
# VENT-LESS®

## THE GROUNDBREAKING RANGE OF AUTOMATIC BREATHER VALVE TEST BENCHES

Also includes:-

**Essential Insights for Breather Valve Selection and Maintenance: Risks, Considerations, and Best Practices**

Revision 2

# Contents Page

# ABOUT US

Founded in 2009, Assentech is a premier provider of equipment, services, and technical expertise in the realms of Tank Storage, Process Safety and Fluid Transfer. We take pride in supplying and servicing equipment that adheres to stringent international standards, reflecting our commitment to safety, environmental responsibility, and cost-efficiency.

Assentech's vision is rooted in understanding the high stakes involved in tank storage – the often expensive and potentially hazardous contents necessitate the use of equipment that meets the highest environmental and safety standards.

Assentech has built an enviable reputation by partnering with a comprehensive global supply network to deliver an extensive range of products, services, and solutions. Our one-stop-shop approach, combined with our in-house knowledge and expertise, allows us to provide tailored solutions to tackle even the most complex applications.

# ABOUT US

The Managing Director of Assentech is Ewart Cox who has 25 years of tank venting experience and also serves as a Technical Committee member for the British Standards Institute (PSE-17 WG6) and the Institute of Oil & Gas Producers (IOGP), contributing to the upcoming revision of BS EN ISO28300:2008.

As a voting member of the API2000 Standards Committee, Ewart leads a task group developing a new 'Environment' annex focused on effective tank vent selection and design. Additionally, he is collaborating with the API576 committee to align the maintenance and inspection of tank breather valves with API2000 and best practices, with a strong emphasis on environmental sensitivity. Ewart also advises regulatory bodies, including the Environment Agency, on best practices for controlling biogas digester emissions.


**"I do not believe anyone would knowingly purchase a breather valve that hasn't been tested to a recognised standard before installing it onto a £1+ million storage tank or digester"**

# Innovating for a Safer Tomorrow: The Story Behind the Vent-Less Test Bench

**“It took us 25 years to become an overnight success! We figured out how to help tank farm and digester operators reduce emissions, enhance safety, profitability, and reliability, all while meeting the expectations of an environmentally conscious public—simply by ensuring tank breather valves function properly.**

**The solution was obvious yet overlooked for decades. These ubiquitous devices are installed on millions of storage tanks and digesters worldwide, holding everything from perfume and whiskey to gasoline, paint and digestate. Tanks and digesters operate at pressures similar to that of a party balloon but contain up to many hundreds of tons of liquid. Tank valves, essential for controlling emissions that can be flammable, toxic, or corrosive, also accommodate pressure and volume changes or provide the ultimate line of pressure relief in an emergency.**

**No responsible operator would use an untested breather valve, risking assets and safety. Although international standards mandate thorough testing, the time-consuming nature of manual testing leads many manufacturers to skip this step to keep prices competitive. This lack of emphasis on valve integrity and functionality often results in a knowledge gap among operators, leading to frequent, serious incidents.**

**Driven by necessity and a commitment to environmental stewardship, Assentech embarked on a decade-long journey to develop the Vent-Less test bench, addressing these critical safety and environmental challenges.”**


With over 75% of new valve manufacturers not conducting functional testing of new breather valves to international standards API2000 and ISO28300, it has never been more important for operators to test new valves prior to commissioning and then keeping test records for ageing plant to satisfy requirements of the Regulators and document a path to net-zero.

Manual test benches have existed for many years, but results are variable because vents are modulating devices that open incrementally with rising flow. So, determining where set point occurs and leak rate volumes at 75%, 90% or whatever pressure is desired is difficult to calculate and almost impossible to replicate.

Breather valves are critical safety devices that protect people and the environment from exposure to volatile organic compounds and flammable atmospheres. Far too many tank storage incidents are caused by lack of knowledge of tank breather valve functionality or inadequate maintenance practices.

Did you know that the requirement to test all production breather valves has been a requirement since the 1960's? It was introduced following a number of tank collapses caused by installation of incorrectly assembled breather valves!

# What is a breather valve?

## Breather Valves: Critical for Tank Safety and Environmental Protection

Breather valves, also known as Pressure/Vacuum Relief Valves (PVRV), are essential devices designed to protect staff and the environment from emissions but also protecting storage tanks from the dangers of over-pressure and vacuum conditions. These critical safety components ensure tanks operate efficiently, maintain structural integrity, and minimise harm to people, product loss and environmental impact.

## Why Are Breather Valves Used?

- Protect People: Prevent harmful exposure to vapours affecting nearby workers or residents.
- Prevent Flammable Vapour Clouds: Minimise emissions to enhance safety.
- Protect Tanks: Avoid damage from over-pressure (filling, heating, reactions, fire) or vacuum (emptying, cooling).
- Ensure Safety: Maintain tank integrity and prevent accidents from pressure imbalances.
- Reduce Product Loss: Limit evaporation to conserve resources and reduce environmental impact.
- Reduce odours: Often the first indicator of harmful fugitive emissions.
- Support Compliance: Meet regulations like DSEAR, LDAR, and IED.

## Where Do You Find Breather Valves?

**Breather valves are commonly found on:**

- Atmospheric Storage Tanks: Fixed-roof tanks that are key assets for manufacturers that use large volumes of liquids including chemicals, pharmaceuticals, food and beverages to oil & gas to refineries and bulk storage facilities that operate as distributors or refineries.

- Biogas Digesters: Sustainable energy producers using anaerobic digestion to produce electricity and gas. These can be stand alone businesses or part of a waste management facility in a water treatment works. They are the last line of pressure protection and have been identified as prime emission sources.

## What Emission Scope Do They Fall Under?

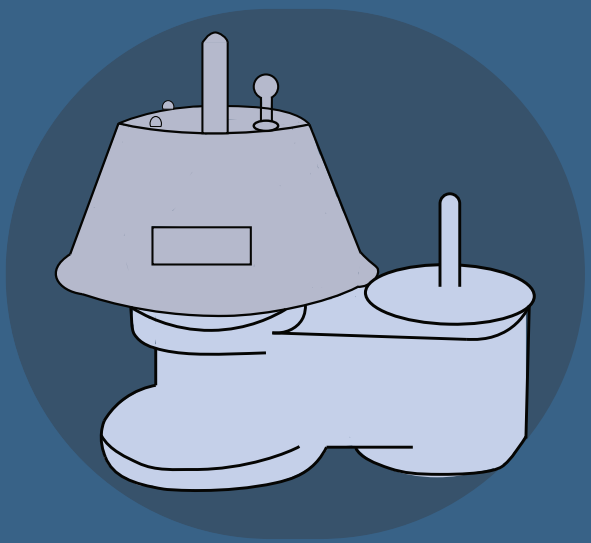
Breather valves contribute to greenhouse gas emissions, categorised differently depending on their application:

- **Scope 1 Emissions**: When installed on digesters, breather valves are part of the operational process and fall under direct emissions from company-controlled sources.
- **Scope 3 Emissions**: When installed on storage tanks, breather valves are associated with storage activities and contribute to indirect emissions within the supply chain.

These emissions occur when vapours or gases escape due to tank pressure fluctuations or through leak paths caused by valve design or worn soft goods kits that require replacement.

Managing these emissions is vital for meeting greenhouse gas reduction targets and ensuring compliance with methane and VOC (volatile organic compound) regulations. Addressing these leaks not only supports environmental objectives but also demonstrates a commitment to regulatory and corporate responsibility.

*Today's actions shape tomorrow's world. Each of us holds the responsibility to focus on sustainable choices today, ensuring a healthier planet for future generations.*



# Procurement Guide: Key Considerations to Mitigate Risks with Tank and Digester Breather Valves

Informed procurement is one of the most important stages in mitigating risk and running an efficient facility. Many operators rely on tank storage or digesters as a business critical asset. In other words, they have the highest potential impact on viability of the business if they cannot be used, or if an incident leads to loss of containment, harm to people or the environment.

If you think that purchasing from the lowest priced bidder is the way ahead, think again. The industry is proliferated with valves that are not tested for functionality, capacity or compliance. This is a clear case of 'Caveat Emptor' where the buyer beware because poor quality valves can hide the damage they are doing to your business, the facility and your staff.

8 important stages to understand

1) The application: The media stored affects the rate of evaporation, compatibility of materials, volatility, GWP, likelihood to freeze or polymerize etc.
2) Storage Tank or Digester Design: Pressure limits, orientation, design code, available flanges and specifications.
3) Industrial Standards; API2000, ISO28300, API576, EEMUA 231,
4) Legislative framework: Industrial Emissions Directive , AP-42, Clean Air Act, DSEAR etc.
5) Valve Designs Available: Full open at 10% or 100% overpressure, pipe-away or end of line, weight loaded, spring loaded or pilot operated.
6) Documentation: Individual production test cert including calibration and leak test results and evidence of certified flow capacity.
7) Installation Requirements: Flange specification, commissioning and safe orientation.
8) Management of Ageing Plant: Agreed written scheme of examination including inspection and servicing requirements and timing.

# Are You Aware of the Risks? Essential Insights for Maintenance and Testing of Breather Valves

Mitigate the hidden risks with assignment of service or inspection activities.

1) How certain are you that the valve on the tank or digester has been sized and set correctly? All too often valves are fitted that have been pulled out of storage or from another tank without consideration for its suitability. It is always best to document a 'health check' to match the required capacity flows and settings with the valve before any service work commences on the valve. This work should be done by an experienced person.

2) Are the staff correctly trained? Technician competency is vital to all successful inspection and maintenance activities. Regular training and competency checks ensure that even the smallest details that could lead to catastrophic consequences are spotted before they become an issue. This applies to all stakeholders.

