

Medical Gas Equipment

Product catalogue

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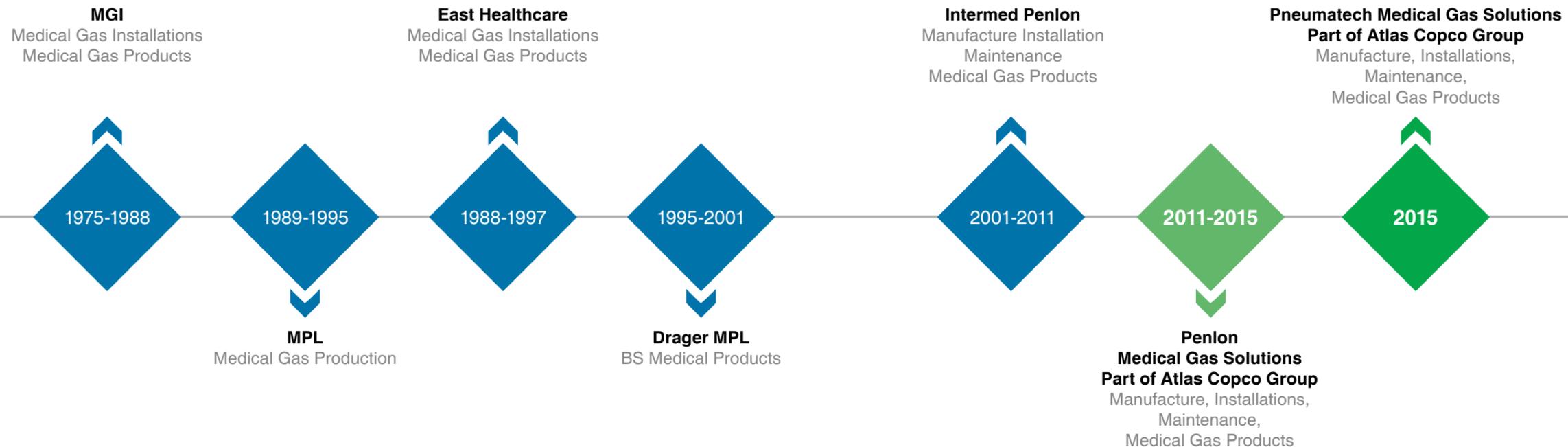
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 [Link to an online document](#)
Only for digital purpose

Guaranteed high-quality medical air and gas

Pneumatech Medical Gas Solutions (PMGS) is a global leader in manufacturing medical gas production, delivery and control equipment. Our comprehensive product portfolio comprises everything a hospital needs for safe, reliable and efficient medical gas provision. From onsite generation of European Pharmacopoeia quality medicinal air and oxygen to medical vacuum and anaesthetic gas scavenging systems, we provide you with a complete solution; from source of supply to the point of patient care. We know that you value choice and flexibility. That's why the designs of our medical air and vacuum systems can be tailored to meet your specific site requirements.

Our history



Our guarantee

At PMGS we strive to satisfy our customers at all times. We like nothing more than seeing our customers give us repeat orders. We pursue excellence in all we do – and expect it from our supply channel partners too. We invest heavily in training and education of our employees. We constantly raise the bar as regards quality of our processes and products. We insist on regular audits and health & safety reviews for our own operations and those of our suppliers.



Quality Control

Quality is our driving force at PMGS. Our manufacturing facilities operate within a Quality Management System that is independently certified to comply with the requirements of BS EN ISO 13485:2016 and ISO 9001:2008. Furthermore, our products are designed and manufactured according to ISO 14001:2004 and OHSAS 18001:2007. Where appropriate, products carry a CE mark, indicating compliance with relevant EC Council Directives, including Council Directive 93/42/EEC concerning Medical Devices as amended by Directive 2007/47/EC. All our products undergo a rigorous and well-controlled programme of inspection and testing to assure conformance to specification before being released for delivery.

Complete solutions for
medical gas generation

Source

01



Medical **Air**

Our medical air plants provide customers ultra-clean medical air, required for medical and surgical applications. Systems are available from simplex up to hexaplex configurations. The Medical Air Plant is supplied as a fully modular assembly ensuring ease of onsite installation. Components are tested and verified within our factories and come fully certified. For complete peace of mind full system string tests are also optional upon request.

Oil-injected Screw Variable Speed Drive

Medical Air Systems

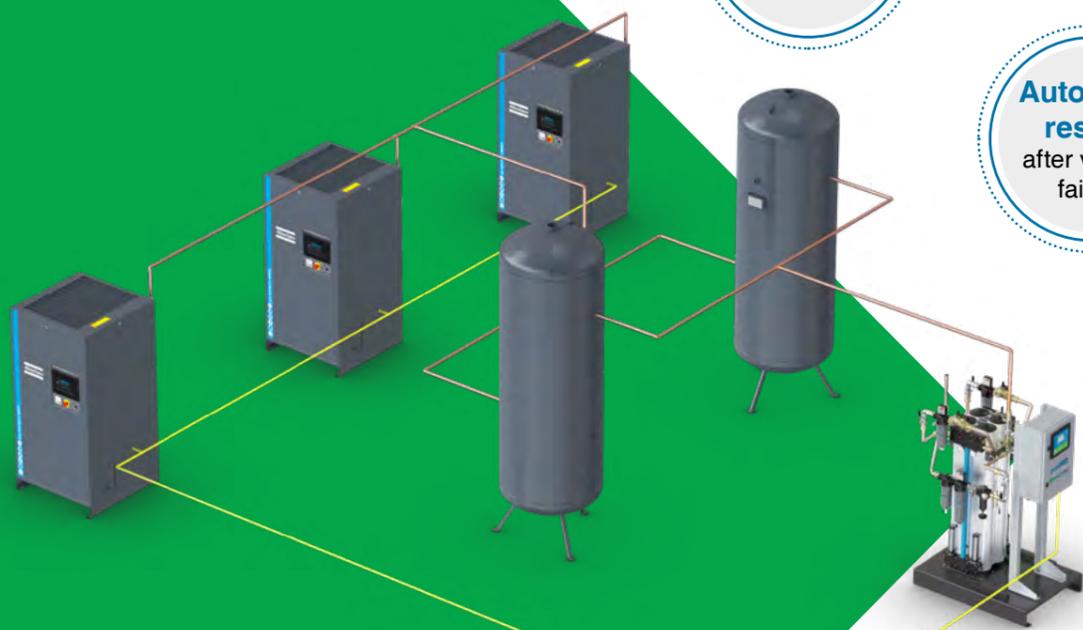
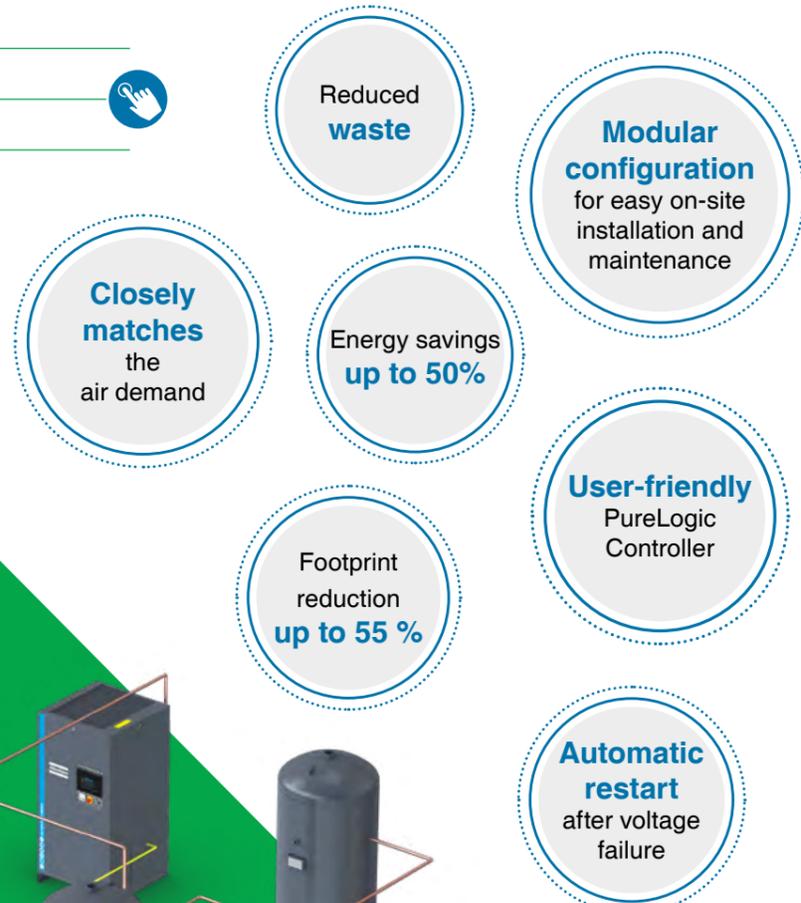
Ultimate energy and space savings

Medical Air Plants are intended to provide a continuous supply of medical quality air conforming to the European Pharmacopoeia medicinal air monograph (ref. 1238), for respiratory use in healthcare facilities. The GA VSD+ MED accomplishes this while taking energy efficiency to a higher level. The average energy savings up to 50% become a reality.

Technical Datasheets

[Oil-injected Screw Medical Air Systems 50Hz](#)

[Oil-injected Screw Medical Air Systems 60Hz](#)



General Specifications

- **Air system capacity:** 852-12,500 l/min @50Hz and 60Hz
- **Installed power:** 7-37 kW
- **Net weight compressors:** 208-396 kg
- **Net weight receivers:** 155-1,400 kg
- **Net weight purifiers:** 250-670 kg
- Contact our technical department for the standard heat dissipation formula
- GA VSD+ MED oil injected rotary screw compressors suitable for continuous and frequent start/stop operation
- Compressors with a block and fin style after cooler with a dedicated quiet running fan
- Minimum IE5 (IEC 60034) rated, IP66 class F electric motors
- iPM (Permanent Magnet) technology
- Phase sequence relay
- EMC - Electromagnetic Compatibility Certified

Services Used



Medical Air



Surgical Air

Code of Compliance and Guidance

- | | | | |
|--------------|------------------|------------------|----------------|
| • HTM 02-01 | • EN 1012-1 | • EN ISO 13348 | • EN 61439-1 |
| • HTM 2022 | • EN 1041 | • EN ISO 14971 | • EN 62304 |
| • ISO 7396-1 | • EN 5169 | • EN ISO 15001 | • EN 60601-1-2 |
| • C11 | • EN ISO 10993-1 | • EN ISO 15223-1 | • EN 61000-6-2 |
| • EN 286-1 | • EN ISO 12021 | • EN 60034 | • EN 61000-6-4 |
| • EN 837-1 | • EN ISO 12100-1 | • EN 60204-1 | |

Options



OSC Oil Water Separator



Roto-Xtend duty oil



Tropical thermostatic sensors for countries with high humidity



Maintenance spares for this product are required **annually**.

See back of catalogue for recommended **service schedule**.



Oil-injected Screw Fixed Speed

Medical Air Systems

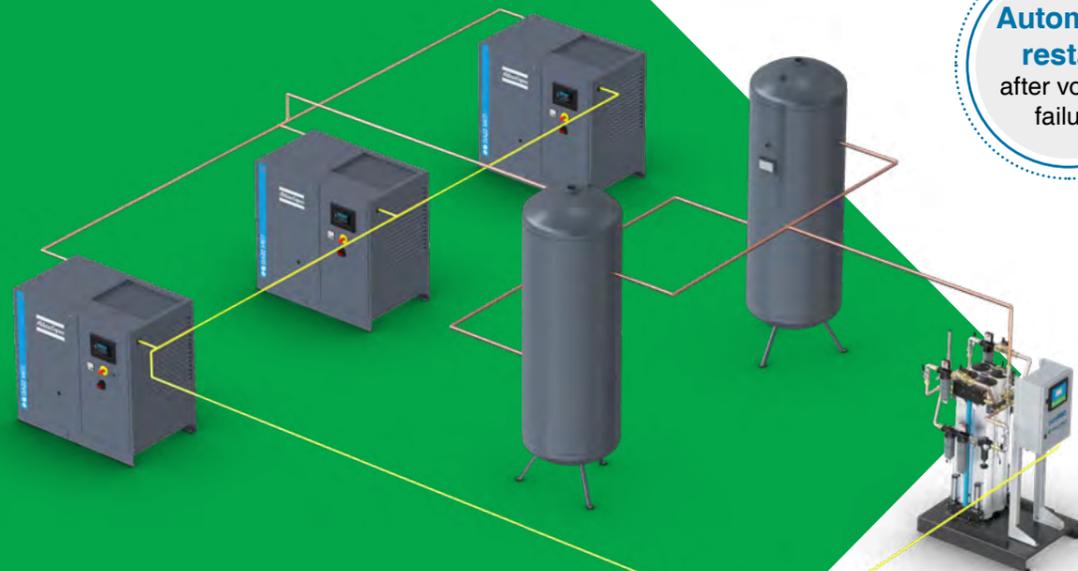
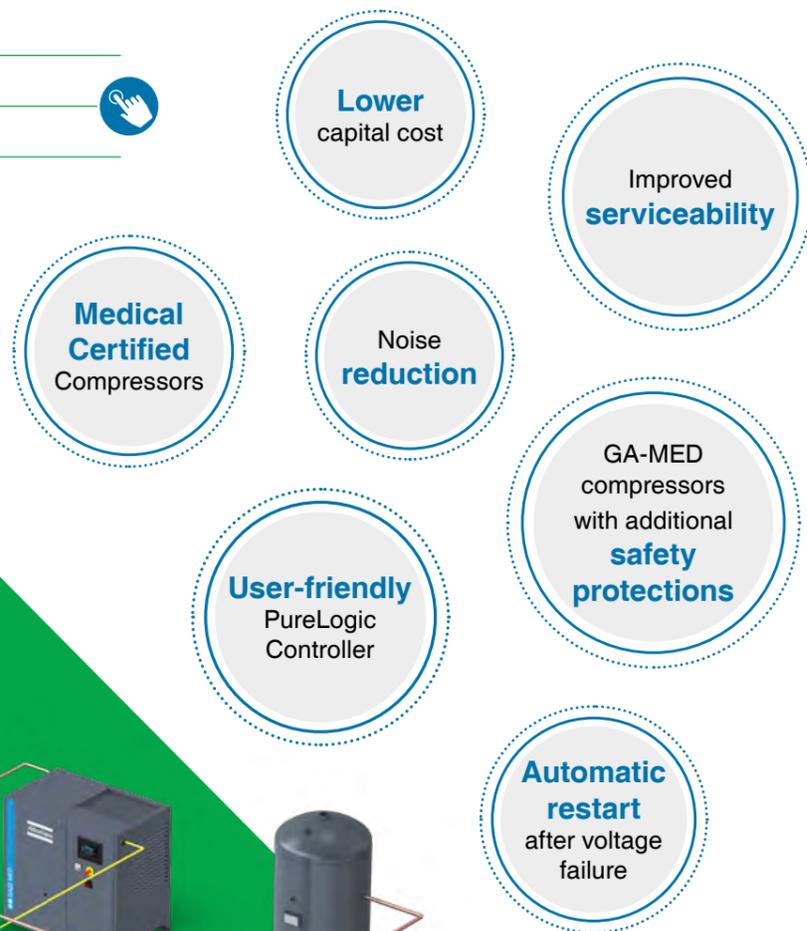
Premium solution offering outstanding performance

Medical Air Plants are intended to provide a continuous supply of medical quality air conforming to the European Pharmacopoeia medicinal air monograph (ref. 1238), for respiratory use in healthcare facilities. GA-MED compressors bring outstanding performance, flexible operation and high productivity, while minimizing the total cost of ownership.

