tube Stub
Heater Temperature Analog Output:	4-20 mA signal for monitoring heater temperature	**Options:**	Solid cover without LED display Solid cover with LED display Glass cover with LED display Separable regulator and enclosure (solid cover without LED display) Separable regulator and enclosure (solid cover with LED display) Separable regulator and enclosure (glass cover with LED display)
Flow Capacity:	C_V 0.02		

Certified separability for greater Installation flexibility

Certified separability



- Separable version maintains hazardous location certifications after installation
- Ideal for heated enclosures or smaller cabinets

Extended product lifetime

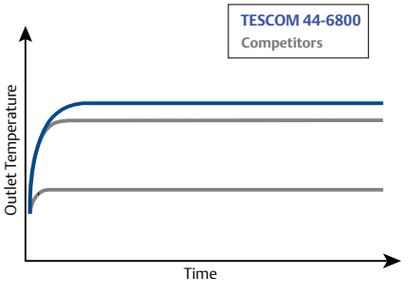
- Protect sensitive electronics by installing the electrical housing in a lower-temperature environment

Superior heat transfer technology preserves the composition of your sample

Advanced geometry

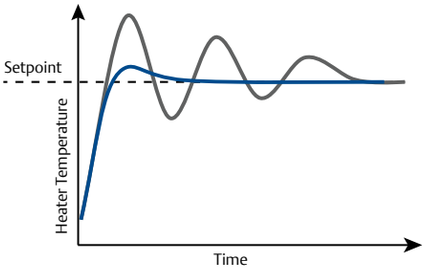
- Flow path design maximizes heat transfer to ensure complete sample vaporization

Higher outlet temperatures



- Higher outlet temperatures prevent condensation after pressure reduction
- Single heater capable of handling different process compositions

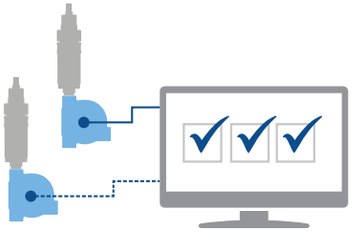
Steady, precise and responsive heater control



- PID feedback controller reduces overshoot and undershoot effects, resulting in steady heater temperature control

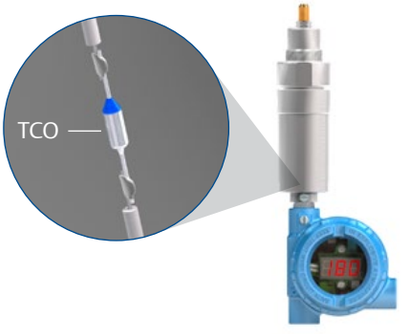
Additional advanced features expand capabilities

Remote and local monitoring capabilities



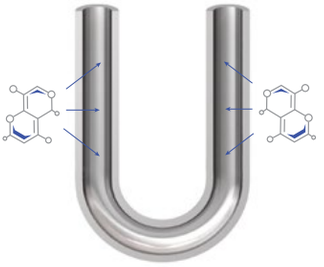
- 4 – 20 mA analog output allows for remote heater temperature monitoring and data acquisition
- Local LED display enables monitoring and troubleshooting while in the field

Thermal event protection



- TCO fuse shuts off heater power during unexpected thermal events

Corrosion resistance and surface inertness



- Specialty wetted path coatings prevent chemical adsorption and ensure surface inertness

The TESCOM 44-6800 Series Vaporizing Regulator improves the analytical accuracy of your analyzer.

TESCOM delivers a wide range of standard and custom-engineered precision product solutions for safe, reliable pressure control, instrument process isolation, and environmental protection to a diverse world market.

Emerson Automation Solutions
TESCOM
12616 Industrial Blvd.
Elk River, MN 55359
United States
T +1 800 447 1250

Emerson Automation Solutions
TESCOM
5801 East Harrison Ave.
Harlingen, TX 78550
United States
T +1 800 447 1250

Emerson Automation Solutions
TESCOM
An der Trave 23-25
23923 Selmsdorf
Germany
T +49 38823 31 284

Emerson Automation Solutions
TESCOM
Building 40B-2
1006 Jin Min Road
Shanghai Pu Dong District
Shanghai 201206, China
T +86 21 2892 9000 (China)
T +65 6777 8211 (Singapore)

Emerson.com/TESCOM
Facebook.com/EmersonAutomationSolutions
LinkedIn.com/company/Emerson-Automation-Solutions
Twitter.com/EMR_Automation

BR000172ENUS-01_09-20

EMERSON™

CONSIDER IT SOLVED™