3) The Technician should be able to demonstrate a clear understanding of international standards such as API2000 & ISO28300

4) Written schemes of examination should be clear and unambiguous. This covers both inspection and service activities.

5) Test accuracy should be demonstrated by evidence of recent calibration testing. This could be an annual test for static test benches or even daily for mobile units. Full traceability in accordance with national standards is essential.

6) The test bench must have the ability to simultaneous measure flow and pressure to comply with the test conditions of API2000 Section 5.4.

7) Testing must include both pressure and vacuum ports and volume leak rates for environmental compliance.

8) The certification must reference testing in accordance to API2000 Section 5.4. and refer to an individual valve, date and test technician.

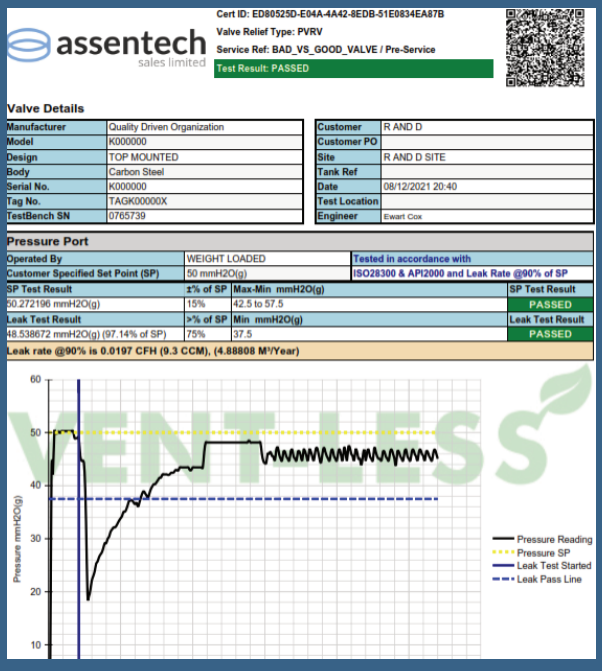
9) To assist in management of ageing plant, certification should include work carried out during service, spares used, condition observations and advisories.

# Essential Risk Evaluation: Safeguarding Yourself, Your Facility, and Your Reputation

- When you procure breather valves, do you always ask for an individual Production Test Certificate to API2000 or ISO28300?
- Blanket certificates of conformity are not acceptable.
- How do you know if your new breather valve has been assembled correctly prior to commissioning? The tank or digester could me worth £millions.
- Can you confirm the set point has been correctly applied and that the breather valve is operating safely and in accordance with the specification?
- Can you demonstrate that you are following best practice?
- Can you demonstrate and evidence reduction in your breather valve emission leak rates?
- Can you provide an individual breather valve test certificate compliant with API2000 or ISO28300?
- Before you install, can you confirm that your new breather valve has been delivered safely to site and not sustained any damage during transit?
- Have both the vacuum and pressure ports been tested for leakage and detailed on the Test Report?
- Do you ensure any ongoing maintenance is conducted by competent technicians who understand the API2000 or ISO28300 test protocols?
- How would you defend a Litigation Claim, Criminal Prosecution or Environmental Enforcement Notice?
- How do you evidence environmental awareness in procurement and maintenance of your breather valves

## VENT-LESS WILL GIVE YOU THE ANSWERS

Video demo



assentech sales limited

Cert ID: ED80525D-E04A-4A42-8EDB-51E0834EA87B
Valve Relief Type: PVRV
Service Ref: BAD_VS_GOOD_VALVE / Pre-Service
Test Result: PASSED

**Valve Details**

| | | | |
|---|---|---|---|
| Manufacturer | Quality Driven Organization | Customer | R AND D |
| Model | K000000 | Customer PO | |
| Design | TOP MOUNTED | Site | R AND D SITE |
| Body | Carbon Steel | Tank Ref | |
| Serial No. | K000000 | Date | 08/12/2021 20:40 |
| Tag No. | TAGK00000X | Test Location | |
| TestBench SN | 0765739 | Engineer | Ewart Cox |

**Pressure Port**

| | | | |
|---|---|---|---|
| Operated By | WEIGHT LOADED | Tested in accordance with | |
| Customer Specified Set Point (SP) | 50 mmH2O(g) | ISO28300 & API2000 and Leak Rate @90% of SP | |
| SP Test Result | ±% of SP | Max-Min mmH2O(g) | SP Test Result |
| 50.272196 mmH2O(g) | 15% | 42.5 to 57.5 | PASSED |
| Leak Test Result | >% of SP | Min mmH2O(g) | Leak Test Result |
| 48.538672 mmH2O(g) (97.14% of SP) | 75% | 37.5 | PASSED |

Leak rate @90% is 0.0197 CFH (9.3 CCM), (4.88808 M³/Year)

# Vent-Less: Delivering the Due Diligence You Need for Informed Decisions

**Having your own test bench on-site empowers your facility to take full control of service schedules, allowing you to evaluate and perfect them with precision. It offers unparalleled convenience, demonstrates industry-leading best practice, and showcases a proactive commitment to managing ageing plant infrastructure. Beyond operational benefits, it highlights your dedication to duty of care for the workforce, ensuring safety, compliance, and efficiency at every level.**

Vent-Less checks tank or digester breather valves with the groundbreaking Vent-Less test bench. It does a pre-service/maintenance test which is referred to as the Production Test in accordance with API2000 Section 5.4. It includes a calibration and leak rate check. Considering all valves should be tested to this standard from new, this pre-service/maintenance test is an indicator of the valve's condition as found. It is normal to expect some valve deterioration in performance. Additionally, we also test the valve for volume leak rate which is outside of API requirements but is an indicator of the environmental impact, inhalation risks and financial loss. The volume leak rate test consists of a set point test and leak rate test on both vacuum and pressure ports,. A failed pre service/maintenance test on either set point or leak rate indicates that the valve has deteriorated or has been set incorrectly. The set pressure is the point that the valve begins to control tank pressure.


**How will you evaluate your service frequency?**

# Vent-Less: Delivering the Due Diligence You Need for Informed Decisions

Contrary to common belief, the valve is not likely to snap open, instead it gradually opens in a proportional manner. If the set point is low, this will lead to excess leakage from the valve during normal operating cycles. If the set point is too high, you risk serious damage to the tank or digester. The leak rate tests on both ports and is an indicator of valve efficiency and defined by the ability to hold pressure at a fixed flow rate. The leak rate test in accordance with API2000 is an indicator that the valve can hold more than 75% of the set point with a fixed flow determined by the size of the valve's seat ring. A failure at the pre-service/maintenance stage means that you should evaluate your service frequencies because a breather valve should perform at optimum efficiency and should not dip in performance. If it does, you need to service and test more frequently to mitigate site downtime, environmental, financial, reputational and occupational harm.

Vent-Less delivers the insights needed for informed decision-making. This QR code links directly to a Vent-Less demo batch certificate for two valves, showcasing its comprehensive capabilities with pre and post test results on both vacuum and pressure ports.

Data is invaluable—it offers a defence against scrutiny, an opportunity to assess performance, and a means to track historical trends. Vent-Less allows you to trace every detail, including calibration records to confirm accuracy, valve manufacturer type, test operator, test bench, and tank details. Additionally, Vent-Less provides a user-friendly portal for historical referencing, ensuring you have easy access to all critical information. Vent-Less equips you with the data to streamline processes, enhance decision-making, and maintain compliance with ease.

# Protecting Your Operations: The Essential Guide to Breather Valve Testing and Risk Management

Managing ageing assets, including breather valves, requires ensuring these devices maintain optimal performance between servicing. If a breather valve fails a pre-service test, it's advisable to increase service frequency to prevent performance dips and safeguard your storage tank or digester, the environment, your workforce, operational costs, and reputation.

There will be times when a breather valve reaches the end of its recommended service life and must be replaced. Devices with shorter lifespans are often of lower quality and, while initially cheaper to purchase, can prove costlier in the long run due to reduced reliability and increased maintenance needs.