Technical Datasheets

[Oil-injected Screw Medical Air Systems 50Hz](#)

[Oil-injected Screw Medical Air Systems 60Hz](#)



General Specifications

- **Air system capacity:** 504-12,500 l/min @50Hz and 510-12500 l/min @60Hz
- **Installed power:** 5-26 kW
- **Net weight compressors:** 270-490 kg
- **Net weight receivers:** 155-1,400 kg
- **Net weight purifiers:** 250-670 kg
- Contact our technical department for the standard heat dissipation formula
- GA MED oil injected rotary screw compressors suitable for continuous and frequent start/stop operation
- Modular configuration
- Compressors with a block and fin style aftercooler with a dedicated quiet running fan
- Minimum IE3 (IEC 60034) rated, IP55 class F electric motors
- Compressor is provided with Star-Delta (Wye-Delta) motor starters and each motor is protected by a thermal overload relay
- EMC - Electromagnetic Compatibility Certified

Services Used



Code of Compliance and Guidance

- | | | | |
|--------------|------------------|------------------|----------------|
| • HTM 02-01 | • EN 1012-1 | • EN ISO 13348 | • EN 61439-1 |
| • HTM 2022 | • EN 1041 | • EN ISO 14971 | • EN 62304 |
| • ISO 7396-1 | • EN 5169 | • EN ISO 15001 | • EN 60601-1-2 |
| • C11 | • EN ISO 10993-1 | • EN ISO 15223-1 | • EN 61000-6-2 |
| • EN 286-1 | • EN ISO 12021 | • EN 60034 | • EN 61000-6-4 |
| • EN 837-1 | • EN ISO 12100-1 | • EN 60204-1 | |

Options



Maintenance spares for this product are required annually.
See back of catalogue for recommended **service schedule.**

Oil-free Rotary Tooth

Medical Air Systems

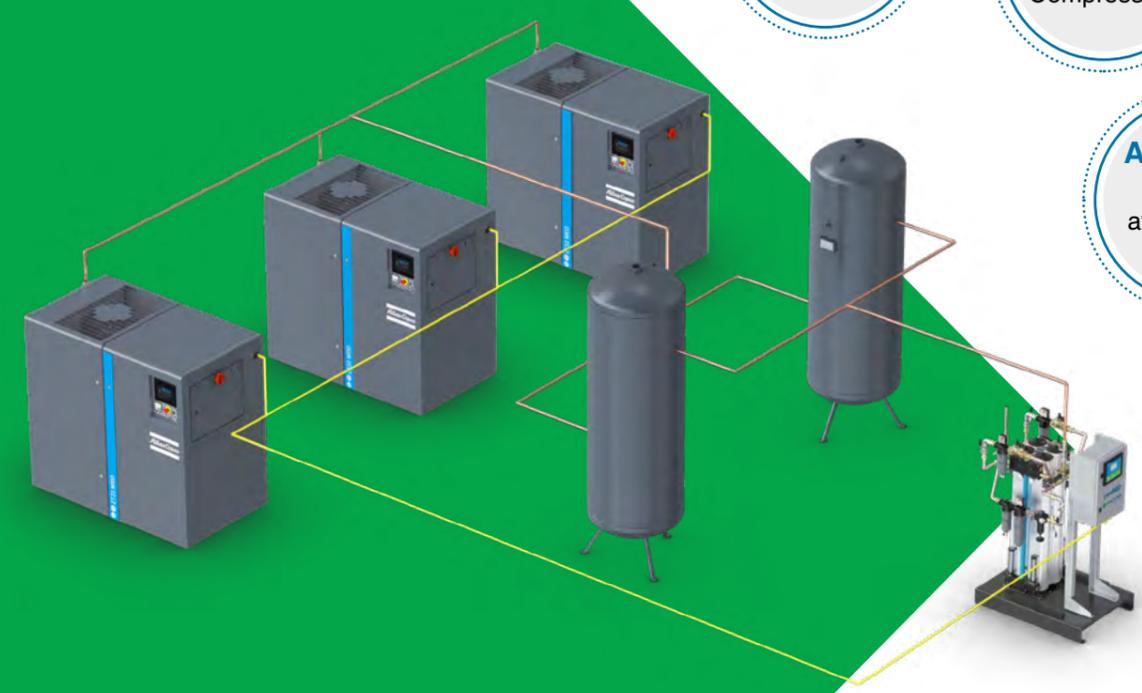
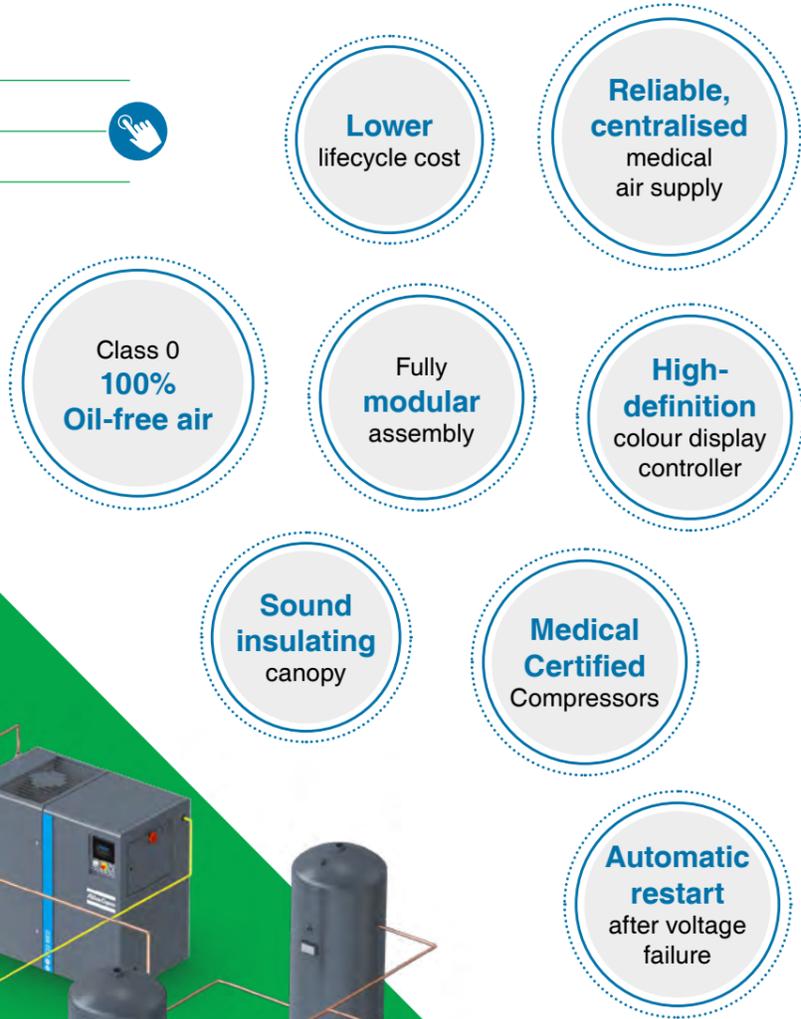
Provides reliable medical air supply

Medical Air Plants are intended to provide a continuous supply of medical quality air conforming to the European Pharmacopoeia medicinal air monograph (ref. 1238), for respiratory use in healthcare facilities. ZT-MED oil free rotary tooth compressors provide 100% certified (Class 0) oil-free air quality.

Technical Datasheets

[Oil-free Rotary Tooth Medical Air Systems 50Hz](#)

[Oil-free Rotary Tooth Medical Air Systems 60Hz](#)



General Specifications

- **Air system capacity:** 1806-8500 l/min @50Hz and 1842-8500 l/min @60Hz
- **Installed power:** 15-55kW
- **Net weight Fixed speed compressors:** 1060-1086 kg
- **Net weight VSD compressors:** 1,120-1,432 kg
- **Net weight receivers:** 155-1,400 kg
- **Net weight purifiers:** 250-670 kg
- Contact our technical department for the standard heat dissipation formula
- ZT-MED two-stage oil-free rotary tooth compressors are suitable for both continuous and frequent start/stop operation
- Stainless steel tooth element
- Minimum IE3/NEMA Premium electric motors
- EMC - Electromagnetic Compatibility Certified

Services Used



Medical Air



Surgical Air

Code of Compliance and Guidance

- | | | | |
|--------------|------------------|------------------|----------------|
| • HTM 02-01 | • EN 1012-1 | • EN ISO 13348 | • EN 61439-1 |
| • HTM 2022 | • EN 1041 | • EN ISO 14971 | • EN 62304 |
| • ISO 7396-1 | • EN 5169 | • EN ISO 15001 | • EN 60601-1-2 |
| • C11 | • EN ISO 10993-1 | • EN ISO 15223-1 | • EN 61000-6-2 |
| • EN 286-1 | • EN ISO 12021 | • EN 60034 | • EN 61000-6-4 |
| • EN 837-1 | • EN ISO 12100-1 | • EN 60204-1 | |

Options



Variable Speed Drive (VSD) variant



Maintenance spares for this product are required **annually**.

See back of catalogue for recommended **service schedule**.



Oil-free Scroll

Medical Air Systems

A lower impact on the environment

Medical Air Plants are intended to provide a continuous supply of medical quality air conforming to the European Pharmacopoeia medicinal air monograph (ref. 1238), for respiratory use in healthcare facilities. SF-MED oil free scroll compressors provide 100% certified (Class 0) oil-free air quality.

Technical Datasheets

[Oil-free Scroll Medical Air Systems 50Hz](#)

[Oil-free Scroll Medical Air Systems 60Hz](#)



Lower
lifecycle cost

Reliable, centralised
medical air supply

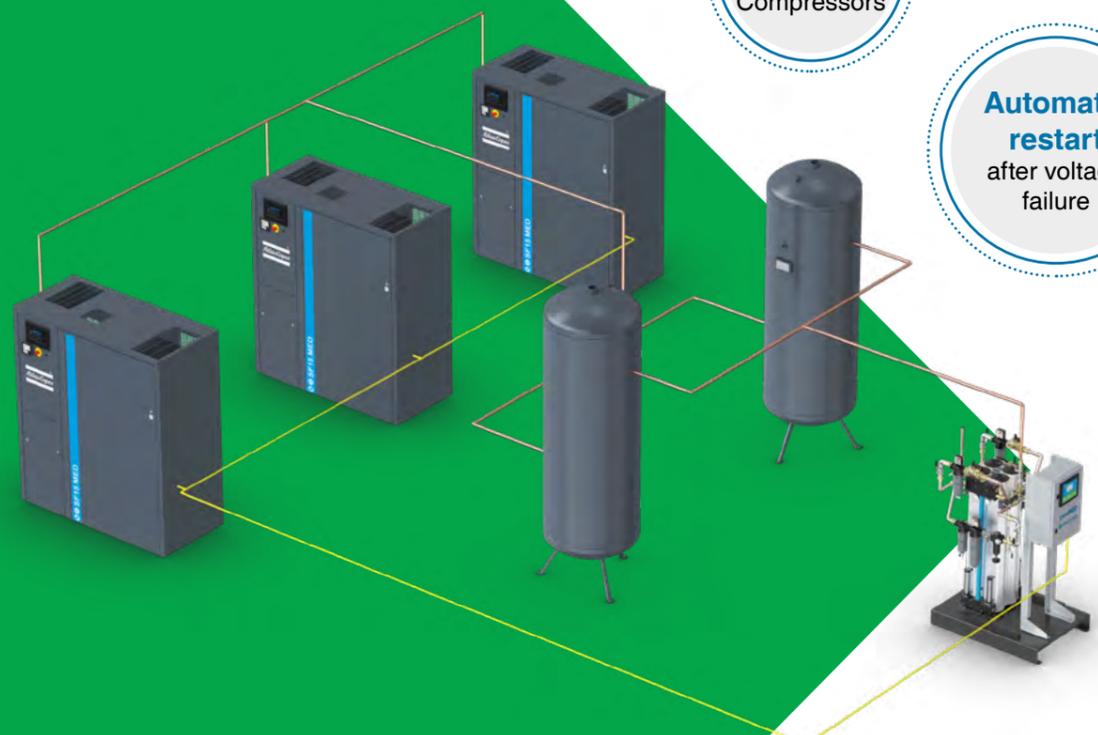
Temperature sensor
downstream of the aftercooler (HTM variant)

Fully **modular**
assembly

High-definition
colour display controller

Medical Certified
Compressors

Automatic restart
after voltage failure



General Specifications

- **Air system capacity:** 678-8,500 l/min @ 50Hz and 60Hz
- **Installed power:** 8-22 kW
- **Net weight compressors:** 450-650 kg
- **Net weight receivers:** 155-1,400 kg
- **Net weight purifiers:** 250-670 kg
- Contact our technical department for the standard heat dissipation formula
- SF-MED single-stage oil-free rotary scroll compressors are suitable for both continuous and frequent start/stop operation
- Compressors with an aftercooler with a dedicated quiet running fan
- Totally enclosed air-cooled IP55 Class F electric motors
- EMC - Electromagnetic Compatibility Certified

Services Used

MA4

Medical Air

SA7

Surgical Air

Code of Compliance and Guidance

- | | | | |
|--------------|------------------|------------------|----------------|
| • HTM 02-01 | • EN 1012-1 | • EN ISO 13348 | • EN 61439-1 |
| • HTM 2022 | • EN 1041 | • EN ISO 14971 | • EN 62304 |
| • ISO 7396-1 | • EN 5169 | • EN ISO 15001 | • EN 60601-1-2 |
| • C11 | • EN ISO 10993-1 | • EN ISO 15223-1 | • EN 61000-6-2 |
| • EN 286-1 | • EN ISO 12021 | • EN 60034 | • EN 61000-6-4 |
| • EN 837-1 | • EN ISO 12100-1 | • EN 60204-1 | |

Options



Electronic zero loss water drains



Maintenance spares for this product are required annually.

