FOCUSED ON EXCEPTIONAL ACCURACY

Gas generation solutions for gas chromatography

Parker

ENGINEERING YOUR SUCCESS.

"Parker on-site gas generation allows us to have a high-purity, safe and consistent supply of gas."

Geneticist, United Kingdom

FOCUSED ON
ACHIEVING BETTER RESULTS

In sectors like pharmaceuticals, chemical and polymer, environmental monitoring, CRO and forensics, scientists rely upon specialist analytical instruments for the fast and accurate identification of compound properties.

A consistent, safe supply of high-purity make-up, carrier and fuel gases is essential to ensure precise results in separation techniques such as gas chromatography.

The challenge is to find a gas supply solution that meets the quality criteria whilst being easy to use, cost-efficient and reliable.

Expert gas generation solutions

With a history of expertise in gas generation, Parker domnick hunter are perfectly placed to support profitable operations in analytical science. Working with partners in laboratories across a range of sectors, our industry-leading solutions enable consistent accuracy through a constant, on-demand supply of nitrogen, hydrogen and zero air for carrier, make-up and fuel gas.

FOCUSED ON
PURITY AND PERFORMANCE

Offering a wide range of advantages over the traditional cylinder gas supply, gas generators are increasingly becoming the popular choice in many laboratories.

Consistent, reliable purity

Gas purity varies significantly from cylinder to cylinder, and impurities can be introduced via the pipeline during changeover. In contrast, on-site generators supply consistently high-purity gas, preventing variations in quality, and ensuring ultra-sensitive analysis, every time.

Supported by proven, advanced technologies, you can trust Parker domnick hunter gas generators to deliver the reliability and consistency your work demands.

Maximum uptime, minimal downtime

Unlike cylinders, which can run out mid-process and require recalibration, on-site generators are able to produce gas around the clock, 24/7. They also remove the inconvenience caused by the need to undertake inventories and leak checks, re-order cylinders, and arrange for collection and delivery.

Parker domnick hunter gas generators are designed for quick and simple maintenance, with extended intervals between scheduled services. This means you can enjoy significantly increased uptime and greater throughput of samples for analysis, contributing to the profitability of your lab operations.

Continuous supply, available on-demand

Permanently installed at the point of use, an on-site generator provides you with straightforward access to an unlimited supply of gas, and always at the correct pressure, flow and temperature - improving the stability of your instruments and the accuracy of your results.

"Switching from gas cylinders to on-site gas generation has given us countless benefits."

Scientist, United Kingdom

A safer choice

High-pressure cylinders are inherently linked to safety issues – from the chance of injury through manual handling to the risk of gas leaks, which can make the atmosphere potentially explosive or deficient in oxygen.

Gas generators from Parker domnick hunter are a safe alternative, thanks to leak detection technology with 'auto shut off' and integral alarms. They also operate at a fraction of the pressure and with low volumes of stored gas, further reducing the potential for harm.

Cost-efficient with the lowest lifetime cost

In some cases, you can expect to have recouped the cost of your gas generator in less than one year. Super-high energy efficiency keeps running costs down, there are no hidden charges such as on-going delivery costs, cylinder rental and storage fees for spares and empty cylinders, and maintenance and part replacement costs are minimal.

Global support for your peace of mind

We know that business continuity is vital to your work. That's why we offer a comprehensive package of expert service, care and maintenance across our complete analytical gas systems range, worldwide.

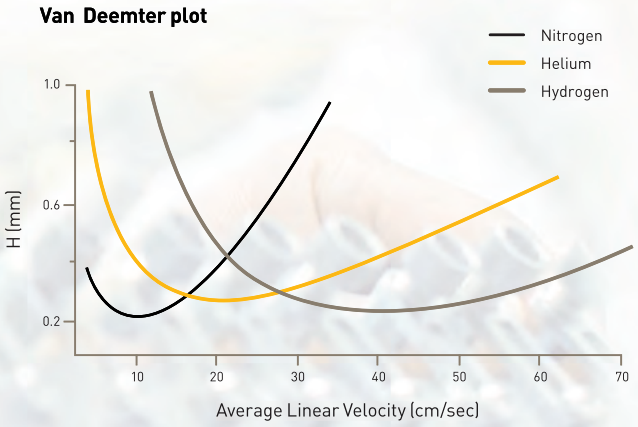
From installation, scheduled maintenance and in very rare cases, emergency assistance, wherever you are, you can trust Parker to give you complete peace of mind.

A practical alternative to helium for gas chromatography

As worldwide supplies of helium are running out, and with prices rising steeply, laboratories increasingly require a viable alternative for gas chromatography.