## Breather Valve Risk Assessing for Establishing Service Intervals

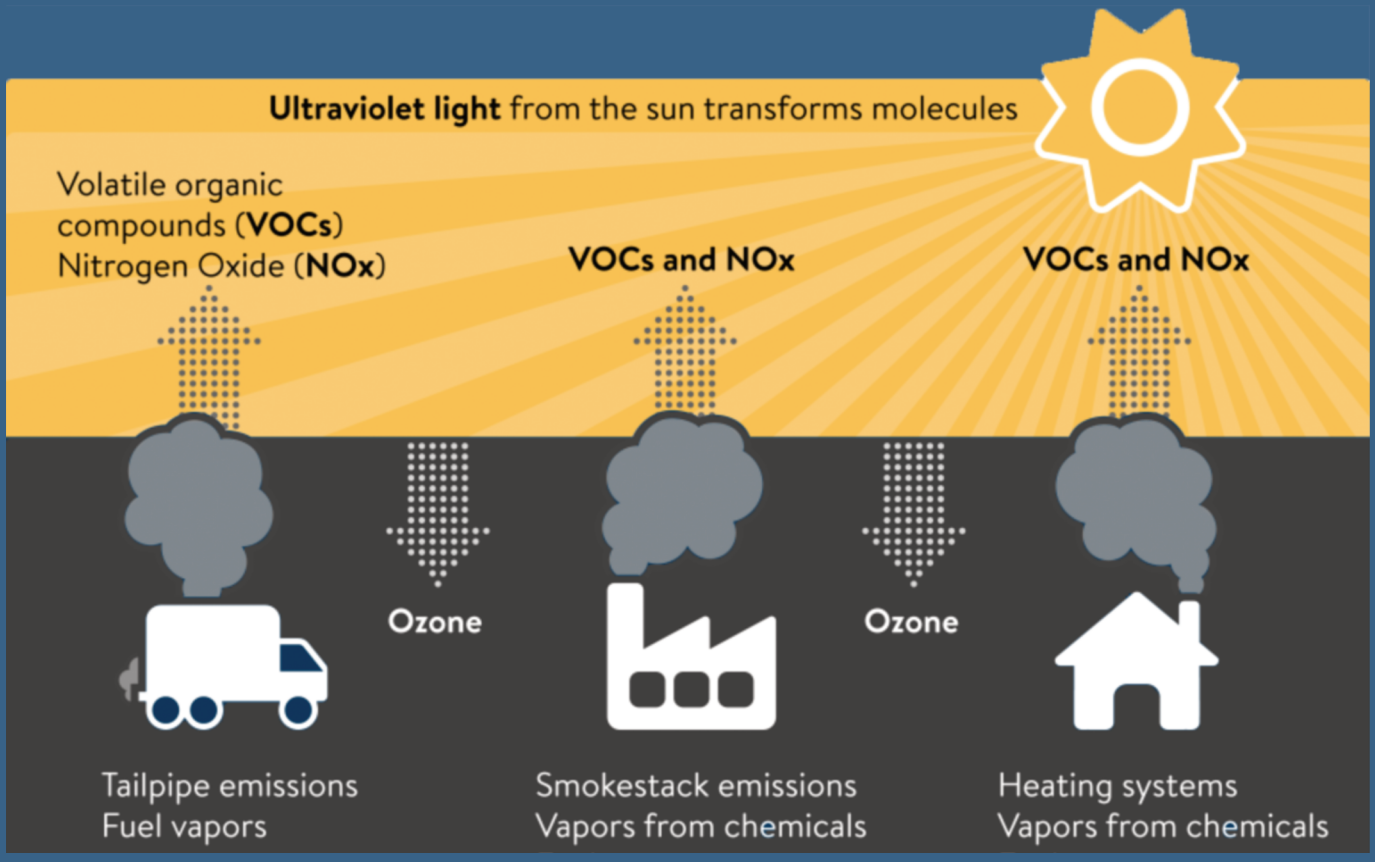
Scheduling the servicing, testing, and inspection of breather valves is a complex process with many factors to consider. However, it is essential to ensure that your breather valves operate at peak efficiency to provide continuous protection for your facility, workforce, environment, profitability, stored media, and reputation.
This guide highlights the critical risks to evaluate when assessing breather valves, emphasising the need for a systematic service and testing approach, supported by Vent-Less.
Key factors to evaluate include:

- **Application Type**: Ensure the valve is suited to its specific use case.
- **Media Properties**: Assess characteristics such as toxicity, viscosity, flammability, corrosivity, and acidity, as leaks can present significant risks depending on the stored material.
- **Valve Quality**: Understand the valve's build and design reliability.
- **Operating Conditions**: Consider the pressure, temperature, and frequency of use.
- **Exposure to Weather Elements**: Evaluate how external conditions might affect valve performance over time.

By thoroughly analysing these factors, you can assess, evaluate, and manage individual valves effectively. This approach allows you to design a tailored maintenance regime that ensures each valve operates at peak efficiency, maintaining reliability and long-term performance.

Vent-Less is your trusted partner in this process, offering precision testing and actionable insights to help you mitigate risks, maintain compliance, and safeguard your operations.

# Ground Level Ozone




Oxidising methane produces Tropospheric (ground level) ozone

The UK Environment Agency is currently studying links between public health and vegetation degradation and biogas emissions

- Life cycle is short lived - few days to weeks in polluted urban areas
- Ozone absorbs radiation, acting as a strong greenhouse gas and altering evaporation, cloud formation, and atmospheric circulation
- Estimated global crop production losses owing to ozone total 79-121 million tonnes, worth US$ 11-18 billion annually
- Long-term exposure to ozone air pollution is linked to 1 million premature deaths per year due to respiratory diseases

# Vent-Less is the Complete Solution for Precision Testing, Compliance, and Emission Reduction

- Pressure/Vacuum Production Test to API 2000 and ISO 28300 standards, completed in as little as 3 minutes with only one technician.
- Fully automatic technology with AI self-learning functionality ensures consistent, repeatable, and accurate results across all tests.
- Supports testing of Pressure/Vacuum Valves, Blanket Gas Regulators, Pilot Operated Relief Valves with remote sensing.
- Size rages from 2 to 24 inches in size.
- Non-recording pallet balancing function allows new valves to settle before testing, improving accuracy.
- Comprehensive documentation includes verified set point checks, leakage rate measurement and photographic evidence, accessible via QR code technology.
- Quantifies leak rates for compliance with DSEAR, LDAR, IED, and Regulation 61, providing evidential certification and reducing environmental risks.
- Customisable test settings, tolerances, and certifications, including factory logos, watermarks, and bench colours (RAL).
- Pre-programmed to adhere to industry standards, ensuring best practices with every test.

- Self-calibrating and ready for continuous operation 365 days a year, ensuring consistent reliability.
- Range designed for all types of use:
  - Mobile Bench: Our unique compact, lightweight mobile bench with retractable handle and wheels can be transported to multiple sites in a small valve by one Service Engineer.
  - Fixed: Larger steel frame unit is ideal for a workshop fixed location.
  - Hydraulic: The biggest bench for testing high volumes of valves favoured by valve manufacturers and mega chemicals manufacturers. The hydraulic clamps are actuated by foot controls and speed up mounting.
- Batch reporting and admin support enable the preloading of valve details, creating indexed records for multiple units and streamlining workflows.
- Secure storage of test data, either cloud-based (optional) or local, ensures searchable records for product development analysis and regulatory compliance.
- Provides critical evidence for risk mitigation.
- Measures and calculates vapour loss costs, saving thousands of pounds in lost revenue while demonstrating best environmental practices.
- Demonstrates proven accuracy for underwriter confidence, potentially reducing insurance premiums.
- Remote technical support, training, and troubleshooting available as required.

# Climate Action Framework

"The challenge of meeting the world's growing need for energy while simultaneously ushering in a lower-carbon future is massive, intertwined and fundamental. It is the opportunity of our time - governments, industries and consumers must rise to seize it together."

Source: American Petroleum Institute

- The American Petroleum Institute is driving change with the following 5 point action plan.

1. Accelerate Technology and Innovation
2. Further Mitigate Emissions from Operations
3. Endorse a Carbon Price Economy
4. Advance Cleaner Fuels
5. Drive Climate Reporting

**Our new annex deals with the following elements of the API Industry Action Plan:**

- **Accelerate Technology and Innovation to reduce emissions while meeting growing energy needs:** *By creating a benchmark for valve leak tightness we open a window of opportunity for innovation in design for improvement in leak tightness and flow capacity.*

- **Further Mitigate Emissions from Operations:** *Knowledge and data are key drivers for charting a reduction in emissions. Informed procurement ensures the correct valves are purchased in the beginning and maintaining leak tightness is easy.*

- **Drive Climate Reporting:** *Routine testing of valve performance using the calibrated Vent-Less test bench shows irrefutable evidence of valve set pressure and leak tightness in accordance with international standards. The additional leak volume measurement is an essential test for proving the true environmental impact of a valve.*

# Assentech's Specialist Services

**Assentech provides industrial facilities with tailored Leak Detection and Repair (LDAR) packages**

**Emission quantification and leak repairs**

**OGI Surveys (EA approved)**

**Servicing, Re-set and certifying**

**Breather Valve Inspections**

**Breather Valve Commissioning Surveys**

**Leak Rate, API2000 and Environmental Test Reports**

Through a comprehensive national network, Assentech can also offer full breather valve servicing capabilities on site, or in our workshops, for all tank venting and safety equipment.

- Breather Valve API2000 Test Reports (inspect, service, leak test, re-set, calibrate, and re-certify valves from all manufacturers)
- LDAR - Repair and evidential certification (including emission reduction)
- Breather Valve swap in, swap out servicing
  - (procure an identical unit to ensure operational continuity)

## Professional Services

- Expert Technical Guidance and Regulatory Advice
- Site Visits with Tailored Support
- Leak Detection LDAR OGI surveys with EA approved specialist
- Valve Sizing and Unit Suitability
- Solution Provider for Complex and diverse range of Applications
- Installation of Internal Floating Roofs and Geodesic Domes
- Environmental Impact Assessments

## Pre Commissioning Breather Valve Check

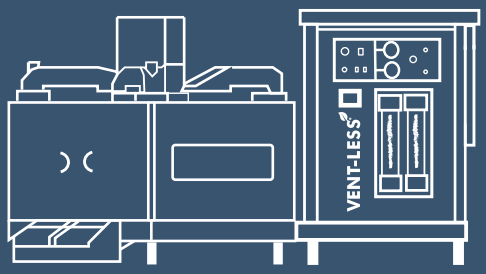
- Specification Confirmation
- Verified Flow Curve
- Performance Analysis
- Unit Functionality
- Set Point Check
- Leak Rate Measurement

# THE VENT-LESS RANGE

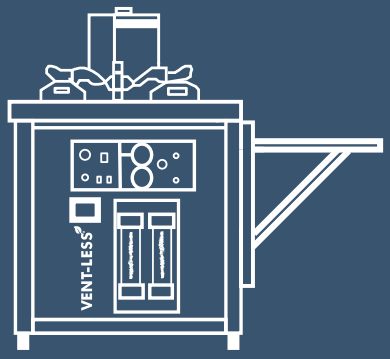
Revolutionising Breather Valve Testing: Presenting the world's first range of groundbreaking automated test benches aligned to the test protocol stipulated in the International Standards.