See back of catalogue for recommended **service schedule.**



Pressure Reducing Sets

Simplex & Duplex

Providing reliable pressure regulation

The Pressure Reducing Set (PRS) are often installed where medical and surgical quality air is generated by a common supply source. Both simplex and duplex variants come complete with pressure safety valves and pressure gauges indicating the delivered pressure.

Technical Datasheet

Pressure Reducing Sets - Simplex and Duplex



Pressure relief valves
fitted as standard

Quarter turn ball valves
fitted as standard

Easy to read pressure gauges



General Specifications

- Simplex PRS comprises an in-line pressure regulator
- Simplex unit mounted via munsen rings
- Duplex PRS has two branches connected to the MGPS in parallel
- Duplex unit mounted in baseplate
- Supplied with copper stub pipes for ease of installing using inert gas jointing procedures

Services Used



Oxygen



Medical Air



Surgical Air

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 837
- EN 1041
- EN ISO 4123
- EN ISO 10993-1
- EN ISO 14971
- EN ISO 10524-2
- EN ISO 13348
- EN ISO 15001
- EN ISO 15223-1

Options



Padlocks



Maintenance spares for this product are required **5 yearly**.

See back of catalogue for recommended **service schedule**.



Protect the environment – treat your condensate

As efficient as the process may be, a compressor inevitably produces more than compressed air alone. One of its by-products is a large volume of condensate, generally an emulsified combination of oil and water that poses a serious environmental risk. Only by treating this condensate in the right way, we can make sure it brings no harm to the environment. Depending on the location, severe penalties can be charged for dumping oily condensate in the sewerage system. The legal threshold of the maximum oil concentration in water varies strongly depending on continent, country and even local region. However, the maximum allowable oil content in drainage to the sewerage generally varies between 15 and 20 mg/l.

Medical Oxygen

We can offer an extensive range of oxygen supply systems such as oxygen generators, bulk liquid oxygen tanks (VIEs) and manifold control panels suitable for your oxygen supply needs.

Oxygen Generator

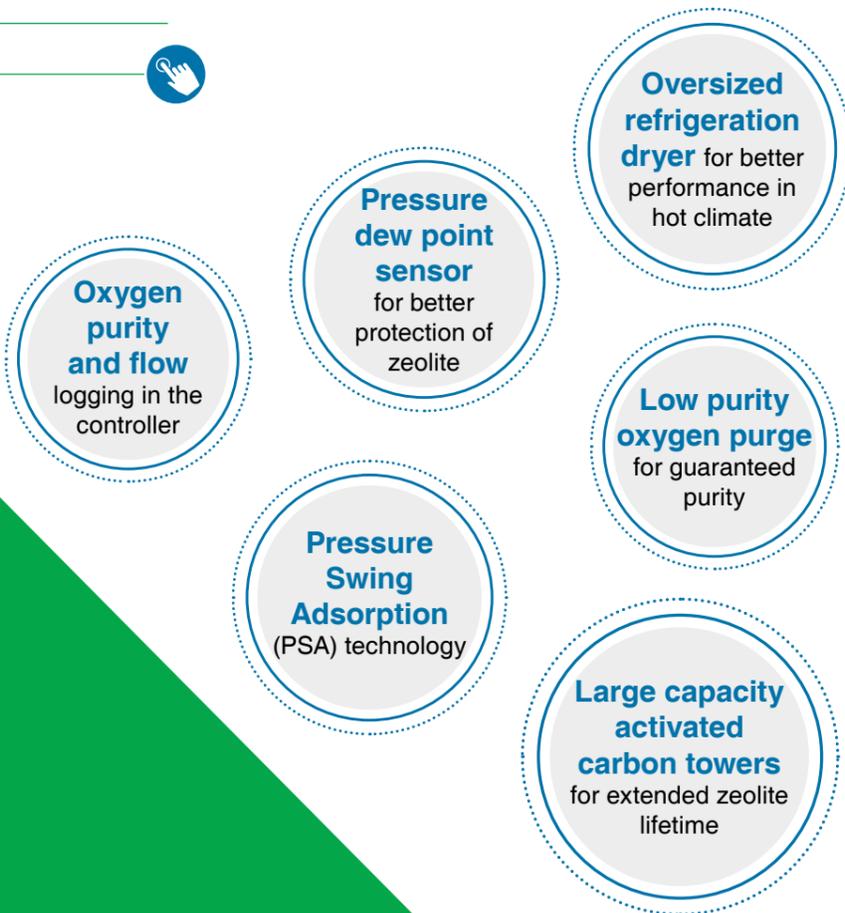
Systems and Components

Offering economical and reliable supply of oxygen

The range of Oxygen Generator Systems is perfect for anyone who wants to produce oxygen on-site. Generators offer a flexible, reliable supply of oxygen and can be arranged in simplex or duplex configurations for emergency back up.

Technical Datasheet

Oxygen Generator Systems



General Specifications

- **Net weight oxygen generators:** 180-4,200 kg
- **Net weight fixed speed compressors:** 280-1,425 kg
- **Net weight high pressure booster compressors:** 91-839 kg
- **Net weight air receivers:** 125-800 kg
- **Net weight dryers:** 51-550 kg
- Contact our technical department for the standard heat dissipation formula
- Simplex or duplex configurations
- 90-95% oxygen purity production
- Touch screen controller with 4" high definition display
- Including: Zirconia oxygen sensor, Inlet dewpoint sensor, Outlet flow meter
- Safety purge function
- Outlet pressure regulator and filter
- Copper stub pipe connectors
- Silencer on exhaust
- EMC - Electromagnetic Compatibility Certified

Services Used



Oxygen

Code of Compliance and Guidance

- All related BS EN ISO standards
- ASME BPVC SECVIII Div 1:2015 - Pressure Equipment Directive
- EN 13445-3:2009/A2:2013
- EN ISO 12100:2010 - Machinery Directive
- EN 60204-11:2000/AC:2010
- EN 61000-6-2:2005 - Electromagnetic Compatibility
- EN 61000-6-4:2007/A1:2011
- EN 60204-1:2006/AC: AC2010 - Low Voltage Equipment
- EN 61439-1:2011
- EN ISO 13485:2016 - Medical Devices
- EN ISO 14971:2007/C:2012
- EN ISO 7396-1 (AC2010)
- EN ISO 5359:2014
- EN ISO 15001:2012
- EN ISO 155223:2012
- EN ISO 60601-1:2006
- EN ISO 60601-2:2015
- EN ISO 60601-6:2010
- EN ISO 60601-8:2007
- EN ISO 62304:2008
- EN ISO 562366:2008

Options



Containerised solution



High pressure booster compressor



Filling ramp



Secondary air supply line



Maintenance spares for this product are required **annually**.

See back of catalogue for recommended **service schedule**.



Liquid Oxygen Systems

Bulk Liquid Oxygen tanks

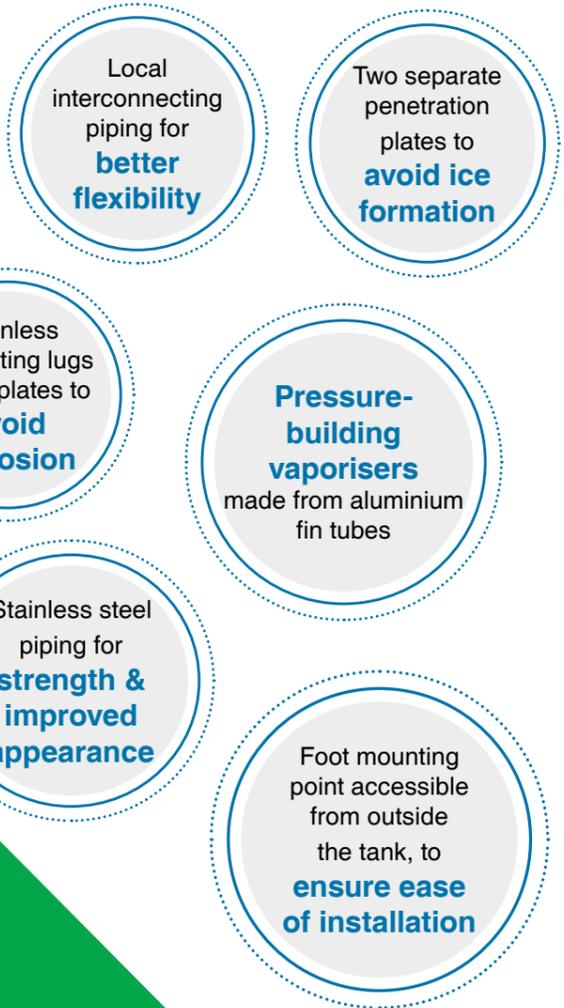
Vessel cleaned for oxygen application

Vertical Liquid Oxygen storage vessels, with tank mounted or free standing vaporisers. Wall mounted VIE control panel for gas distribution. Low evaporation rate, ergonomic layout of instruments and controls for ease of use, carefully selected components and outstanding build quality ensure a high degree of reliability and economy in everyday use and guarantee the longevity of the vessel.

Technical Datasheets

Liquid Oxygen System - Bulk Liquid Oxygen tanks

VIE Control Panels



General Specifications

- CE Certified
- European Pressure Equipment Directive 97/23 CE (PED)
- Tanks are stationary, vacuum-insulated pressure vessels
- Bulk tanks consist of an inner and an outer vessel
 - Inner vessel, which is suspended concentrically in the outer vessel, is made of stainless steel and is used for storage of cryogenic liquefied gases
 - Outer vessel is made of carbon steel
 - The space between the vessels is filled with high quality perlite and evacuated
- The integrity of the welded joints is checked by leak-testing, using a helium mass spectrometer to ensure long-term vacuum maintenance
- A molecular sieve absorbs remaining molecules to improve and maintain the vacuum during the working life of the vessel
- These vessels can also be supplied to customer's design requirements or specifications
- 18.5 bar standard pressure supply
- Standard Twin alarm contents Gauge classed as Media 5k
- Coating - Blasted ground (to SA 1/2, DIN 559281), Epoxy Zinc primer, Finish in Polyurethane Quality

Services Used



Oxygen

Code of Compliance and Guidance

- | | | | |
|-----------------|--------------|-------------------|------------|
| • HTM 02-01 | • DIN EN 439 | • EN 910 + EN 970 | • EN 10025 |
| • HTM 2022 | • EN 499 | • EN1011 | • EN 10028 |
| • ISO 7396-1 | • EN 719 | • EN 1289 | • EN 10088 |
| • EN 298-1 | • EN 729-1 | • EN 1435 | • EN 10113 |
| • EN 299-1 +A1 | • EN 729-2 | • EN 1418 | • EN 10204 |
| • EN 288-2 + 1 | • EN 756 | • DIN EN 1600 | • EN 13445 |
| • EN 288-3 + A1 | • DIN EN 760 | • EN 1708 | |

Options



LCD digital contents gauge with alarms contacts



Stand alone or tank mounted vapouriser solutions



Higher Pressure rated Tanks Available on request



Tank mounted or floor mounted vapourisers available from 1,000 to 15,000 l/m



There is **no recommended maintenance interval** for this product.

VIE Control Panels

Vacuum Insulated Evaporator Control Panel

VIE Control Panels are designed to accept a supply of gaseous oxygen from the VIE at 1050 kPa (10.5 bar) or from the standby manifold at 850 kPa (8.5 bar) and to reduce the pressure to a nominal 420 kPa (4.2 bar) pipeline distribution system pressure. The VIE Control panel is available in a duplex configuration, with one standby and one duty regulator set.

Technical Datasheet

VIE Control Panels



All components degreased for oxygen use

High lift brass safety relief valve

Quarter turn ball valves die cast brass alloy body with nitrile seals

In line filtration

Gauge monitoring 0-11 bar with bottom entry connection

Non relieving regulators 28 bar rated



General Specifications

- Duplex configuration
- Designed to regulate line pressure
- Regulating unit is mounted onto a light weight mild steel zinc plated back plate
- Powder coated mild steel enclosure includes inlet and outlet pressure indication gauges

Services Used



Oxygen

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 837-1
- EN 1041
- EN 4126
- EN ISO 10993-1
- EN ISO 10524-2
- EN ISO 13348
- EN ISO 14971
- EN ISO 15001
- EN ISO 15223-1

Options



22mm and 28mm pipe option



Internal in line metal filtration for each line for both sizes



Maintenance spares for this product are required 5 yearly.

See back of catalogue for recommended service schedule.



The importance of the correct sizing for purity

Correct sizing for the desired purity of medical components using Pressure Swing Adsorption (PSA) technology is critical for oxygen generation. Appropriate correction factors must be used to take into account that a deviation of real conditions, such as high humidity, high ambient temperature and high altitude. All these factors are considered in the design of our oxygen systems and are verified over many running hours in hospital installations around the world.

Medical Vacuum

Our medical vacuum systems are intended to provide a continuous supply of medical vacuum to a pipeline system in healthcare facilities. The centralised medical vacuum system is available with two to six vacuum pumps and can be configured as a packaged or modular system.

Lubricated Rotary Vane

Vacuum Systems

Modular and packaged solutions

Medical Vacuum Plants are intended to provide a continuous supply of medical vacuum to a pipeline system in healthcare facilities. It is a redundant to multiplex system such that the supply is maintained in single fault condition. Horizontal Medical Vacuum Plants are supplied pre-piped and fully tested.

