

Breather Valve Compliance Throughout the Whole Lifecycle

Keep the gas in. Prove compliance. Protect your site. Mitigate inhalation risks.

We supply, test, service and certify breather valves for digesters, gas holders and biomethane storage. Our tank venting expertise combines quality products, technical support and maintenance to protect your plant and measure vented emissions.



Why Breather Valves Matter

The Cost of One Missed Service

An untested breather valve risks more than a fine. It can quietly turn compliance, safety and revenue into a single point of failure.

1

Untested & Unserved

Valves on digesters, gas holders and storage left unproven and overdue.

2

CH₄ & H₂S Escape

Faulty valves release methane and toxic vapours, increasing Scope 1 emissions.

3

Safety & Compliance Risks

Permit limits can be breached, increasing DSEAR and flammable vapour risks.

4

Lost Gas, Lost Revenue

Valuable biomethane escapes, taking revenue and carbon with it.

5

Blockage & Foaming

Fouled valves risk over-pressure, vacuum collapse and downtime.

VENT-LESS

True valve performance can only be proven through testing. Vent-Less verifies calibration and leak-tightness against API 2000 and ISO 28300 standards.

The Biogas Difference

Biogas breaks breather valves in ways others miss

Challenging process media demand application-specific maintenance, not generic service intervals.

H₂S Corrosion

Sour gas attacks springs, seats, weights & pallets, shifting set points.

Digestate Fouling

Sticky carry-over gums pallets so valves stick or won't reseal.

Foam Carry-Over

Digester foam binds mesh and seats, blocking safe venting.

Freezing & Moisture

Condensate freezes valves, defeating pressure/vacuum protection.

Drifted Set Points

Wrong settings over-pressure the tank or vent needlessly.



Built for Every Corner of the Sector Safe, Reliable Venting Across Every Application

Agricultural AD – Crops, manure and slurry

Wastewater AD – Sewage and sludge

Food Waste AD – Household and commercial waste

Food and Drink AD – Distilleries, breweries and dairies

Industrial AD – Pulp, paper, process effluent & organic waste

Landfill Gas – Gas recovery and treatment

What we can do for you - Pick what you need

Assentech Breather Valve Offerings

Flexible service offerings for AD & biogas operators. Choose a single service or combine them into a full lifecycle programme - on your site, in our workshop, or a hybrid of both.

01 API 2000 / ISO 28300 testing & certification

Pre and post service testing on both pressure & vacuum ports, with a QR-traceable certificate. Review performance, leak rate, settings and compliance before and after servicing.

03 Pre-service test + structured replacement

For ageing or uncertified valves, capture performance data, demonstrate emission reductions and plan replacement.

05 Written Scheme of Examination (WSE)

A risk based inspection and examination scheme tailored to the media, valve age, historical test results and operating duty, with scheduling defined to maintain optimum performance.

07 LDAR & emission source surveys

OGI leak surveys quantify fugitive methane and prioritise a reduction plan. Aligned with ADBA guidance on the reduction of VOCs and HAPs.

09 Training Academy

A wide range of courses delivered at our Academy in Cornwall, at manufacturers' facilities in Europe or on your own site. Courses range from basic introductions and equipment handling to comprehensive engineering, specification and servicing.

02 On-site & workshop servicing

API 2000 test, full overhaul with compatible soft goods plus swap-in / swap-out units to keep gas flowing. Option to witness a remote API 2000 test.

04 In-situ inspection & set-point verification

Condition assessed and advisories detailed. Settings verified in place - ideal where drift or tampering is suspected.

06 Continuity planning & spares holding

We hold swap in valves and soft goods kits so a single failure need not stop production.

08 Technical consultancy & venting design

Valve sizing & venting calculations, selection & suitability, DSEAR / HAZOP / EEMUA 231 support.

10 Remote or onsite Factory Acceptance Testing

Witness a remote or onsite FAT with a Vent-Less test bench to verify settings, measure leak rate at both the pressure and vacuum ports, confirm API 2000 compliance and alignment to nameplate. Ideal for pre-install or as a payment milestone condition.

On your site

Minimal handling — we test and service in place, ideal when isolation is simple.

Assentech workshop

Controlled bench conditions for overhaul, with swap-in units keeping you running.

Hybrid

The best of both — planned around your shutdown windows and asset criticality.

Compliant Products and Services for AD & Biogas

Mechanical breather valves (PVRV)

Bespoke training packages

Proximity switches

Isolation valves

Flame arresters

Regulatory advice

Changeover valves

Blanket gas regulators

Bespoke maintenance

Vent-Less test bench range

Regulatory approved API 2000 certification

Factory-Approved Service Centre for multiple manufacturers

- Access to factory maintenance procedures
- Original valve BOM specifications
- Genuine OEM spares
- Material and equipment suitability support
- Technical and compliance support
- Comprehensive and tailored documentation packages
- Manufacturers' sizing and emissions software

We Guide.

Authority

Tank venting and process safety technical expertise

Leadership

Representation on international Standards Committees

Innovation

Vent-Less award-winning test bench range (BAT)

Competence

UKAS Certified to ISO9001, ISO45001 and ISO14001

Assurance

Whole lifecycle breather valve support ensuring compliance at every stage

You Decide. — Why Operators Trust Assentech.

See what your leaks really cost



Our free Emissions Calculator converts a biogas leak rate into lost product value and CO₂e emissions, with methane and anaerobic digester settings built in. [assentech.co.uk > emissions calculator](https://assentech.co.uk/emissions-calculator)

Ready when you are — three ways to start

1 · Email or phone call

Request maintenance support, review available options and discuss approach with our team.

2 · Maintenance Contract

Discuss contract length, individual asset needs, stock, historical maintenance, swap in equipment, shutdown dates and tailored support.

3 · Request a Site Visit or Review

Review your onsite assets from a safety and compliance perspective. Discuss requirements, technical support, regulatory review and tailored maintenance guidance.