Hydrogen is a proven replacement as an effective carrier gas - providing the fastest analysis time over a broad range of linear velocity, particularly at higher carrier gas velocities. As a result, laboratories can enjoy distinct benefits including decreased run times and increased sample throughput, without compromising on sample quality. Manufactured easily and inexpensively from de-ionized water, hydrogen is also a cost-effective and practical solution.

A common concern when considering hydrogen is the perceived safety risk. However, there are multiple safeguards in place to ensure that all equipment is safe and there is no risk of danger.



The Van Deemter curves demonstrate how hydrogen offers high efficiency and performance as a carrier gas.

FOCUSED ON SPECIALIST SOLUTIONS

Parker domnick hunter offer a comprehensive range of gas solutions to meet all of your supply needs. Expertly designed and meticulously engineered, our specialist generators will deliver performance, safety and cost benefits to your lab.

HYDROGEN GENERATORS

H & H-MD

Using proven PEM cell technology, Parker domnick hunter H and H-MD range generators produce a continuous supply of high-purity hydrogen, for use as fuel and carrier gas, on-demand from de-ionized water and electricity. Both models work at low pressure and with minimal stored volume, offering you added safety.

- Continuous supply of high-purity hydrogen
- Precision engineered - simple installation and operation
- Compact design - save space in your laboratory
- Minimal maintenance - maximum uptime and low running costs
- Optimum safety and reliability - innovative intelligent control software and alarms
- Easy to manage - control a number of generators from one central PC

Parker offer a huge range of specialist, expert gas generation solutions.

NITROGEN GENERATORS

UHP-N2

Featuring proven, advanced technology and engineered to the highest standard, the Parker domnick hunter UHP-N2 generates a continuous stream of ultra high-purity nitrogen. Ideal for make-up and carrier gas applications, it is fully approved for use by major instrumentation manufacturers, giving you complete peace of mind.

- Continuous supply of ultra high-purity nitrogen at 99.9999% purity
- Engineered to ensure maximum reliability and minimal operator attention
- Compact design – requires minimal space in your laboratory
- Advanced noise reduction technology - a quieter working environment
- Economy mode - significantly reduced running costs and increased compressor life
- Single plug & play unit – saves you valuable time
- With or without an integral compressor

UHP-ZN2

An industry leading dual gas generator, the UHP-ZN2 delivers nitrogen and zero air for carrier gas and make-up gas applications. Producing ultra high-purity nitrogen from standard compressed air, with <0.1 ppm hydrocarbon content, it will enable you to achieve the most accurate results.

- Continuous supply of ultra high-purity, organic free nitrogen
- Engineered to ensure maximum reliability and minimal operator attention
- Compact design – requires minimal space in your laboratory
- Advanced noise reduction technology - a quieter working environment
- Integral heated catalyst – ensures carrier grade nitrogen
- Economy mode - significantly reduced running costs and increased compressor life
- Single plug & play unit – saves you valuable time
- With or without an integral compressor

ZERO AIR GENERATORS

UHP-ZA

Parker domnick hunter UHP-ZA produces ultra high-purity zero grade air from an existing compressed air source. Ensuring a lower and more stable baseline signal, it allows for higher sensitivity or larger peak areas so you can enjoy superior limits of detection over and above traditional modes of supply.

- Engineered with state-of-the-art components - enhanced reliability and long term performance
- Minimal operator attention and maintenance required
- Silent operation - improved working environment
- Compact design - save space in your laboratory
- Low operating costs - economical alternative to cylinders
- Innovative, stackable system – facilitates the mounting of a Parker domnick hunter hydrogen generator

FOCUSED ON GLOBAL SUPPORT

The leading provider of gas systems for the analytical instrument market, Parker domnick hunter provide gas generators that specifically meet the stringent requirements for all the leading analytical instrument manufacturers.

Working with partners in laboratories across the world, in a variety of sectors, our gas solutions fulfil highly complex needs, yet are engineered for ease of use. Delivering a reliable, on-demand supply of high-purity hydrogen, nitrogen and zero air, they help ensure the consistently accurate results you need.

Reliable, dependable and durable

With the largest installed base of gas generators worldwide – in excess of 50,000 – our technology has earned an enviable global reputation for quality and reliability.

Using our range of patented technologies, Parker domnick hunter generators offer a range of unique performance benefits. These include near silent operation, few moving parts and minimal operator attention – with safety and cost efficiency as standard.

FOR MORE INFORMATION OR A DETAILED DISCUSSION ABOUT YOUR SPECIFIC REQUIREMENTS PLEASE CONTACT PARKER OR AN AUTHORISED PARKER DISTRIBUTOR.

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