Technical Datasheets

Lubricated Rotary Vane HTM 02-01 - 50 Hz

Lubricated Rotary Vane HTM 02-01 - 60 Hz

Lubricated Rotary Vane HTM 2022 - 50 Hz

Lubricated Rotary Vane HTM 2022 - 60 Hz



Tank mounted variant
for smaller model sizes

Easy on-site installation

Oil-lubricated rotary vane vacuum pumps offer **high flow performance**

Ethernet connectivity as standard

Compact footprint
vessel-mounted stand-alone assemblies

Vacuum pumps on anti-vibration mounts for **quiet operation**

Purelogic™ Central Controller
user-friendly colour display: real-time status via hospital's LAN network



General Specifications

- Contact our technical department for the standard heat dissipation formula
- Oil lubricated rotary vane type suitable for both continuous and frequent start/stop operation
- Air-cooled vacuum pumps
- Each vacuum pump provided with an oil mist eliminator delivering virtually oil-free exhaust
- Each pump fitted with anti-vibration pads between pump foot and mounting frame
- Each pump fitted with its own drain flask
- Rotors driven by directly coupled totally enclosed fan-cooled electric motors
- Pump inlets include wire mesh filter and integral non-return valve to prevent oil suck back and pressure increases
- Pressure switch to indicate normal operation of the pump once it has been called into service
- Duplex and Quadruplex arrangements of bacteria service
- EMC - Electromagnetic Compatibility Certified

Services Used

MV

Medical Vacuum

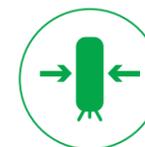
Flow Rate Formula Calculation

- Using Boyle's Law where:
 $P1 \times V1 = P2 \times V2$
 - P1 = Pump operating vacuum pressure
 - V1 = Pump capacity (displacement) @ 50Hz in m³/hr
 - P2 = Atmospheric pressure 1013mbar
 - V2 = Free air aspired in m³/hr

Code of Compliance and Guidance

- | | | | |
|--------------|------------------|------------------|----------------|
| • HTM 02-01 | • EN 1012-1 | • EN ISO 12100-1 | • EN 60204-1 |
| • HTM 2022 | • EN 1012-2 | • EN ISO 12100-2 | • EN 62304 |
| • ISO 7396-1 | • EN 1041 | • EN ISO 13348 | • EN 61000-6-1 |
| • C11 | • EN ISO 2151 | • EN ISO 13857 | • EN 61000-6-2 |
| • EN 286-1 | • EN 5169 | • EN ISO 14971 | • EN 61000-6-3 |
| • EN 837-1 | • EN ISO 10993-1 | • EN ISO 15223-1 | • EN 61000-6-4 |

Options



Reduced vessel sizes and dimensions to suit special room conditions



Maintenance spares for this product are required **annually**.

See back of catalogue for recommended **service schedule**.



Anaesthetic Gas Scavenging Systems

Providing a safe and healthy workspace for medical personnel

A safe and healthy workspace is of primary importance in a hospital's operating department. Pneumatech Medical Gas Solutions' active Anaesthetic Gas Scavenging Systems (AGSS) are designed to safely remove exhaled anaesthetic agents from an operating department and dispose of them in the atmosphere, preventing contamination to safeguard employees and patients.

Technical Datasheets

Simplex AGSS

Duplex AGSS



Thermal Overload Relay with manually reset function

Compact

User-friendly

Wire mesh filter to prevent ingress of large particulates

System mounted vacuum relief valve for pressure balancing

Panel mounted gauge for pressure measurement from source supply



General Specifications

- **Net weight simplex AGSS:** 21-33 kg
- **Net weight duplex AGSS:** 85-120 kg
- Contact our technical department for the standard heat dissipation formula
- Provide a continuous low-level vacuum supply to pipeline systems
- Removal of waste anaesthetic gases
- The stated volumetric flow rate of a simplex are delivered with one blower running
- The stated volumetric flow rate of a duplex are delivered with one blower on standby
- Fully assembled and skid mounted
- Oil-less and air-cooled side channel regenerative blower(s)
- Bearings are sealed and greased for life
- Plant Control Unit
- Gauge fitted for monitoring pressure and balancing of the system
- Regulated by a vacuum relief valve
- Remote start switches
- EMC - Electromagnetic Compatibility Certified

Services Used



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 1041
- EN 8532
- EN ISO 7396-2
- EN ISO 9170-2
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN ISO 15001
- EN ISO 15223-1

Options



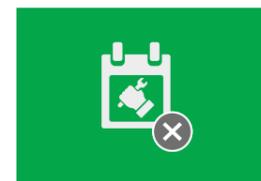
Building Management System (BMS) relay module (Simplex and Duplex versions)



Stubbed vacuum relief valves for piped system installation nearer to gas outlet



24 volt on/off remote controllers



There is no recommended maintenance interval for this product.

Optimal control & monitoring thanks to Purelogic™ controller

The Purelogic™ Central Controller is the ideal complement to your vacuum and air systems. This state-of-the-art control solution will provide optimal control and monitoring of your systems, increased reliability and reduced energy use. The built-in web server allows direct read-out of important parameters, settings and service counters of your dryer or vacuum pump, by a simple connection via a local area network. Machine status information can also be received, and air purifiers or vacuum pumps remotely start/stopped through voltage-free contacts.



Safe, reliable and efficient
medical gas distribution
and control

Pipeline

02



Manifolds

Our manifold control solutions provide a continuity of supply that is of paramount importance for medical gases. These manifolds are suitable to supply medical gases for respiratory, clinical and surgical use in healthcare facilities.

PureGAS Automatic

Changeover Manifolds

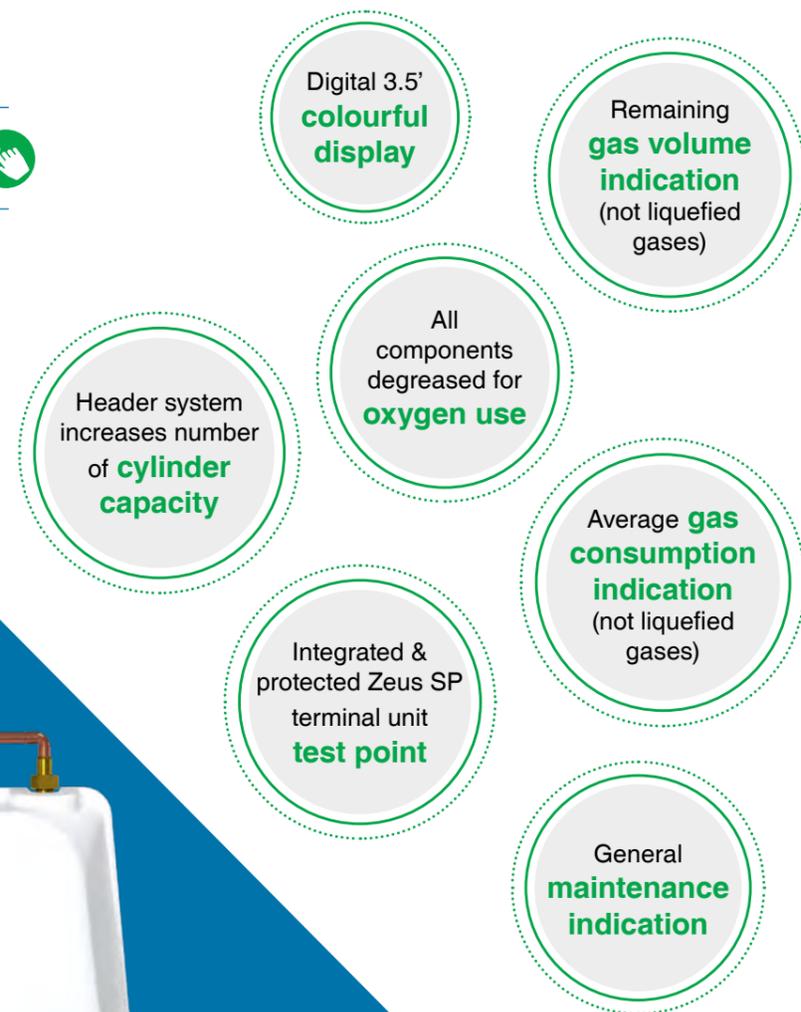
Providing continuous supply of medical gases

Automatic Changeover Manifolds are a completely redundant system that ensures the supply is maintained in the event of a single fault condition. The changeover from the duty to the standby bank of cylinders takes place automatically. The Automatic Changeover Manifolds are supplied pre-piped and pre-wired.

Technical Datasheets

PureGAS Automatic Changeover Manifold

Manifold Header Systems



General Specifications

- Manifold header system increases number of variations of arrangements
 - 2x1 through 2x6 standard wall mount
 - Space saving free standing
 - Double stacked configuration
- Sizes up to 20 cylinders per bank available
- Central regulator panel with cylinder headers each side
- Securely support cylinders of varying diameters
- Powder coated steel cylinder racks
- 4 bar flow rates 1,750 l/m and 7 bar flow rates 2,500 l/m
- Cylinder connections have either Bullnose (BS 341) or Pin-indexed (ISO 407) connectors
- Non-return valves fitted to each tailpipe connection
- Control system for ease of maintenance
- Pre-wired for alarm connection to BMS outputs
- Halogen free polymers
- Adiabatic test passed
- EMC - Electromagnetic Compatibility Certified

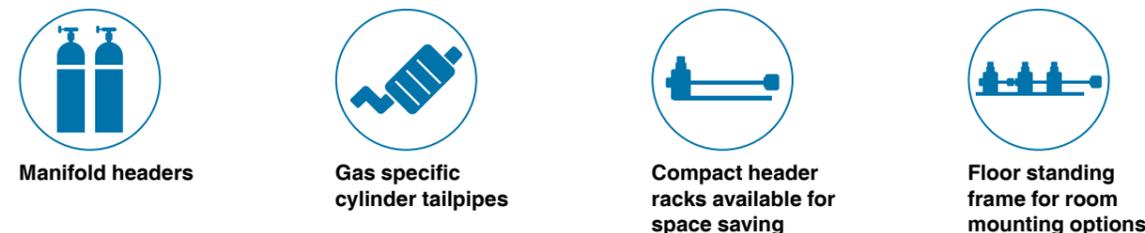
Services Used



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 837-1
- EN 1041
- EN ISO 10993-1
- EN ISO 14971
- EN ISO 15001
- EN ISO 10524-2
- EN 15223-1
- EN 50581
- EN 60601-1
- EN 60601-1-2
- EN 60601-1-6

Accessories



Maintenance spares for this product are required 5 yearly.

See back of catalogue for recommended service schedule



Emergency Reserve Manifolds (ERM)

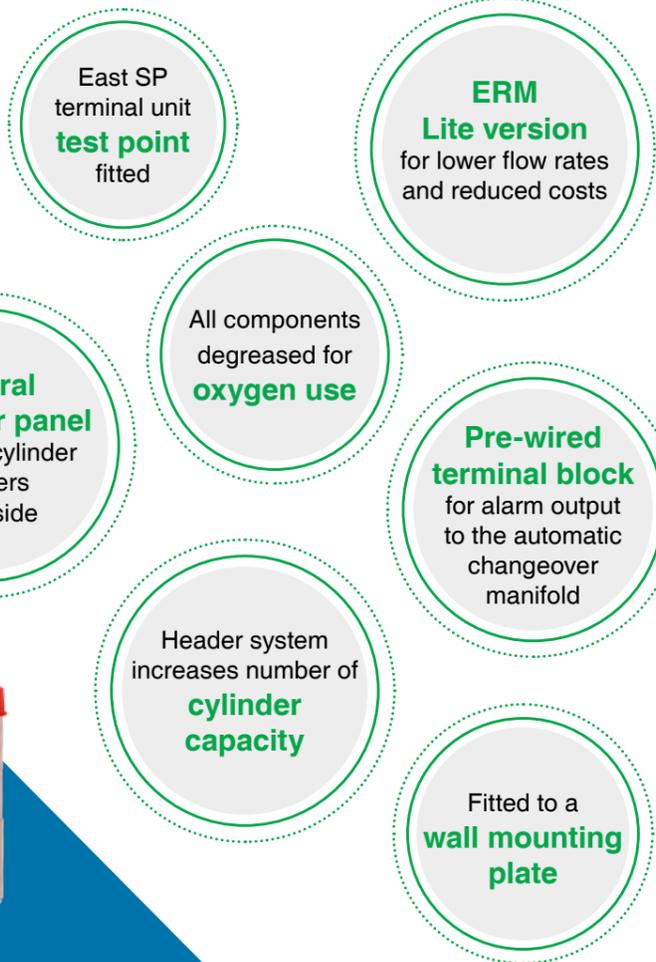
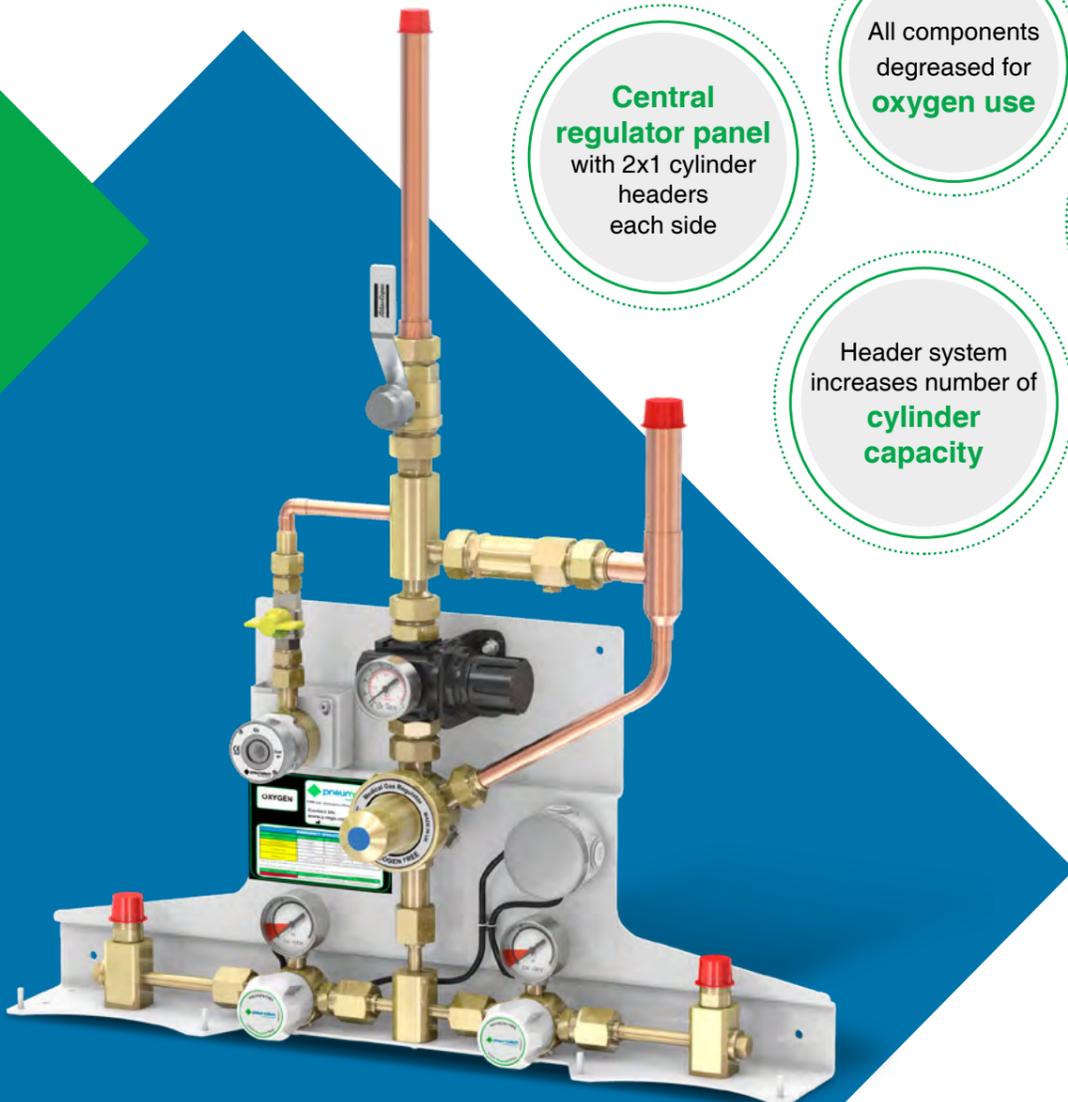
Reliable reserve gas supply