Our Test Benches deliver detailed test data for individual breather valves, empowering Valve Manufacturers, Maintenance Companies, Regulators/Auditors, and Storage Facilities to surpass scrutiny. This ensures comprehensive protection for the workforce, tanks, media, the environment, and operational profits, while safeguarding the personnel accountable for these critical decisions.

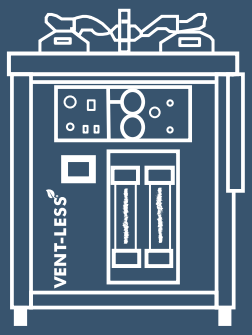
Customisation of bench colour and test specifics can be available on request.




HFTB02
Hydraulic Test Bench
Allows for testing of 2"-24" valves



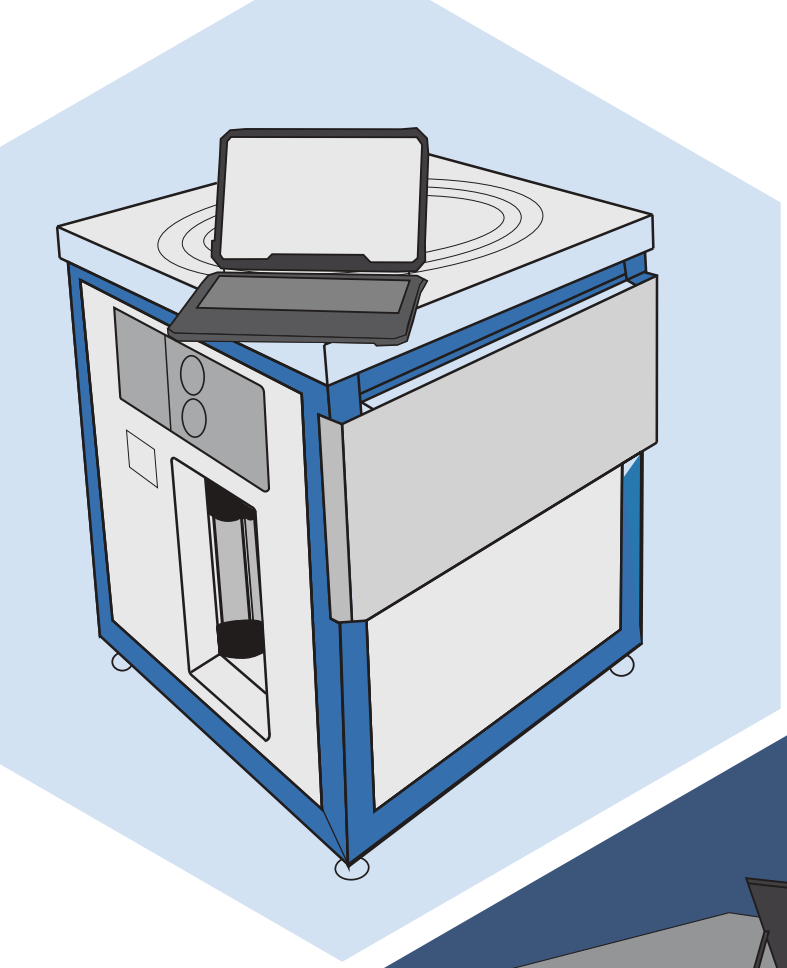

FTB02
Fixed Test Bench
Allows for testing of 2"-24" valves

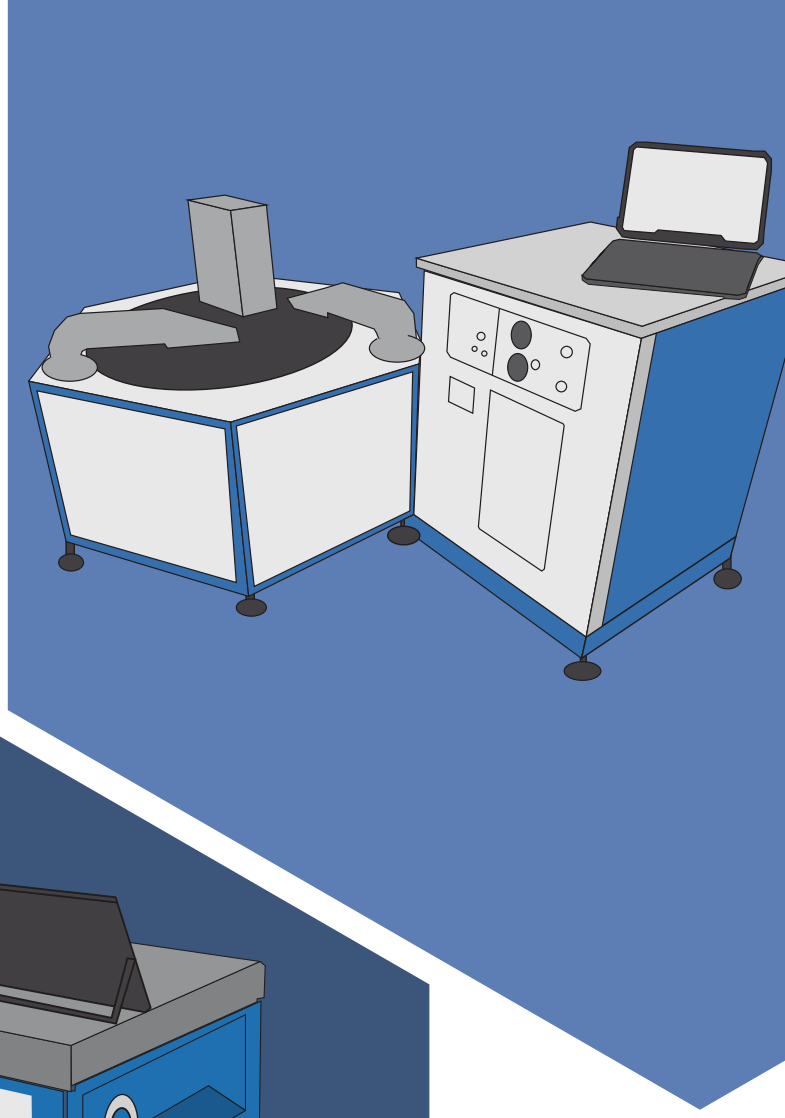


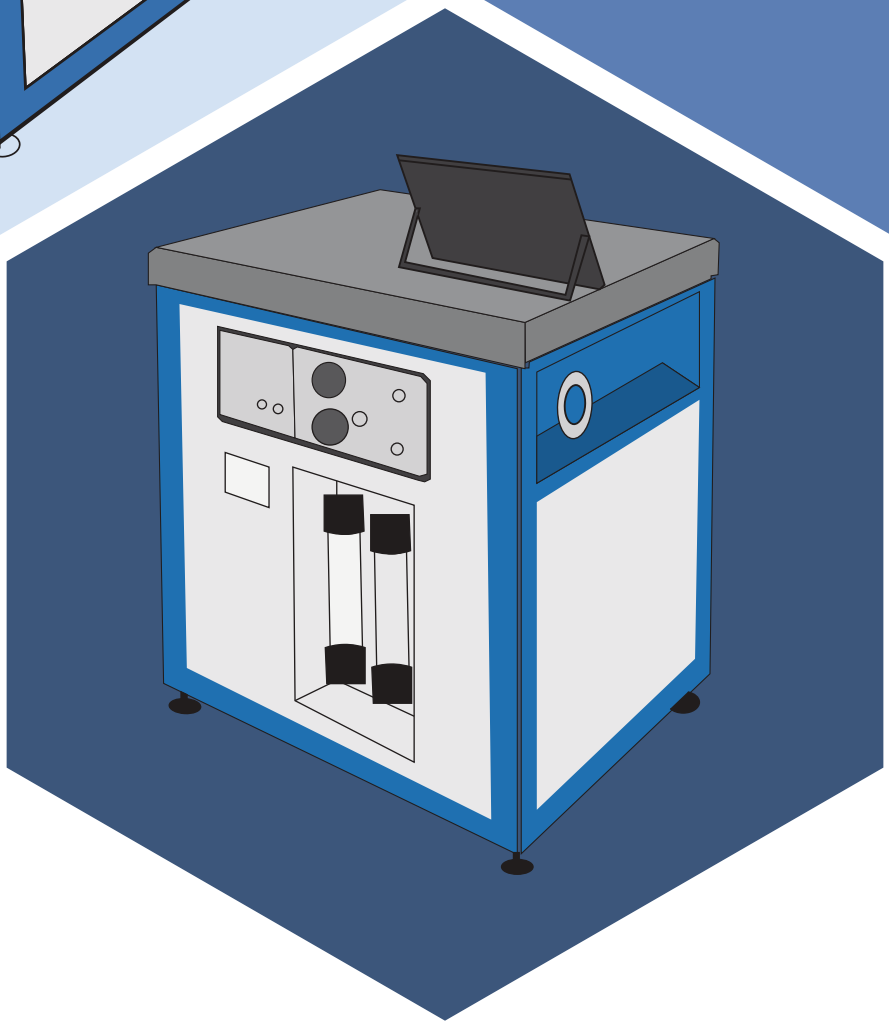

MTB03
Mobile Test Bench
Allows for testing of 2"-12" valves

Keep an eye out for the upcoming launch of our new Production Model, engineered to test at higher pressures!