The Emergency Reserve Manifolds (ERM) are typically used as a reserve or backup gas supply, usually to a high demand system i.e. an automatic changeover manifold. Changeover can be carried out manually when one bank of the cylinders is empty.

Technical Datasheets

[Emergency Reserve Manifold \(ERM\)](#)

[Manifold Header Systems](#)



General Specifications

- Manually changeover manifold
- Manifold header system increases number of variations of arrangements
 - 2x1 through 2x6 standard wall mount
 - Space saving free standing
 - Double stacked configuration
- High flow models 1,200 l/m and lower flows 200 l/m available
- Cylinder connections have either Bullnose (BS 341) or Pin-indexed (ISO 407) connectors
- Non-return valves fitted to each tailpipe connection
- Control/regulator assembly
- Two separate stages of pressure regulation

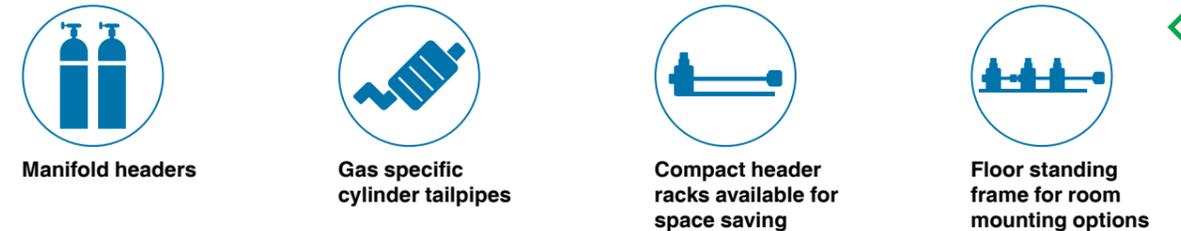
Services Used



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 837-1
- EN 1041
- EN ISO 7396-1
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN ISO 15001
- EN 15223-1

Accessories





Maintenance spares for this product are required 5 yearly.
See back of catalogue for recommended [service schedule](#)

Semi-Automatic and Manual Manifolds

Simple to install, easy to use

Semi-Automatic and Manual Manifolds are designed to supply piped medical gas where continuity of supply is essential, and where the gas is to be supplied from high pressure gas cylinders.

Technical Datasheets

[Semi-Automatic and Manual Manifolds](#)

[Manifold Header Systems](#)



Same **medical grade components** featured in automatic and ERM manifold control products

Medical gas **control panel**

Supplied **fully tested**

Manual manifold is ideal for **small** installations with **low flow** demands

Two stage pressure regulation for smooth and constant delivery pressure

Header system increases number of **cylinder capacity**



General Specifications

- Can be used as either main supply or emergency reserve manifold
- Standard or full feature model for semi-automatic manifold
- Duty band and standby bank for semi-automatic manifold
- Contact gauges connected to each cylinder bank regulator
- Cylinder connections have either Bullnose (BS 341) or Pin-indexed (ISO 407) connectors
- Non-return valves and lockable like isolation valves fitted to each tailpipe connection
- Manifold header system increases number of variations of arrangements
 - 2x1 through 2x6 standard wall mount
 - Space saving free standing
 - Double stacked configuration

Services Used

O₂	N₂O	O₂/N₂O	MA4	SA7	SA11	N₂	CO₂
Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Air 11 bar	Nitrogen	Carbon Dioxide

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 837-1
- EN 1041
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN ISO 15001
- EN 15223-1

Options

Configuration for standard model	Pressure relief exhaust connection point	Alarm termination box	Cover plate for semi-automatic manifold	
Pressure switch (+ tee connection for semi-automatic manifold)	Single- and double-line contact module	High pressure bank valve kit	Manifold headers	Gas specific cylinder tailpipes

Maintenance spares for this product are required 5 yearly.
See back of catalogue for recommended [service schedule](#)

Electromagnetic Compatibility (EMC) Certified

To ensure a safe medical working environment, Pneumatech Medical Gas Solutions considers EMC a critical part of the testing program of our medical devices. Our medical gas equipment is tested according to the comprehensive medical device electromagnetic compatibility (EMC) certifications and are meeting regulatory requirements such as EN 61000-6-2/EN 61326-1 and HTM 02-01 section 2.42 and HTM 06-01 section 12.

Pipeline Components

Our Pipeline Components range consists of pipeline solutions to distribute medical gas services throughout the hospital, clinical or laboratory facility. The designs of Area Valve Service Units and Line Ball Valves allow individual parts of the central medical gas pipelines to be isolated locally in a safe manner.

Line Ball Valve Assemblies

HTM 02-01/HTM 2022

Line Ball Valve Assemblies for assured service

Line ball valve assemblies are designed to provide local isolation of individual parts of the central gas and vacuum piping system in hospitals, clinics, laboratory facilities, or anywhere there is piped medical gas.

Technical Datasheet

Line Ball Valve Assemblies



- Internal ball valve design suitable for medical gas systems
- Operates by manual operation of a 90 degree turn lever
- A set of white "open" and red "closed" spades



HTM 02-01



HTM 2022

General Specifications

- Copper stub pipes
- Two-piece full-bore design with brass body
- Coded and lockable NIST connectors with brass non-return valve (excluding vacuum unit)
- 15 to 54 mm - at-face connectors with O-ring seal
- 76 to 108 mm - stainless steel bolts, nuts and spring washers with 3 mm Viton® sealing gaskets
- Locking mechanism on the handle

Services Used

Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Medical Vacuum	Nitrogen	Carbon Dioxide

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN ISO 10993-1
- EN ISO 14971
- EN ISO 10524-2
- EN ISO 13348
- EN ISO 15001
- EN ISO 15223-1
- EN 18082

Options

HTM 2022: 40mm locking device and keys for valve assemblies	HTM 02-01: Long shackle padlock and keys for NIST connections (individually per gas type)	Colour coded adhesive gas tape and directional arrows	Fluxless silver solder available for inert gas welding

There is no recommended maintenance interval for this product.

Zeus Area Valve

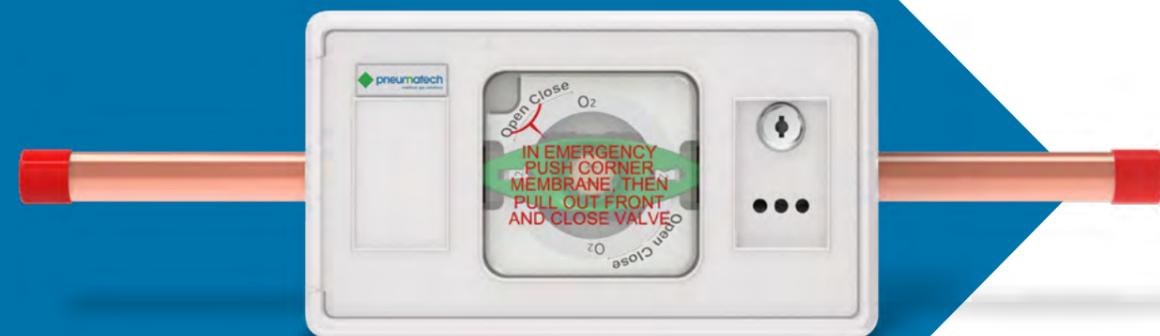
Service Units

Providing one point isolation of gases

The Zeus Area Valve Service Units (AVSUs) provide local gas isolation. Each AVSU is gas specific, and indicates the gas or vacuum via a colour coded gas identity label behind each valve handle.

Technical Datasheet

Zeus Area Valve Service Unit



Colour coded service ID

Nitrile Sealing Valves

Cost-effective

Emergency access: breakable pull out window

General Specifications

- Quick pull out window access
- Individual key access locks
- Moulded recessed front door for labelling areas
- Medical gas and vacuum gas-specific NIST connections
- Valves: chrome plated brass ball with PTFE seats
- Universal first fix back plate and injection moulded cover
- Universal kit for surface or flush fitting

Services Used



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 1041
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN ISO 15001
- EN ISO 15223-1
- EN ISO 18082
- EN ISO 13348

Options



Wall mounted, surface or flush fitting



22mm and 28mm pipe sizes



There is **no recommended maintenance interval** for this product.

Area Valve Service Unit

Modules

Valves individually accessible via lockable doors with emergency access facilities

The Area Valve Service Unit Modules create an independent zone within the gas pipeline system, which can offer up to six different gases. AVSU Modules are pre-assembled wall mounted zone units with optional alarm, pressure switches and pipe work.

Technical Datasheet

Zeus AVSU Module



- Emergency access:**
breakable pull out window
- Cost-effective**
- Colour coded service ID**

General Specifications

- Pre-assembled wall mounted zone units
- Surface, semi-flush or fully flush mounting options
- Internal pipework with stub pipes
- Quick pull out window access
- Individual key access locks
- Moulded recessed front door for labelling areas
- Medical gas and vacuum gas-specific NIST connections

Services Used

							
Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Medical Vacuum	Nitrogen	Carbon Dioxide

Code of Compliance and Guidance

- | | | |
|--------------|------------------|------------------|
| • HTM 02-01 | • EN 1041 | • EN ISO 15001 |
| • HTM 2022 | • EN ISO 10993-1 | • EN ISO 15223-1 |
| • ISO 7396-1 | • EN ISO 13348 | • EN ISO 18082 |
| • C11 | • EN ISO 14971 | • EN ISO 13348 |

Options

		
Local Area alarm	Remote mounted alarm panel	Hygromatic Pressure Switches



There is no recommended maintenance interval for this product.

Copper Tubes, Fittings, Fixtures and Accessories

To provide the connection between source equipment

The copper tubes and fittings are pipeline solutions for medical installations. BS EN 13348 Degreased Medical Grade Seamless Copper Tubes are specifically designed for medical gas and vacuum systems, recognising the special requirements of the medical gas market.

Technical Datasheet

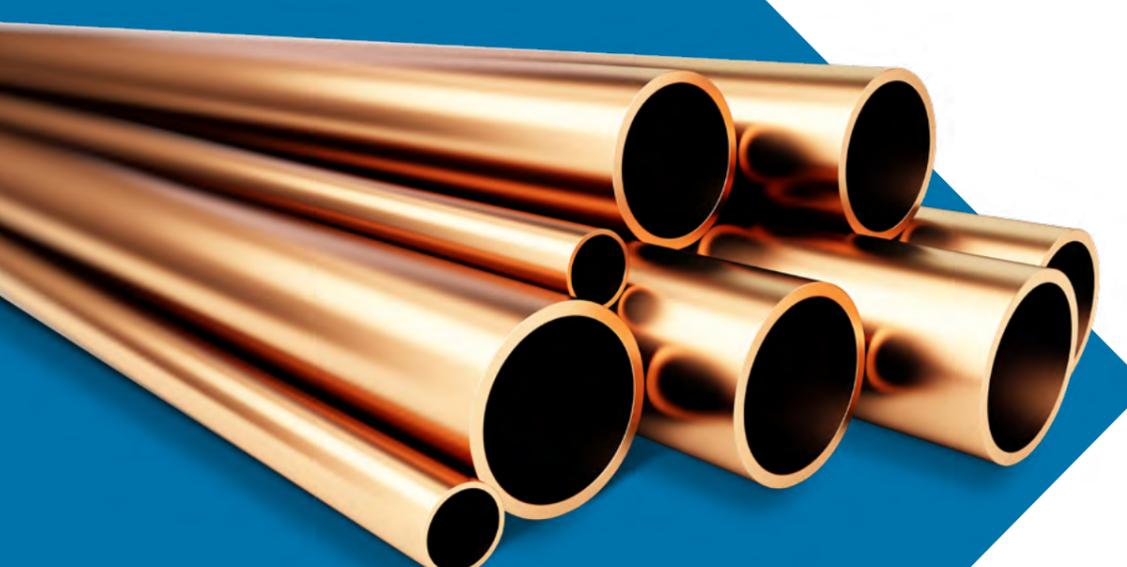
Copper Pipes and Fittings



Specifically designed copper for **medical gas and vacuum** systems

Conforms to **HTM 02-01** & NHS engineering spec. **C11**

Superseding earlier 'hybridised' **copper tube standards**



General Specifications

- Material analysis
 - Material grade phosphorus deoxidised copper; Cu-DHP or CW024A
 - Minimum copper content 99.90% (including silver)
 - Phosphorus 0.015-0.040%
 - Total impurity maxima 0.060% (excluding phosphorus and silver)
 - Melting point of copper at 1083°C and has a density of 8.9 gm/cc
- Cleanliness
 - Maximum total carbon content 0.20 mg/dm²
 - Packaging
 - Each tube individually end capped, tube bundles polythene wrapped and sealed
- Sizes 12-108mm copper tubes are stamped with
 - Tube size
 - EN 13348
 - Manufacturer
 - Date & Batch Code 12mm to 28mm sizes are also inkjet marked with additional data to enable traceability
 - Kitemark
 - Temper

Services Used

O₂ Oxygen	N₂O Nitrous Oxide	O₂/N₂O Entonox	MA4 Medical Air	SA7 Surgical Air	MV Medical Vacuum	N₂ Nitrogen	CO₂ Carbon Dioxide
He Helium	Xe Xenon	Specific mixtures Specific mixtures	AGSS AGSS				

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- C11
- EN 13348
- EN 1057
- BS EN 1254-1:1998 Part 1
- BS EN 1254-1:1998 Part 5
- Kite Marked Tube

Options

 Straight and reducing couplings	 Equal and reducing tees	 Insert reducers	 Copper tube wall or ceiling fixing components	
 Brass single or double munsen rings	 Brass hospital brackets	 Threaded studding	 Screws and anchors	 Gas identity tape



There is **no recommended maintenance interval** for this product.

The precision of gas identification

Managing a clear identity of each gas running through the medical gas pipelines up to the terminal units in a hospital is of the utmost importance. The safety of the patients, personnel and visitors in healthcare facilities depend on the specific gas identification labelling to help minimise hazards of any risks such as fire, explosion, and electricity. At Pneumatech Medical Gas Solutions we can support you with the required identification materials to be compliance with BS 1710:2014.

Alarms & Monitoring

The PureGUARD medical gas alarms provide safe and reliable monitoring of your medical gas pipeline systems. Whether you require a Local or Central Alarm System, you can easily accommodate the needs of your facility.

PureGUARD 15

Central Alarms

Provides safe and reliable monitoring of medical gas systems

The Digital PureGUARD 15 Central Alarm Panel is designed to monitor the status of up to six medical gas source equipment. The alarm panel comes with easy installation, carefree maintenance, security from unauthorized personnel access, and anti-microbial additives.

Technical Datasheet

Central Medical Gas Alarm Panel



Unique **on-site configuration**

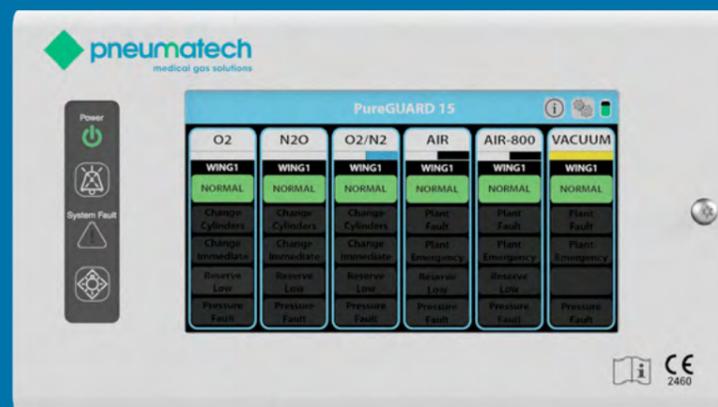
Anti-microbial additives
minimize cross infection

Touch Screen
Easy on screen set-up

Safety from **anti-tamper screw**

Line continuity
monitors pipeline wiring

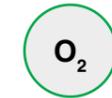
Conforms to **HTM02-01, HTM2022, C11** and **BS EN ISO standards**



General Specifications

- Factory tested.
- On-site expandability.
- Line continuity monitoring.
- All panels can be configured as master or repeaters.
- Touch proof boards.
- Protected access with anti-tamper screw.
- Mounting boxes include multiple knock out holes for easy cable entry.
- Trimming bezel for flush mounted installation.
- Surface mounted components.
- Digital pressure/vacuum transducers
- HTM02-01, HTM2022, C11 and all related BS EN ISO standards.
- Configuration and set-up can be performed on-site.

Services Used



Oxygen



Nitrous Oxide



Entonox



Medical Air



Surgical Air



Medical Vacuum

Code of Compliance and Guidance

- HTM02-01
- HTM2022
- EN ISO 10993-1
- EN ISO 14971
- EN ISO 15001
- EN ISO 15223-1

Options



Indicator that alarm condition has been acknowledged and action is being taken



There is **no recommended maintenance interval** for this product.

PureGUARD 6

Local Alarms

Provides safe and reliable monitoring of medical gas systems

The Digital PureGUARD 6 Local Alarm System is designed to monitor the high and low pressure downstream of any Area Valve Service within a facility. The local alarm can provide real time pressure monitoring for up to six medical gas services. The alarm panel comes with easy installation, carefree maintenance, security from unauthorized personnel access, and anti-microbial additives.

Technical Datasheet

Local Medical Gas Alarm Panel



Unique **on-site configuration**

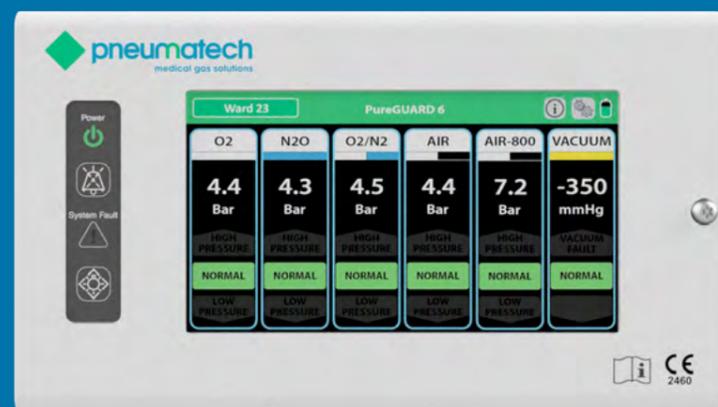
Anti-microbial additives
minimize cross infection

Touch Screen
Easy on screen set-up

Safety from **anti-tamper screw**

Line continuity
monitors pipeline wiring

Conforms to **HTM02-01, HTM2022, C11** and **BS EN ISO standards**



General Specifications

- Factory tested.
- On-site expandability.
- Line continuity monitoring.
- All panels can be configured as master or repeaters.
- Touch proof boards.
- Protected access with anti-tamper screw.
- Mounting boxes include multiple knock out holes for easy cable entry.
- Trimming bezel for flush mounted installation.
- Surface mounted components.
- Digital pressure/vacuum transducers
- HTM02-01, HTM2022, C11 and all related BS EN ISO standards.
- Configuration and set-up can be performed on-site.

Services Used



Oxygen



Nitrous Oxide



Entonox



Medical Air



Surgical Air



Medical Vacuum

Code of Compliance and Guidance

- HTM02-01
- HTM2022
- EN ISO 14971
- EN ISO 15001
- EN ISO 10993-1
- EN ISO 15223-1

Accessories



Remote audible device



Double line contact monitor module



Single line contact monitor module



Two pair screened pressure switch alarm cables



Pressure switches



Pressure sensor pipeline connectors 15 mm, 22 mm and 28 mm



There is **no recommended maintenance interval** for this product.

Pure protection

All our products undergo a rigorous and well controlled inspection program and testing to assure conformance to standards and regulations before being released for delivery. You can trust us to meet your specific demands in various medical applications.

Terminal Units

Our Zeus SP and East SP medical gas terminal units are designed to accept medical gas probes to BS 5682:1998. They provide a safe and reliable means of supplying medical gases from the central gas and vacuum supply systems.

Zeus SP Medical Gas

Terminal Units

Combining ease and speed of installation

The Zeus SP economically designed terminal units are manufactured gas specific to prevent interchangeability between different types of gas services. The Zeus SP medical gas terminal units are attached permanently to the medical gas distribution pipeline system via copper tube or semipermanently via medical gas hose assembly.

Technical Datasheet

SP Medical Gas Terminal Unit

AGSS SP Medical Gas Terminal Units



Clear gas indication

MRI compatible

Anti-swivel pin
(wall mounted TU)

Pressure and leak tested

Positive action of the rolling pin latch mechanism

General Specifications

- Machined brass construction first fix
- Injection moulded polymer with stainless steel Teflon™ coated rolling pins
- Enclosed in a white ABS decorative mounting box
- Integral check valves
- Brazed copper stub pipe 12 mm

Gas Specific Components

O ₂ Oxygen	N ₂ O Nitrous Oxide	O ₂ /N ₂ O Entonox	MA4 Medical Air	SA7 Surgical Air	MV Medical Vacuum
N ₂ Nitrogen	CO ₂ Carbon Dioxide	AGSS AGSS			

Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 8532
- EN ISO 9170-1
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN 15223-1
- EN 18082
- EN ISO 15001
- EN 1041
- EN 5682

Options

Plaster shield	Bedhead mount installation kit	Flush surround	Conversion terminal units available
Different mounting options	Different tailpipe options	Terminal unit probes	



There is **no recommended maintenance interval** for this product.

East SP Medical Gas

Terminal Units

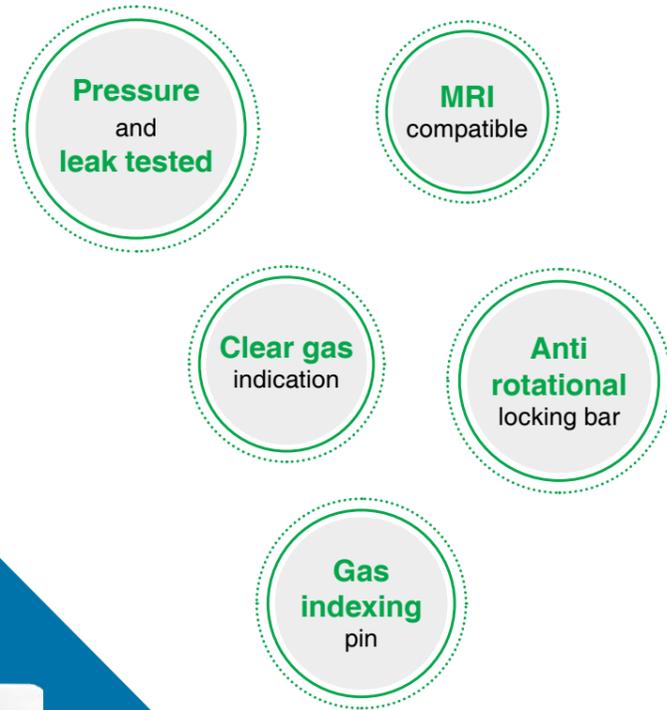
A safe means of supplying medical equipment with medical gases

The East SP all metal construction terminal units are manufactured gas specific to prevent interchangeability between different types of gas services. The East SP medical gas terminal units are attached permanently to the medical gas distribution pipeline system via copper tube or semipermanently via medical gas hose assembly.

Technical Datasheet

SP Medical Gas Terminal Unit

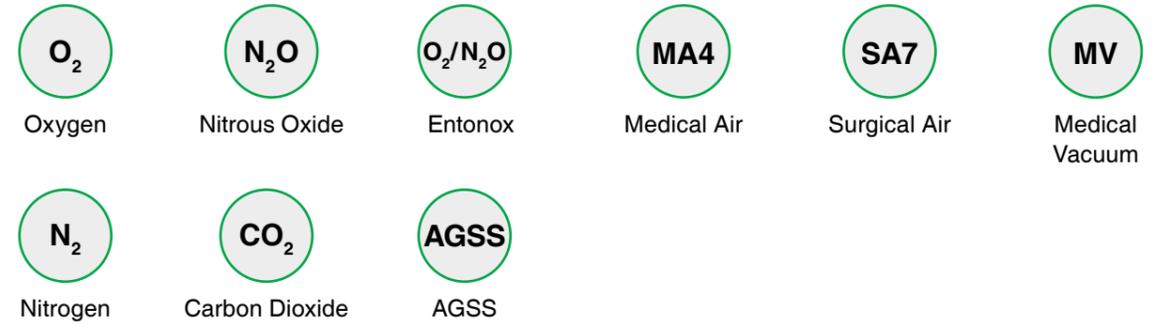
AGSS SP Medical Gas Terminal Units



General Specifications

- All metal construction
- Machined brass construction first fix
- Zinc die-cast chrome collar with stainless steel rolling pins
- Black Teflon coated body
- Copper/zinc finished interlock ring
- Enclosed in a white ABS decorative mounting box
- Full metal to metal seal on maintenance check valves
- Integral check valves
- Brazed copper stub pipe 12mm

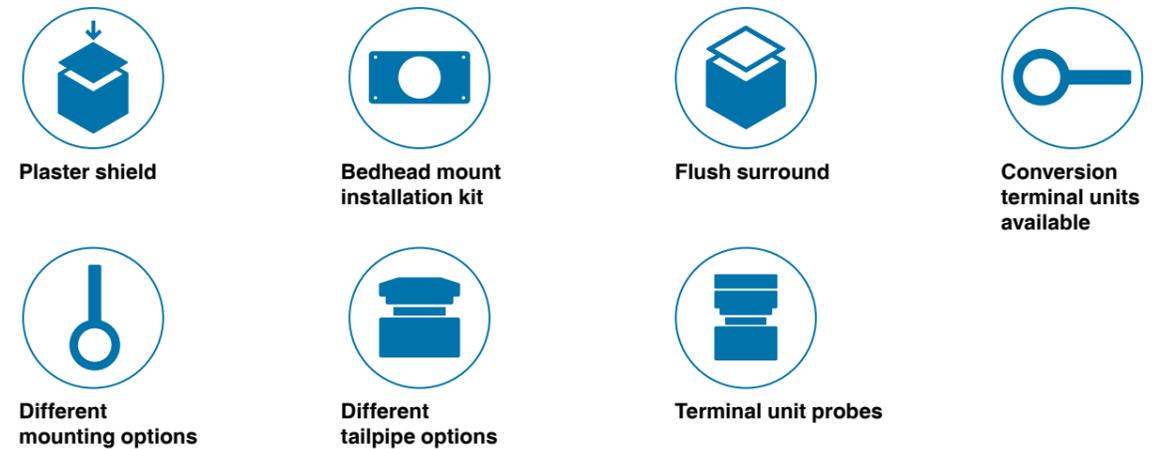
Gas Specific Components



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- ISO 7396-1
- C11
- EN 8532
- EN ISO 9170-1
- EN ISO 10993-1
- EN ISO 13348
- EN ISO 14971
- EN 15223-1
- EN 18082
- EN ISO 15001
- EN 1041
- EN 5682

Options





There is no recommended maintenance interval for this product.