The Vent-Less innovation was awarded gold at the 2024 Global Tank Storage Awards for Environmental Performance





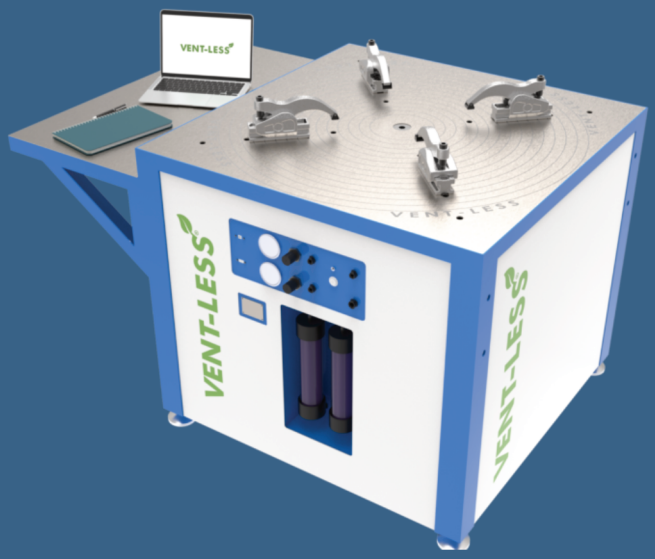


# Which test bench is  right for you?

Assentech's Vent-Less automatic Test Bench range is a revolutionary solution, seeking to ensure the safety and compliance of end users with their tank breather vents. The Test Bench is aligned with industry standards, used advanced algorithms and calibrated instrumentation to provide accurate and reliable results, and produces an instantaneous test report detailing the leakage rate and full vent functionality

# FTB02

# FIXED TEST BENCH




| Base Unit | DIMENSIONS: |
|---|---|
| Fixed Test Bench with manual forged clamps for a workshop | HEIGHT: 850mm |
| Colour to suit customer specification | WIDTH:1315mm |
| 2 demountable desiccant filters | LENGTH: 820mm |
| Operating Software and 4hrs basic training | **CONSTRUCTION** |
| 4 Clamps | FRAME: Carbon Steel |
| 8 x Sealing Doughnuts for vent sizes 2",3",4", 6",8"10"12" & 16-24" | TOP PLATE: Aliminium/Stainless Steel |
| 3m 110-230 power feed flex. Plug top to suit customer specification | CLAMPS: Forged |
| 2m USB-B lead for connecting to laptop | PANELS: Aluminium/Resin |
| Dust cover | WEIGHT: 230kg |

| Operating Parameters | |
|---|---|
| Pressure Range | -300<+1000mbarg. Higher pressures available on request |
| Valve Sizes | 2" (DN50) < 24" (DN600) |
| Valve Orientation | Horizontal Valves. Ask Assentech for side mount options |
| Operating Temperature | 0<50 Deg C |
| Air Supply Pressure | 3 < 7.5 Barg. Dry non-oiled process air |
| Air Feed Connection | 1/4" PCL (Alternates available on request) |
| Maximum Valve Weight | 500kg |
| Power Supply | 110-230v A/C 10A (Customer to specify) |
| Laptop Connection | USB-B |
| Operating System Requirements | Windows 10 |
| RAM | 8 Gb |

**The Fixed Service Centre model is our lowest cost option.**

**Allows testing of 2” to 24” valves.**

# HFTB02

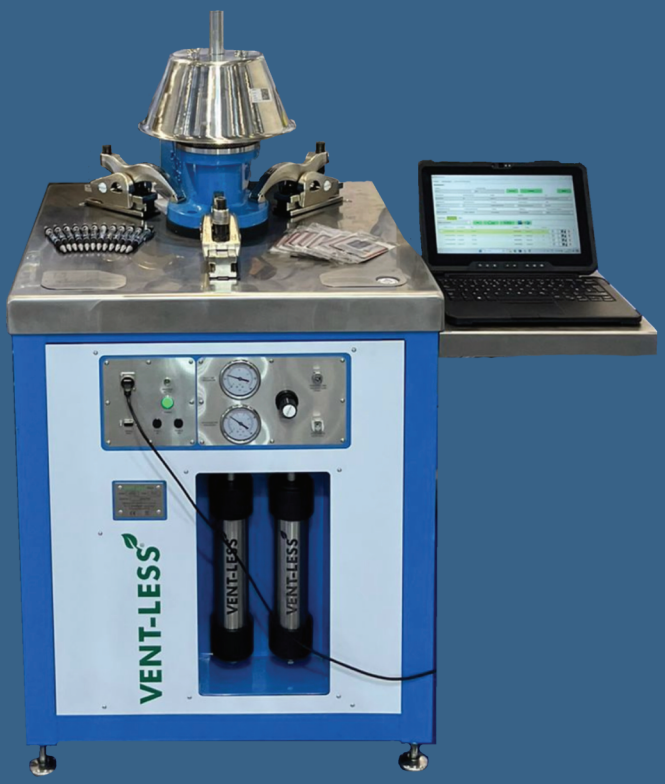
# HYDRAULIC FIXED TEST BENCH


| Base Unit | DIMENSIONS: |
|---|---|
| Foot operated hydraulically operated clamps for high volume testing with adjustable clamping pressure | HEIGHT: 610mm to Valve Datum<br>910mm to Workstation |
| Colour to suit customer specification | WIDTH:1775mm |
| 2 demountable desiccant filters | LENGTH: 1510mm |
| Operating Software and 4hrs basic training | **CONSTRUCTION** |
| 3 Clamps | FRAME: Carbon Steel |
| 8 x Sealing Doughnuts for vent sizes 2",3",4", 6",8"10"12" & 16-28" | TOP PLATE: Aliminium/Stainless Steel |
| 3m 110-230 power feed flex. Plug top to suit customer specification | CLAMPS: Billet Aluminium Milled |
| 2m USB-B lead for connecting to laptop | PANELS: Stainless Steel |
| Dust cover | WEIGHT: 600kg |

| Operating Parameters | |
|---|---|
| Pressure Range | -300<+1000mbarg. Higher pressures available on request |
| Valve Sizes | 2" (DN50) < 28" (DN700) |
| Valve Orientation | Horizontal Valves. Ask Assentech for side mount options |
| Operating Temperature | 0<50 Deg C |
| Air Supply Pressure | 3 < 7.5 Barg. Dry non-oiled process air |
| Air Feed Connection | 1/4" PCL (Alternates available on request) |
| Maximum Valve Weight | 500kg |
| Power Supply | 110-230v A/C 10A (Customer to specify) |
| Laptop Connection | USB-B |
| Operating System Requirements | Windows 10 |
| RAM | 8 Gb |

**The Hydraulic Test Bench is ideal for high-volume testing at end-user facilities or breather valve manufacturers. It features hydraulic clamps, a large test area, and allows for testing of 2”-28” Valves**

# MTB03
# MOBILE TEST BENCH




| | DIMENSIONS: |
|---|---|
| Lightweight compact test bench with retractible handle & wheels | HEIGHT: 850mm |
| Colour to suit customer specification | WIDTH:705mm |
| 2 demountable desiccant filters | LENGTH: 800mm |
| Operating Software and 4hrs basic training | **CONSTRUCTION** |
| 3 Clamps | FRAME: Aliminium |
| 7 x Sealing Doughnuts for vent sizes 2",3",4", 6",8"10"12" | TOP PLATE: Stainless Steel |
| 3m 110-230 power feed flex. Plug top to suit customer specification | CLAMPS: Forged Steel |
| 2m USB-B lead for connecting to laptop | PANELS: Aluminium/Resin |
| Dust cover | WEIGHT: 110kg |

| Operating Parameters | |
|---|---|
| Pressure Range | -300<+1000mbarg. Higher pressures available on request |
| Valve Sizes | 2" (DN50) < 24" (DN600) or 12" (DN300 without extension plate) |
| Valve Orientation | Horizontal Valves. Ask Assentech for side mount options |
| Operating Temperature | 0<50 Deg C |
| Air Supply Pressure | 3 < 7.5 Barg. Dry non-oiled process air |
| Air Feed Connection | 1/4" PCL (Alternates available on request) |
| Maximum Valve Weight | 300kg |
| Power Supply | 110-230v A/C 10A (Customer to specify) |
| Laptop Connection | USB-B |
| Operating System Requirements | Windows 10 |
| RAM | 8 Gb |

**The Mobile Test Bench is ideal for multi-location facilities, maintenance companies, exhibitions, marketing, and regulatory audits. It tests valves from 2” to 12” (up to 24” with an optional extension).**

# THE RISK MITIGATION TOOL

The VENT-LESS test bench is a unique technology designed to support professionals across various fields by facilitating the capture of data, evidence of performance, and demonstration of best practice.

## Environmental Improvement

Pre-test and post-test leak rate measurements provide essential emission quantification, crucial for environmental stewardship and reporting. Identifies the volume of fugitive emission leakage to enable operators to review hazardous area zone allocation, inhalation risks and impact on neighbouring communities.

## Quality Control

Either routine maintenance or pre-commissioning checks.

Both pressure and vacuum port testing.

Calibration and certification are traceable to national standards.

Protects vacuum port leakage and water ingression impacting media quality.

Verified flow curves.

Photographic evidence.

## Asset Management

Records, photographs and captures data for historical retrieval.
Streamlined access to electronic data, either cloud or locally stored. Simplifies maintenance evaluation or stock management referencing.
QR labelling for simplistic access.

Extends longevity of tank and peripheral equipment.
Collation of multiple test reports.
Test data enables operators to define service frequencies.
Full traceability of asset, test technician and test equipment.