Ready for an easy upgrade?

The SP range of 2nd fixes are designed to be used together with our conversion kits to upgrade terminal units. The upgrade option allows conversion of aged and outdated terminal units to the latest 2nd fix designs whilst maintaining the original 1st fix and avoiding interruption of gas service associated with full installation of replacements.



Patient care solutions that
meet the demands of modern
clinical environments

**Patient
environment**

03



Medical Supply Units

The Medical Supply Units range provide our customers with the integrated medical gas and electrical services that is required for patient care throughout the facility, such as general care, high dependency care and surgical applications.

Ceiling Columns

Configured for your needs

The Ceiling Columns are offered fixed rigid type or a height adjustable retractable type. Both rigid and retractable pendants are intended for use operating theaters for connection to anaesthesia machines or other similar locations where access around equipment is essential.

Technical Datasheet

Ceiling Columns - Rigid and Retractable Pendants



First and second fix components

Individually configured for the workplace

Pre-piped and pre-wired systems

Ergonomic solution

Easy-to-use pneumatic actuator (retractable pendant)



General Specifications

- Rigid units with fixed length
- Retractable units with 300mm of vertical movement
- Mounting plate suitable for up to nine gases
- Up to four twin electrical sockets
- Phthalate free medical gas hose (retractable pendant)
- All copper tail connections (rigid pendant)

Services Used

Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Medical Vacuum	Nitrogen	Carbon Dioxide	AGSS

Code of Compliance and Guidance

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • HTM 02-01 • HTM 2022 • ISO 7396-1 • C11 • EN 1041 • EN ISO 5359 | <ul style="list-style-type: none"> • EN 5682 • EN 8532 • EN 9170 • EN 10993 • EN 11197 • EN 13348 | <ul style="list-style-type: none"> • EN 14971 • EN 15001 • EN 15223 • EN 18082 • EN 60601 |
|--|---|--|

Options

Double banked	RJ45 data outlets and other ELV services on request	Other norms than BS medical gas terminal units available on request	Equipotential earth sockets
RJ11 data points available	Meigan wiring code compliance	15 mm piped ceiling NIST connections	Zeus SP or East SP outlets



There is **no recommended maintenance interval** for this product.

Articulated Arm Pendant Systems

Providing a safe, robust and ergonomic medical workplace solution

The Articulated Arm Pendant systems provide large carrying capacity for services such as medical gas, power supplies and video imaging. We provide multi-movement arms for operating theatres offering both lateral and cantilever movement. This enables critical services to be placed as close to the patient as possible. For highly demanding areas our tandem heavy duty pendant systems can be used.

Technical Datasheet

Articulated Arm Pendant Systems



Colour coded
brake joints

Quick and easy
to manoeuvre
into position

Pre-piped
and
pre-wired
systems

Tailor made
pendants

**BS East SP or
Zeus SP** medical
gas terminal units
included



General Specifications

- Pneumatic or electromagnetic brake system
- Lateral or cantilever arms
- Array of arm lengths
- Solo or dual arm arrangements
- Visual indicators on ceiling and intermediate arm joint
- Colour coded hose assemblies with NIST connections
- Configured multi-function racks

Services Used



Code of Compliance and Guidance

- HTM 02-01
- HTM 2022
- EN ISO 7396-1
- EN ISO 11197
- EN ISO 13485
- CE certified and compliant to BS
- EN 60601-1 safety standards

Options



There is **no recommended maintenance interval** for this product.

East SP and Zeus SP

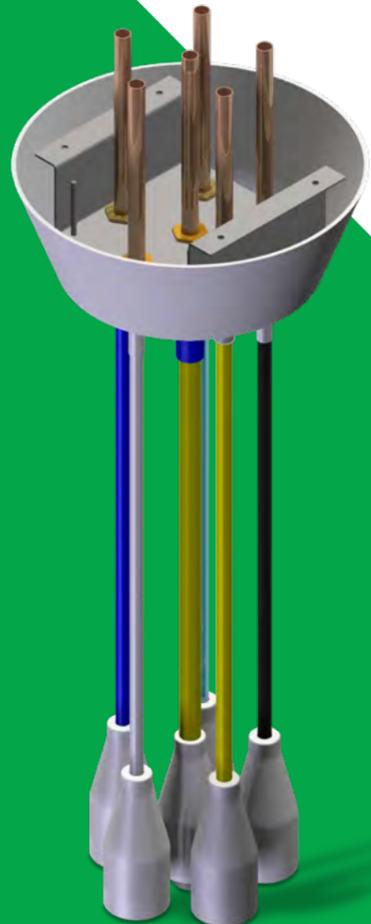
Flexible Pendants

A simple and functional solution

The Flexible Pendants provide a simple but effective solution where only medical gases are required. These products are often used to compliment our larger multimovement type pendant systems. Flexible Pendants are intended for use in operating theatres for connection to anesthesia machines and similar medical locations where access around equipment is essential.

Technical Datasheet

East SP and Zeus SP Flexible Pendant



Pre-piped systems

Ergonomic solution

Pressure and leak tested

First and second fix components

General Specifications

- Ceiling mounted
- Ceiling NIST assemblies
- Mounting bracket suitable for up to six gases
- Colour coded hose assemblies with NIST connections
- Phthalate free medical gas hose

Services Used

 O₂	 N₂O	 O₂/N₂O	 MA4	 SA7	 MV	 N₂	 CO₂	 AGSS
Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Medical Vacuum	Nitrogen	Carbon Dioxide	AGSS

Code of Compliance and Guidance

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> • HTM 02-01 • HTM 2022 • ISO 7396-1 • C11 • EN 1041 | <ul style="list-style-type: none"> • EN ISO 5359 • EN 5682 • EN 8532 • EN 9170 • EN 10993 | <ul style="list-style-type: none"> • EN 14971 • EN 15001 • EN 15223 • EN 18082 |
|---|--|--|

Options



Hose length to suit customer specification



15 mm piped ceiling NIST connections



Zeus SP or East SP outlets



There is **no recommended maintenance interval** for this product.

Bedhead

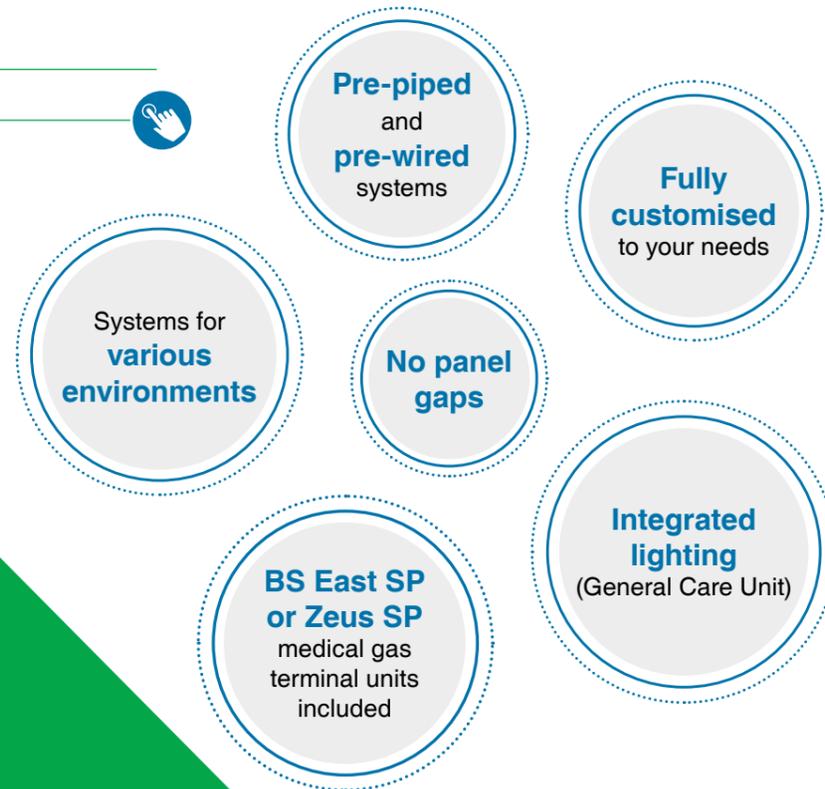
Trunking Systems

For complete bedspace management

The Bedhead Trunking systems provide integrated medical gas and electrical services required for patient care throughout the facility. With a strong emphasis on the aesthetics, the Bedhead Trunking systems blend with the modern hospital environment and enhances the patient environment. PMGS offers various styles such as general care units, high dependency horizontal units and vertical units.

Technical Datasheet

Bedhead Trunking Systems



General Specifications

- 3 to 6 medical gas services (High Dependency Unit)
- Up to 12 medical gas outlets (Vertical Headwall Unit)
- Electrical sockets on both sides (Vertical Headwall Unit)

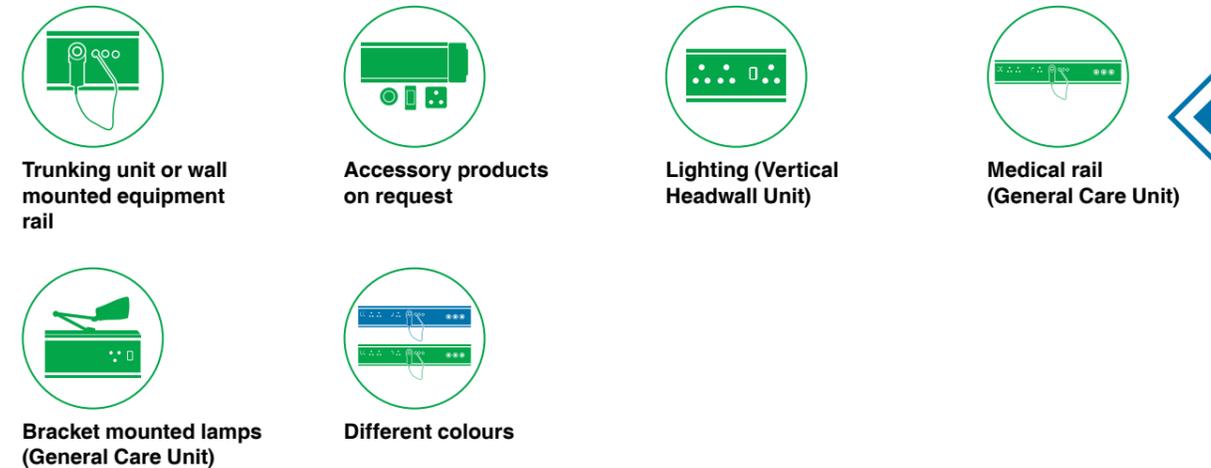
Services Used



Code of Compliance and Guidance

- | | | | |
|--|---|---|--|
| <ul style="list-style-type: none"> • EN ISO 11197 • EN 60601-1 • EN 60598-1 • EN 60598-2-25 • BS 6496 | <ul style="list-style-type: none"> • BS 7671 • BS EN 60439 • IEC 60364-7-710 • CIE • CIBSE LG2 | <ul style="list-style-type: none"> • CIBSE LG3 • HTM 2007 • HTM 2011 • HTM 2015 • HTM 2020 | <ul style="list-style-type: none"> • HTM 2022 • HTM 02-01 • HTM 08-03 |
|--|---|---|--|

Options



There is **no recommended maintenance interval** for this product.

Intensive Care

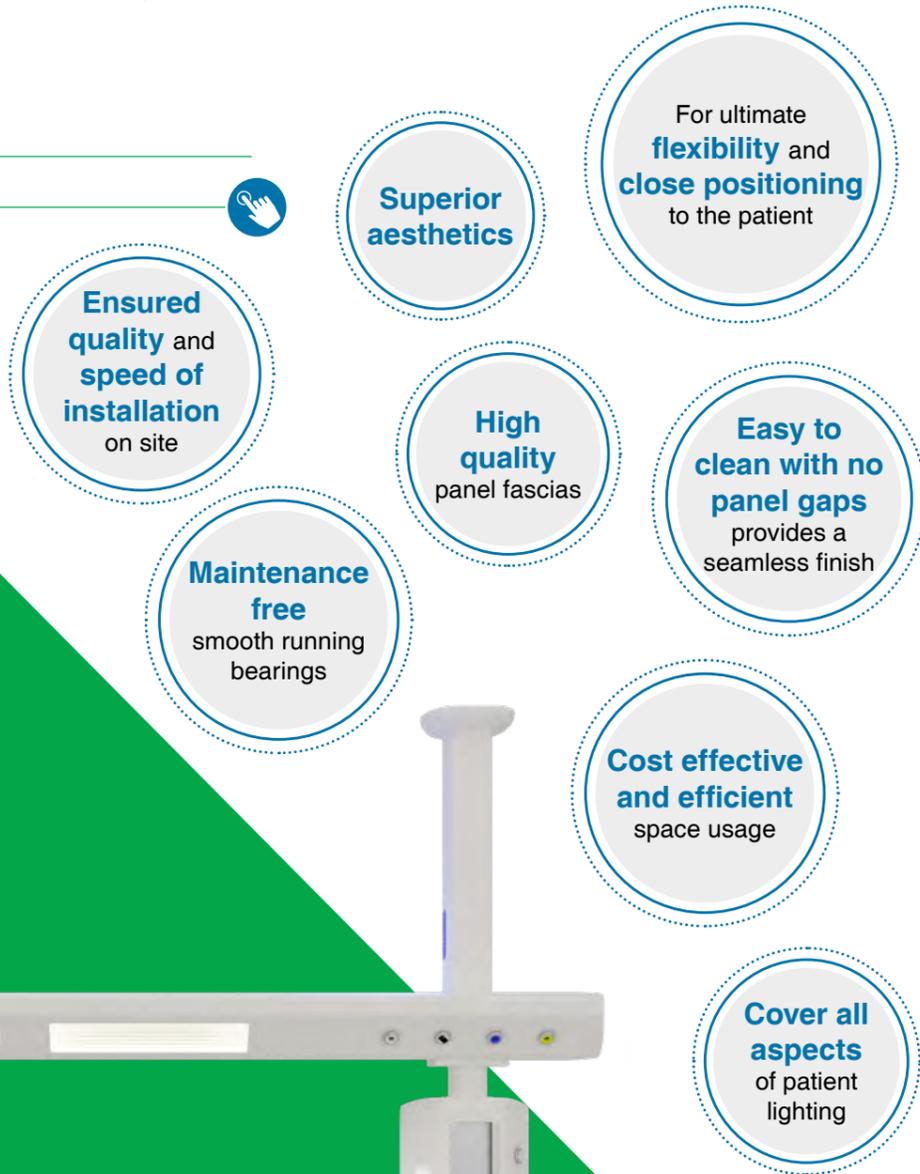
Beam Systems

Enhances the patient environment

The Intensive Care Beam systems provide clear organisation of the workplace, increase patient safety and ease the workload of the user. Beam systems are particularly suitable for intensive care and recovery applications.