## Compliance

Automatic test certification aligns to the International Standards (API2000 and ISO28300).
Evidential breather valve test results and leak rate data for IED, Reg 61, LDAR, etc.

The certification will also demonstrate compliance to ESG, CSR using the best available technique.

Test technician does not require prior and specialist knowledge.

## Defends Scrutiny

Repeatable results.

Test technician does not need knowledge of the API2000 test protocol.
Data collation of test will defend litigation claims, criminal prosecution and environmental breach.
Satisfy underwriter due diligence and auditors/FAT asset evaluation.

Remote operation/viewing.

## Stakeholder Confidence

Illustrates commitment to the environment.

Consistent media quality.

Demonstration of duty of care.

No adverse press.

Loyal and increased customer base.

## Improves Profitability

Reduced leakage of emissions from storage tanks.

Reduced test time with one technician.

Mitigation of fines and penalties by responsible management.

Extends longevity of tank and peripheral equipment.

Reduced downtime.

## Safe Working

Supports operators to identify emissions for safe working zone allocation.

Provides accurate leak rate data for protecting the workforce from emission inhalation.

Identifies breather valves that do not operate correctly and safely.

Focus on tank pressure relief raises safety.

# Case Study

**Non-compliant valve impact on the environment over one year**
**(Not Leak tested)**

- 260
Metric Tons of CO2 (Carbon Dioxide) (GWP)

- £8040
Value of wasted methane

- 200
Double-decker buses filled with anaerobic digester emissions

- 150
Vehicle(s) driven for a whole year

- 33
Homes' energy use for a whole year

- 130000
Kg of coal burned

- £65000
The value of the environmental impact cost

**Compliant valve impact on the environment over one year**
**(Leaked tested and maintained in accordance with API2000 section 5.4)**

- 0.2
Metric Tons of CO2 (Carbon Dioxide) (GWP)

- £7
Value of wasted methane

- 0.2
Double-decker buses filled with anaerobic digester emissions

- 0.1
Vehicle(s) driven for a whole year

- 0.03
Homes' energy use for a whole year

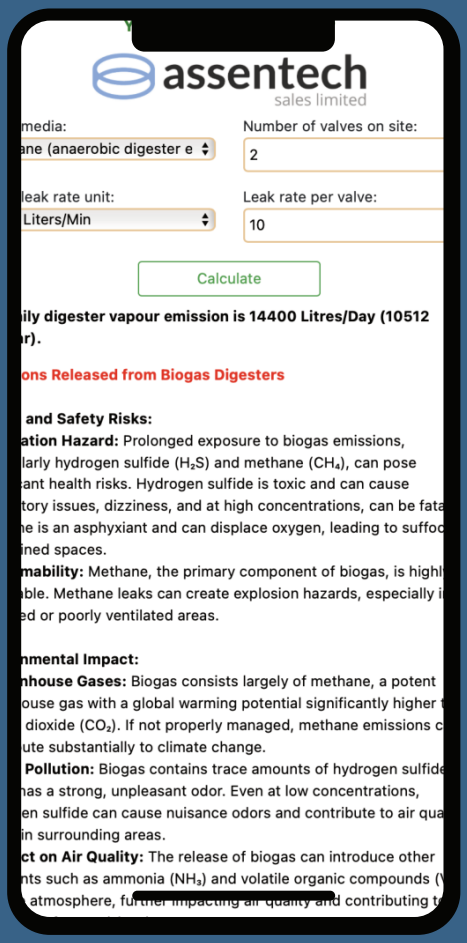
- 116
Kg of coal burned

- £60
The value of the environmental impact cost

Using non-compliant valves may seem like a cost-saving decision upfront, but the hidden environmental and financial costs quickly add up. Assentech's compliant breather valves, maintained in accordance with API2000 standards, offer you a smarter investment by drastically reducing emissions, improving site safety and protecting the environment, while providing long-term financial benefits.

# Emissions Calculator

Try our Methane Emissions Calculator by entering the Leak Rate *(also found on a Vent-Less test certificate).* This reinforces and demonstrates how quality devices reduce the impact on GWP (Global Warming Potential).




Assentech has built a reputation for providing technical expertise and solutions for tank breather valves, a critical component in reducing emissions. With growing attention on environmental responsibility, particularly in the biogas and chemical industries, accurately measuring and mitigating emissions is essential.

- 80% of installed valves are uncertified and not tested to international standards like API2000 / ISO 28300, contributing to increased emissions, environmental breaches, and legal risks.

- Leaking valves can emit between 1-100+ cubic feet per hour (CFH), which impacts operating profits, environmental compliance, and the health and safety of both staff and nearby communities.

- By using Best Available Techniques (BAT) to identify and address leaks, you can comply with Regulation 61, supporting efforts towards Net Zero in the biogas industry.

Our emissions calculator helps you understand the financial, environmental, and safety risks associated with non-compliant valves. Use it to see how leak-tested, compliant valves can reduce your emissions and protect your business.

# Integrating Best Practices with Effective Management of Tank Breather Valves for Emission Reduction

### Global Responsibility:

Everyone needs to contribute to reducing global warming emissions.

### Emission Sources:

Tank breather valves are recognised as a direct source of emissions leakage.

### Leak Detection Advancements:

Regulators are adopting Optical Gas Imaging (OGI) technology to detect and quantify leaks from facilities, aligning with industry best practices. This approach follows Method 21 standards and OGMP 2.0 guidelines to ensure accuracy and compliance.

Advances in satellite technology now enable the detection of significant methane emissions, with companies like MethaneSAT publishing this data on platforms such as Google.

### Definitive Testing Methods:

Leaks observed from a valve indicates that the process may be experiencing excessively high process pressure or the valve requires servicing, testing, inspection, repair or replacement. The only definitive method to verify valve efficiency and repair is through a Vent-Less test bench.

### Use our Free Emissions Calculator

Available on our website, this tool allows users to estimate the Global Warming Potential (GWP) and financial costs of methane leaks, based on calculations by the Intergovernmental Panel on Climate Change (IPCC).

### Environmental Management:

Assentech advises testing valves before and after servicing as part of ISO14001 environmental management policy. This process highlights significant reductions in leak rates and demonstrates incremental improvements.

**Check out our Regulations Brochure to find out which regulations you need to be following and how Assentech can help** →

***Today's actions shape tomorrow's world. Each of us holds the responsibility to focus on sustainable choices today, ensuring a healthier planet for future generations.***

# Emissions and Regulations: Ensuring Compliance with Industry Standards

### EU Methane Regulation:

- Effective from August 2024, this regulation mandates operators in Europe to implement comprehensive Leak Detection and Repair (LDAR) programs, including regular inspections of breather valves to identify and rectify methane leaks by ensuring breather valves are repaired.
- Operators are required to detect leak source, measure/quantify emissions, monitor, report, and verify methane emissions, ensuring accurate data collection and transparency. Failure to adhere will result in subsequent fines.

### Industrial Emissions Directive:

- The Industrial Emissions Directive (IED) provides a legal framework for Regulators to impose fines and improvement notices under regulations like Regulation 61 and LDAR, dictating site responsibility to identify and address leak sources.

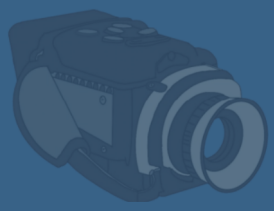
*"Taking responsibility means owning emission reduction to drive meaningful change."*

### LDAR Planning Requirements:

-The UK Environment Agency requires operators to conduct Leak Detection Surveys carried out by skilled and knowledgeable technicians using OGI technology in alignment with Method 21 standards. These surveys must provide accurate, comprehensive, and reliable data. Operators are responsible for identifying leak sources and ensuring that all leaks are promptly repaired.
-Failure to address leaks can lead to environmental fines and enforcement notices. Additionally, the regulatory framework requires operators to demonstrate best practices through comprehensive Leak Detection and Repair (LDAR) planning.

# Revolutionise Emission Control with Assentech's Vent-Less and OPGAL EyeCGas

Unlock the ultimate solution for emission control with Assentech's package: the Vent-Less Test Bench and the OPGAL EyeCGas OGI Camera. Designed to set new standards in emission detection, quantification, reduction and reporting. This cutting-edge combination is perfect for tackling digester breather valve emissions which fall under Scope 1 emissions or Scope 3 emissions for Tank Storage breather valves.



## Why Choose Assentech?

**Industry-Leading OGI Technology**

- Supplier of the OPGAL EyeCGas Multi Camera which complies with Method 21 and is equipped with built-in quantification, detecting over 400 gas types with ultimate precision and accuracy. It's ATEX certification ensures safe use in Hazardous Area Zones, making it the most effective and affordable OGI camera on the market.

**Global Award Winning Vent-Less Test Technology**

- Innovator and manufacturer of the revolutionary and unique range of automatic Vent-Less test benches for calibrating and testing breather valves to establish functional efficiency, performance in accordance with required settings and emission leak rate.

**Regulation & Best Practice Support**

- Our package supports Best Available Techniques for Regulation 61, LDAR programmes, and environmental best practices, helping you stay ahead of regulatory demands and industry expectations and provides certification to defend scrutiny.

**Empowering Your Operations**

- With this technology, you'll not only detect leaks but also risk-assess them, evaluating their impact on your environment, workforce, reputation, and profitability. Take control of your emissions, enhance your performance, and demonstrate compliance with confidence.

**Comprehensive Training Included**

Our packages include expert training, providing you with the skills and knowledge needed to implement a **professional Leak Detection and Repair (LDAR) programme**. From capturing regulatory-compliant data to mastering environmental best practices, you'll be fully equipped to lead the charge in emissions reduction.
Take the first step towards a cleaner, more sustainable future.