Technical Datasheet

Intensive Care Beam Systems



General Specifications

- Single or double sided main frame
- Provides ease of connection for the user
- Fixed or moveable glider systems supplied with electrical services
- 15° mounting angle for services
- 340° rotational movement
- Standard and CE gliders & 360° rotational movement on infusion gliders
- Easy access to electrical and medical gas services
- Integrated medical equipment rail, full length or sectional
- Integrated reading, ambient and night lighting
- Integrated cable management system within the trays
- Fully configurable
- Supplied factory pre-piped and pre-wired

Services Used



Code of Compliance and Guidance

- EN ISO 7396-1
- EN ISO 11197
- EN ISO 13485
- EN ISO 60601-1
- HTM 2022
- HTM 02-01
- CE certified and compliant to BS
- EN 60601-1 safety standards

Options



Lighting



2200, 2800, 3100, and 3500 mm profiles



Wide range of electrical, ELV and medical gas components



There is no recommended maintenance interval for this product.

Medical Hose Assemblies

Phthalate-free PU medical gas hose

Hose assemblies are available in a variety of lengths and gas services. They provide versatility where needed at an affordable price. All NIST valves, bodies, nuts and nipples are manufactured to comply with the latest edition of ISO 18082, Diameter Index Safety System.

Technical Datasheet

Medical Hose Assemblies



Capable of retracting when not in use

Colour coded for easy identification

With NIST body, gas will **continue to flow** when disconnecting NIST nut and nipple



General Specifications

- Max Length 10 Meters
- 1/4" ID hose
- Gas Specific

Permeability test results

- 0 cm³/m² .h .bar for all gases

Water vapour permeability test results

- Water content in retained gas = 1.4-1.6 mg/L

Toxicological information liner and cover material

- The material has the following approvals and certificates of compliance for all these
 - USP VI compliance having passed the Acute System Toxicity, Intracutaneous Toxicity and Implantation Tests
 - FDA 175.105 for Food contact applications & EU food contact approval

Toxicological information gas barrier layer

- The material has the following approvals and certificates of compliance for all these
 - FDA 175.105, FDA 177.1680, FDA 177.1210 & FDA 177.2600 for Food contact applications
 - EU food contact approval
 - USP VI compliance having passed the Acute System Toxicity, Intracutaneous Toxicity and Implantation Tests

Plasticisers & Bonding Agents (Cyclohexanone)

- No bonding or plasticisers are used in the manufacture of these materials or hoses, therefore there will be no post-production leaching out of any such chemicals

Manufacturing environment & storage

- Complies with BS EN ISO 15001:2004

Product Identification

- Gas Identity - ESD BS EN ISO 5359:2008 - PureHose Pf - Batch Number

Services Used

Oxygen	Nitrous Oxide	Entonox	Medical Air	Surgical Air	Medical Vacuum	Nitrogen	Carbon Dioxide	AGSS

Code of Compliance and Guidance

- | | | | |
|--------------|---------------|--------------|------------|
| • HTM 02-01 | • C11 | • EN 1041 | • EN 15223 |
| • HTM 2022 | • EN 5682 | • EN 10993-1 | • EN 18082 |
| • ISO 7396-1 | • EN ISO 5359 | • EN 14971 | • EN 18562 |

Options



Straight and 90° fittings available



8 mm ID hose as standard for Surgical Air and Vacuum services



There is **no recommended maintenance interval** for this product.

Designed to facilitate hospital personnel

Delivering of patient care in a more organized and safe way is the ambition of every healthcare facility. Creating an efficient workflow that carries out critical services, such as medical gas terminal units and electrical circuitry, within an easy reach at all times helps hospital personnel in their daily routines. Our Medical supply units are designed and manufactured to accommodate these requirements and provide flexible solutions where needed.

SOT Therapy

Our Suction & Oxygen Therapy (SOT) equipment provides a seamless solution between your medical gas pipeline system (MGPS) and downstream patient equipment supplier - enabling a one stop provider for all your medical gas needs.

Flow Meters

(Air and Oxygen)

Allows clinical and nursing staff to be concerned about only one thing - the patient

The Flow Meters are designed for connection to medical gas terminal units, providing the interface between patient support equipment and the central medical gas pipeline system.

Technical Datasheet

Flow Meters (Air and Oxygen)



Directly
or remotely
mounted

Lightweight
and
accurate
equipment

Flow meters and
humidifiers
MRI compatible

General Specifications

- Single or double arrangement
- For medical air and oxygen gas application
- Robust and tactile
- Supplied to BS, DIN and AFNOR norms
- Chrome plated brass bodied flow meters
- High precision multistage dial flow meters

Services Used

O₂

Oxygen

MA4

Medical Air

Code of Compliance and Guidance

- EN ISO 15002
- EN ISO 15002
- EN ISO 14971
- EN ISO 62366
- EN ISO 1041
- EN ISO 15223
- EN ISO 8185
- EN ISO 12218

Options



Selector switch



Other norms on request



Venturi products available, drive gas Medical Air



Medical Rail and Accessories available

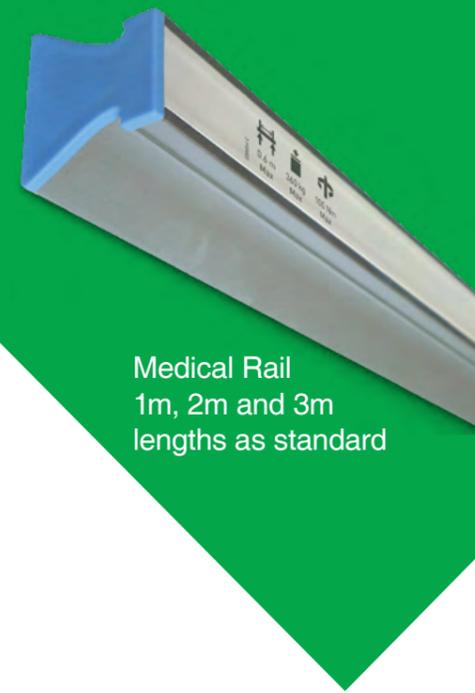


Lighting options available LED



Multiple configurations for oxygen pressure regulators

There is no recommended maintenance interval for this product.



Medical Rail
1m, 2m and 3m
lengths as standard

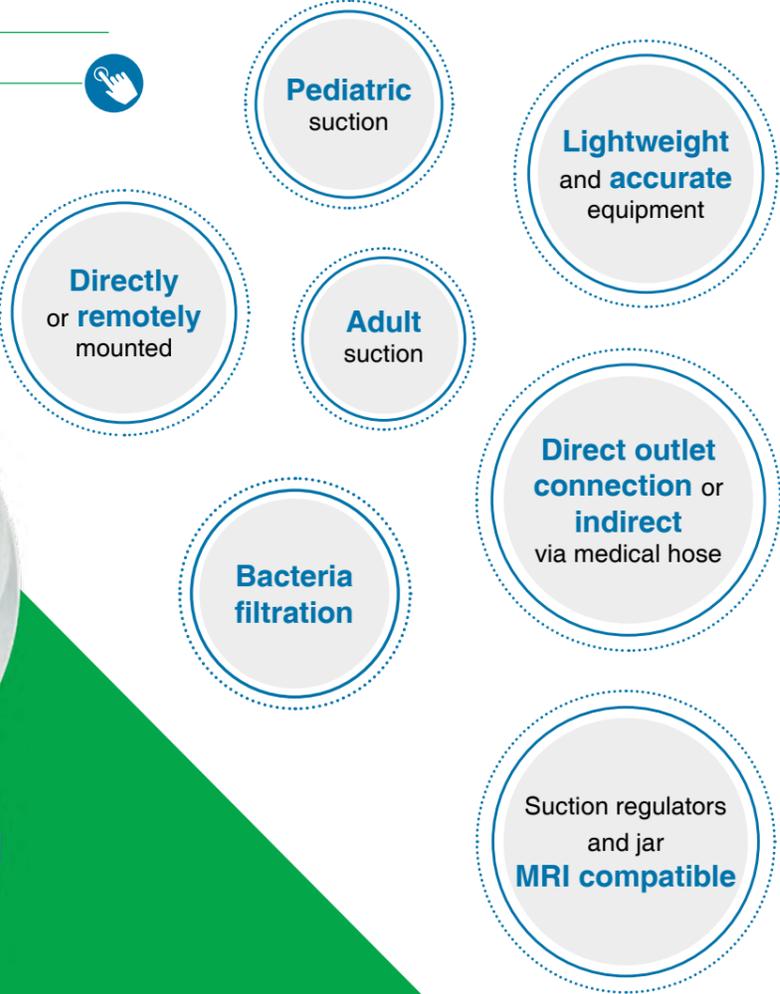
Suction/Vacuum Regulators

For quick operation, high stability and accuracy

The Vacuum Regulators are designed for connection to medical vacuum terminal units, providing the interface between patient support equipment and the central vacuum pipeline system.

Technical Datasheet

Suction/Vacuum Regulators



General Specifications

- Durable high and low vacuum suction controllers
- On/off switch
- Precise control mechanism
- Universal vacuum connector
- Robust and tactile
- Supplied to BS, DIN and AFNOR norms
- Vacuum regulator with three operating modes

Services Used



Medical Vacuum

Code of Compliance and Guidance

- EN ISO 1789
- EN ISO 10079
- EN ISO 10524

Options



Range of polycarbonate and Polysulphone collection jars



Venturi air driven suction devices



Water trap



Other norms on request



Portable electric suction controllers



There is no recommended maintenance interval for this product.

SOT therapy to complete your medical equipment

Suction & Oxygen Therapy products are the interface between the high quality and affordable medical gas distribution systems offered by PMGS and the patient. Flow meters allow clinicians a way to regulate gas flows to patients, while suction regulators conversely allow a way to safely suction patients for a variety of procedures.



Aftermarket

04



Service Schedules

PMGS is one of few Medical Gas Manufacturers in the UK with its own dedicated Spare Parts Division. We have a team of specialists waiting to help identify and supply the correct parts at the correct time.

At PMGS we pride ourselves on our knowledge, customer service and price. We always supply Original Equipment Manufacturer spare parts so you can rest assured that you are receiving the very best spares for your machines, avoiding any expensive repeat failures and costly return visits and breakdowns.

We have a combined industry knowledge of over 100 years waiting to help you with your spare part requirements. We can supply OEM spares for all the industry leading manufacturers including Atlas Copco, Busch Vacuum Pumps, Becker, Gardner Denver and many more.

Air Plant Service Schedule - GA-VSD+ MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil Separator Element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader Valve Kit		◆		◆	
MPV Kit		◆		◆	
Dryer Filter Kit	◆	◆	◆	◆	◆
Dryer Silencer Kit	◆	◆	◆	◆	◆
Dryer Valve and Purge Kit					◆
Dryer Seal Kit					◆
Dryer Desiccant Kit					◆

Air Plant Service Schedule - GA-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil Separator Element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader Valve Kit		◆		◆	
MPV Kit		◆		◆	
Dryer Filter Kit	◆	◆	◆	◆	◆
Dryer Silencer Kit	◆	◆	◆	◆	◆
Dryer Valve and Purge Kit					◆
Dryer Seal Kit					◆
Dryer Desiccant Kit					◆

For all of your Medical Gas Spares requirement please contact

the Medical Gas Spares Department:
spares@p-mgs.com

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Air Plant Service Schedule – ZT-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Roto-Z Oil - 5 Ltrs		◆		◆	
Service Kit A	◆		◆		◆
Service Kit B		◆			
Service Kit C				◆	
Dryer Filter Kit	◆	◆	◆	◆	◆
Dryer Silencer Kit	◆	◆	◆	◆	◆
Dryer Valve and Purge Kit					◆
Dryer Seal Kit					◆
Dryer Desiccant Kit					◆

Air Plant Service Schedule – SF-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Air Inlet Filter	◆	◆	◆	◆	◆
V-Belt		◆		◆	
Check Valve Kit		◆		◆	
Grease Cartridge Kit		◆		◆	
Tip and Dust Seals		◆		◆	
Dryer Filter Kit	◆	◆	◆	◆	◆
Dryer Silencer Kit	◆	◆	◆	◆	◆
Dryer Valve and Purge Kit					◆
Dryer Seal Kit					◆
Dryer Desiccant Kit					◆

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Pressure Reducing Set Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Line Pressure Regulator					◆
Pressure Safety Valve					◆

Oxygen Generator Plant Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil Separator Element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader Valve Kit		◆		◆	
MPV Kit		◆		◆	
UD+ Filter Kit	◆	◆	◆	◆	◆
QDT Filter Kit	◆	◆	◆	◆	◆
PDp Filter Kit	◆	◆	◆	◆	◆
OGP Service Kit B	◆		◆		◆
OGP Service Kit C		◆		◆	
OGP Service Kit D					◆
Booster Service as per Manufacturer	◆	◆	◆	◆	◆

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VIE Control Panel Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Line Pressure Regulator					◆
Pressure Safety Valve					◆

Vacuum Plant Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Pump Oil	◆	◆	◆	◆	◆
Pump Service Kit 'B'	◆	◆	◆	◆	
Pump Service Kit 'C'					◆
On Duty Bacterial Filter Element	◆	◆	◆	◆	◆
Bio Safety Clothing Kit	◆	◆	◆	◆	◆

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Automatic Manifold Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Seal Kit	◆	◆	◆	◆	◆
Manifold Overhaul Kit					◆

Emergency Reserve Manifold Service Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Line Pressure Regulator					◆
Pressure Safety Valve					◆

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