**Contact us today** to learn more about the OPGAL EyeCGas and Vent-Less Test Bench packages. Together, we can help you achieve your emission goals while safeguarding your operations.

# Boost Your Revenue and Lead the Market in Your Country with Vent-Less Breather Valve Testing and Certification Reporting

### Pre-Commissioning Tool

The Vent-Less test bench ensures all breather valves are correctly functioning with minimal leakage before installation, allowing you to rectify any issues early.

### Leak Rate Reports

Provides individual breather valve leak rate reports on both vacuum and pressure ports. Data can be used to demonstrate emission reduction, site hazardous area zone allocation, environmental reporting, condensation risks to storage tank, and duty of care compliance.

### Safe Functionality Report

Identifies any risks in valve functionality, acting as the ultimate risk mitigation tool. Individual reports with access to online historical reporting to allow informed decisions. Evaluate performance trends, maintenance frequency and repeat offenders.

### Set Point Verification

Offers accurate verification of set points and settings, ensuring optimal performance and an opportunity to evaluate individual unit specification.

# Vent-Less: Empowering Compliance, Traceability, and Trust Across Professions

## Compliance and Quality

- Demonstrate asset compliance and regulatory adherence.
- Fully accurate test certificate traceable to national standards.
- The online portal offers searchable fields for quick and easy retrieval of historical asset test data. The reports include photo evidence, condition specifics, and test results providing robust support for litigation defence, as well as environmental and criminal investigations.
- Use Vent-Less as a pre-commissioning tool to verify breather vent functionality before install.
- Demonstrate best practices with verified flow curves, set point checks, and leakage rates.
- Provides the ultimate evidence for third party due diligence.
- Builds customer and stakeholder confidence.

## Sustainability and Environmental

- Use pre and post test data to quantify emission leak rates on both pressure port (environmental harm) and vacuum port (impact on stored media).
- Incremental improvements demonstrates steps towards meeting environmental targets.
- Certified tests lay the foundation for Net Zero and carbon footprint evidence.
- Extend asset lifespan with ongoing leak testing and mitigation strategies.

## Finance

- Reduce costly vapour losses, maintain media quality, and lower water contamination risks.
- Reduce insurance premiums with evidential compliance of critical safety equipment.
- Minimises site downtime due to improved asset performance.
- Extends asset lifespan.
- Minimises fines from litigation claims, environmental enforcement notices and legal fees.
- Service and testing can be carried out in house and time that suits.

# Vent-Less: Empowering Compliance, Traceability, and Trust Across Professions

## Engineering

- Effortless (from) 3-minute testing with a single operator ensures convenience and promotes site self-sufficiency.
- Automatic test with AI means Users do not need prior knowledge of API2000/ISO28300.
- Pre-commissioning tool supports vent functionality, enhancing asset reliability and production efficiency.
- Comprehensive data includes set point check, verified flow curves and tests both vacuum and pressure ports for leakage.
- Batch reporting feature to enable easy transfer of asset data.
- Easily deployable mobile test bench for use across multiple sites.
- QR code labelling enables easy retrieval of test data.

## Safety

- Reduce flammable vapour presence and airborne contaminants.
- By identifying breather valves that are unsafe, i.e. do not function as designed or do not align to the required specification, or leak excessively, will improve the safety of the workforce.
- Provide critical evidence for risk mitigation, evaluation and continual improvement.
- Access to historical data through the Vent-Less portal will provide data and a way to analyse repeat offenders.
- Enables service frequencies to be reviewed and evaluated to maximise safety and performance.
- QR code labelling will reduce the risks of incorrect or non compliant breather valves being installed.

**Scan the QR Code to See How a Breather Valve Manufacturer has Benefited from Our Solutions**

And discover how our advanced testing and data-driven approach can transform your operations too

# Capturing Specification and Documentation Data to Mitigate Risks in Breather Valve Procurement

This valve specification sheet is carefully designed to guide you through capturing the essential elements of procurement, ensuring that all certification requirements and due diligence considerations are thoroughly addressed. By proactively identifying and addressing the critical questions involved in valve selection, this sheet helps you avoid the significant risks associated with purchasing a valve that may be unsuitable for your specific application.

Choosing the wrong valve can lead to non-compliance with regulatory standards, resulting in fines, reputational damage, and potential negligence claims. It can also signify a failure in your duty of care, impact the quality and safety of the stored media, and compromise overall operational integrity. This resource is essential for making informed decisions that protect your business, ensure compliance, and maintain the highest standards of safety and performance.


Scan the QR code to view your RFQ template for your breather valves

# Bench Features and Benefits

| | |
|---|---|
| Calibrated | Flow and pressure are controlled and measured by accurate and precise instrumentation |
| Self-Calibration | Options include a self-calibration unit. The test bench automatically detects when connected and opens the option to run a calibration test. Compares predetermined multiple flow and pressure data from the bench with its own internal calibrated instrumentation. Produces a full PDF test certificate to demonstrate test bench accuracy. Designed with pin-out instructions for local calibration testing |
| Levelling Top Plate | Our mobile test bench includes a patented leveling top plate that achieves the optimum level position to achieve the best test results from an ergonomic standing position while viewing the top mounted 'bulls eye' inclinometer. Fast and easy set-up is an essential feature of a mobile test bench which could be set up on uneven ground. After the feet are adjusted to stop the unit rocking, final balancing of the pallet can be done from the standing position |
| Fast and Easy Operation | No more bouncing rota meters to read. Just enter the valve data at the prompts and hit go! The results are produced in a fraction of the time taken on a manual device. Because this bench is automatic the operator has no opportunity to influence the results. Best practice dictates that the engineer who services a valve cannot test it on a manual test bench. Because this bench is automatic the same engineer can test after servicing. A significant saving for valve service companies and time saving for the operator |
| Future Proof Intelligence | Embraces groundbreaking AI functionality. Full internet connectivity enables our team to support the service technician from a remote location anywhere in the world |
| Upgrade-able | As time goes by, standards evolve. A key benefit of this test bench is that we can offer upgrades to keep your bench up to date |
| Easy To Read Certificate | A comprehensive functional test certificate with visual performance profile showing the vent performance against target with highlighted tolerance |

# Bench Features and Benefits

| | |
|---|---|
| Photographic Record | The program accesses the laptop camera and facilitates titled photographic record of the device and any aspects that need visually recording |
| Corporate Branding | We understand the importance of your brand so we have included an option to upload a brand onto the Certificate template |
| Service Database | Every asset is saved to the database with a full history of all test activity |
| Backup to the Cloud | All test results can be uploaded to the Cloud or sent to the customers server to prevent the risk of lost test results |
| Traceability | The test technician logs in to operate the bench. This gives full traceability of all tests made by that person. This registration process also records technician competence and creates a gateway to refresher training |
| Demount-able Control Box | In the event that the instrumentation needs refurbishment or repair the control box can be de-mounted in less than 5 minutes and returned complete to the factory without the need to transport the whole bench |
| Replaceable Desiccant Filters | In order to make this unit as flexible and reliable as possible, it is fitted with two high capacity quick release desiccant filters which enables the test bench to be connected to any process air connection. The filters are mounted on front of the control box and change colour when saturated. Change over takes 10 seconds. Media can be regenerated in an oven |
| Pilot Valve Calibration | Pilot valves are tested in the same way as weight or spring-loaded vents when they are set up. However, following a full strip down the pilot valve needs to be set separately from the main valve. Again, we have used our many years' experience to develop the software assist with the pilot set finding function |
| External Gauge Calibration Connections | The test bench can be fitted with up to two air supply control regulators. These are manually controlled with analogue pressure indication. This is a basic function that is remote from vent functional test procedures, however all gauges need to be inspected so we have integrated and external quick release connections for each gauge so they can be periodically checked for accuracy |

# Part Numbers and Description

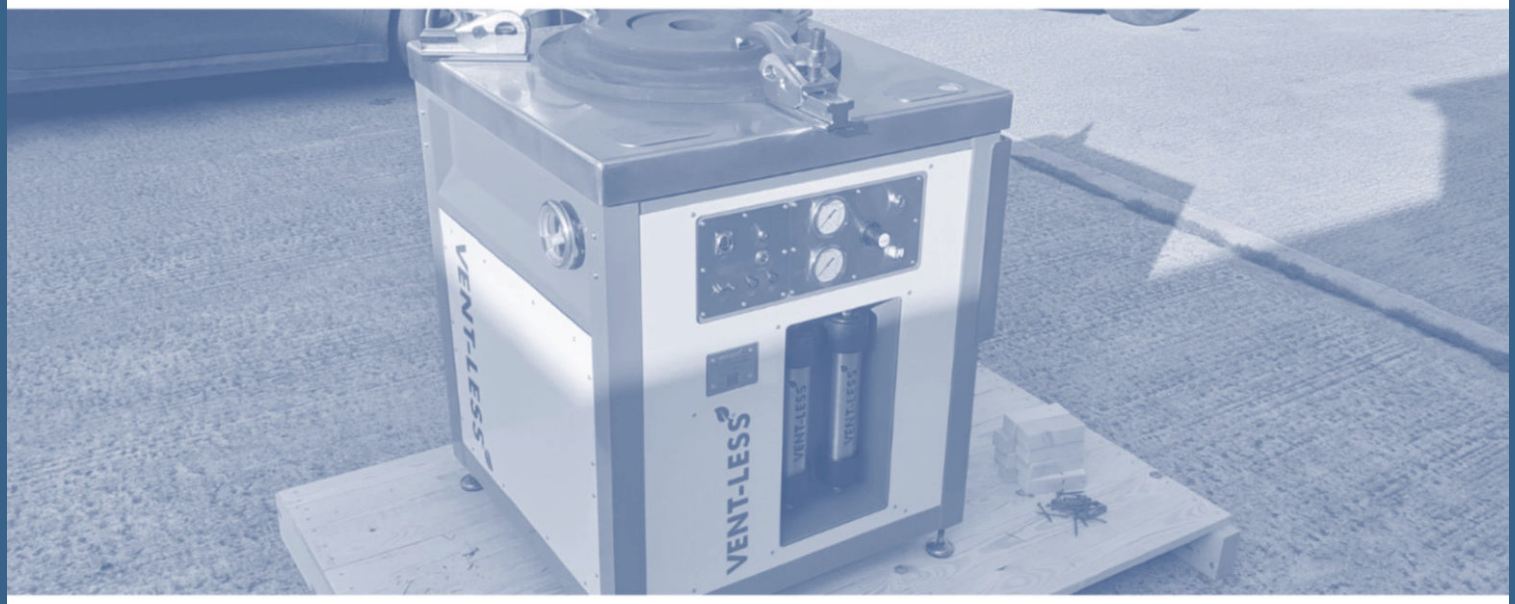
| ITEM | PART NUMBER | DESCRIPTION |
|---|---|---|
| Mobile Test Bench | MTB03 | Portable unit which can easily fit into a small van. Ideal for companies with multiple sites, and maintenance companies operating nationwide |
| Fixed Test Bench | FTB02 | Ideally suited for workshop use, where fixed in a single location |
| Hydraulic Fixed Test Bench | HFTB02 | Ideally suited for manufacturing facilities use, where fixed in a single location |
| **OPTIONS** | **PART NUMBER** | **DESCRIPTION** |
| Custom Frame Colour | PNT02 | RAL colour customisation. Bespoke tailoring packages available |
| Vent-Less Computer Device | TAB01 | Rugged computer device with pre-installed Vent-Less software |
| Extension Plate (MTB Only) | MTBE02 | Extension Plate adapter for mounting valves 16” (DN400)<24” (DN600) on Mobile Test Bench. Includes additional clamp arm and seals |
| Calibration Unit | UCTU02 | Confirms the accuracy of instrumentation. Compatible with both mobile and fixed test benches. |
| Calibration Unit Carry Case | UCTUC01 | Lockable Aluminium Transport Case. |
| Universal Side Mount | USMF02 | For testing side mounted vents. Includes 4 additional clamps |
| Factory Adaptation Package | FAP02 | Bespoke software customisation and tailoring packages to suit customer requirement |

# SPARES

| ITEM | PART NUMBER | DESCRIPTION |
|---|---|---|
| Clamp (each) | UCLP02 | Adjustable clamp to secure vent to top plate |
| 10mm Hex Key | KEY02 | Carbon steel hex key to adjust clamps |
| Donuts 2” to 12” | UDON02-12 | Range of multiple rubber sealing flanges to ensure leak tightness during testing (standard). |
| XL Donuts 16” to 24” | UDON02-24 | Flange seals to improve sealing during ERV testing (large) |
| Desiccant Filter Assembly | UDF02 | Blue dryer beads in 304SS/Glass tubular fitting and used to remove moisture from Bench |
| Desiccant Filter Media | DESPK01 | 800g Blue dryer beads in foil bag |
| Dust Cover - MTB | CVRM02 | Vinyl cover for mobile bench to provide protection when not in use |
| Dust Cover - FTB | CVRF02 | Vinyl cover for fixed bench to provide protection when not in use |
| Dust Cover - HFTB | CVRH02 | Vinyl cover for hydraulic bench to provide protection when not in use |
| Expedited Delivery <12 weeks | EXPD02 | Expedited delivery to be authorised and accepted by Assentech at quote stage |
| MTB or USMF Packing Crate | PKGM02 | Wooden (export ISPM-15 compliant) packaging crate for mobile bench or side mount accessory |
| FTB Packing Crate | PKGF02 | Wooden (export ISPM-15 compliant) packaging crate for fixed bench or MTB purchased with accessories |
| HFTB Packing Crate | PKGH02 | Wooden (export ISPM-15 compliant) packaging crate for hydraulic fixed bench |
| Power Lead 110VAC | FLX110 | 16A 2P&E Industrial Plug on yellow 3 core flex |
| Power Lead 230VAC | FLX230 | 13A BS1363 Domestic UK Plug on black 3 core flex |
| USB Data Cable | USBA/B | Main USB A-B Data Cable for test bench to laptop |
| Universal Side Mount | USMF02 | For testing side mounted vents. Includes 4 additional clamps |

# Vent-Less Printer and Label Package

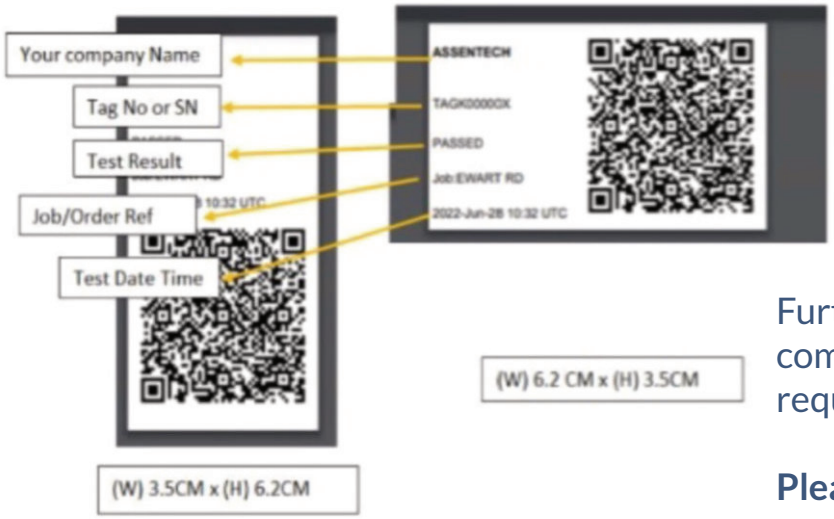
(Product number: PRT01)




A perfect “add-on” to the standard Vent-Less package. A convenient and useful tool for asset management, quality control and audit purposes. This is an industry first and is aimed at empowering operators to track and monitor key assets easily and effectively


Part Number: PRT01

The label facility is a standard feature of the software and allows the user to print a label, in a choice of 2 sizes, configured in the Vent-Less software ‘settings’ section. The label consists of a QR code which can be scanned to download the Vent-Less Test Certificate. The label also clearly shows the Company Name, TAG or Serial Number, Test Result (PASS or FAIL), Job/Order No and Test Date/Time.




**Optional label materials can be sourced including weather/UV resistant.**

Further information, including pricing and compatible printer models is available on request.

**Please quote product number: PRT01**

# Testimonials


## Shell
(Tank Storage - End User)

"We have been using two Vent-Less Test Benches for around 18 months now and have found that their speed of operation, accuracy, and repeatability of results have significantly improved our busy maintenance activities across both refineries. The investment in this equipment was substantial and attracted the attention of our CEO during a recent visit. I was delighted to demonstrate how this game-changing technology is providing critical functional operation and emissions certification and data."

## BASF
(Tank Storage - End User)

"We have now been using a Vent-Less Test Bench for over a year, testing approximately 10 valves per day. The automatic function is extremely helpful because we can mount the valve and start the test while attending to other tasks until the test is complete, providing a significant time-saving benefit to our very busy workshop. The bench is easy to use, and we believe the instant availability of a test certificate with a full pressure profile and environmental leak volume facilitates informed decision-making when valves reach the end of their life. We are delighted that the independence of test results and easy calibration checks ensure accurate and consistent results every time. We would recommend this technology to anyone considering the reliability and environmental performance of their tank farm."

## Safe Tank Solutions
(Service and Maintenance Provider)

"The training with Joseph was excellent! The Assentech team have always been attentive to our questions and helped us operate the Vent-Less Test Bench smoothly."

## Cashco Inc
(Valve Manufacturer)

"We chose Vent-Less for its innovative approach to risk mitigation and environmental responsibility. By using Vent-Less, we are able to significantly reduce and document emissions, showcasing our commitment to being a leading manufacturer of vapor control solutions and supporting our customers with products they can rely on to help reduce emission and product loss. It not only enhances our operational efficiency but also aligns with our goal of being responsible stewards of the environment while helping our customers be safer, environmentally compliant, and more profitable in their operations ."

# CAN YOU EVIDENCE BEST PRACTICE FOR PROCUREMENT AND MANAGEMENT OF AGEING ASSETS?

- IS YOUR BREATHER VALVE SAFE AND COMPLIANT?
- DOES YOUR BREATHER VALVE LEAK?
- DOES YOUR BREATHER VALVE MEET THE SET POINT?
- COULD YOU BE HELD ACCOUNTABLE FOR A LITIGATION CLAIM?
- WHAT HARM COULD YOU BE DOING TO YOUR WORKFORCE, ENVIRONMENT, FACILITY OR PROFITS?

## ENSURE YOUR TANK STORAGE BREATHER VENTS ARE TESTED AND MAINTAINED ACCORDING TO INTERNATIONAL STANDARDS (API2000 / ISO28300)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United Kingdom

Company Registration Number 06746170


Assentech Sales Limited - supplier of tank storage, process safety and fluid transfer equipment as well as manufacturer of the Vent-Less test bench range.

assentech sales limited

Vent-Less is the range of patented and award winning breather valve test benches.

VENT-LESS

*Assentech is certificated to ISO 9001, ISO 14001 and ISO 45001 by a UKAS accredited body*