

Experts in medical gas testing

Medical Gas Testing Services (MGTS) offers independent medical gas testing using the 'team approach' advocated in HTM 02 with installers, Competent Persons (MGPS), engineers, Authorised Persons (MGPS), and other colleagues.

The company was established in 2003 by Paul Jones. Now also working with son, Adam (he is pictured right, with Adam, centre, and *HEJ* technical editor, Mike Arrowsmith, left), his earlier career saw him join the NHS in 1973 as laboratory manager at the Regional Pharmaceutical Quality Control Centre for Northwest London. Specialising in medical gas testing and environmental monitoring of cleanrooms, he worked with the Department of Health in developing the testing of dental air, manifold cylinder pin-indexing, purge gas methods, and the BS 5750 registration of medical gas installers. He left the NHS in 2007.

He said: "MGTS was involved in the first piped Heliox system, the wider provision of piped surgical CO₂ in theatres and



treatment rooms for keyhole surgery and endoscopy, and, more recently, with the introduction of new liquid oxygen VIE accommodation solutions in private hospitals. We have also assisted in new developments overseas, including the introduction of HTM 02 commissioning protocols in Ghana, UK hospital collaborative projects in the UAE, and the adoption of large oxygen and air cylinder pin-indexing in Qatar."

MGTS also provides medical gas quality control and management awareness training. On larger projects the company is supported by several highly experienced QC (MGPS) personnel.

Terminal units' anti-bacterial protection

Beacon Medæ has launched 'the next generation' of medical gas terminal units.

With a curved gas identification ring, the GEM Shield terminal unit 'not only looks more modern, but also incorporates an anti-microbial additive to help reduce cross-infection'. The anti-microbial additive kills bacterial cells in several ways. The additive binds to the cell wall, disrupting growth. The ions interfere with enzyme production, stopping the cell from producing energy, and the additive also interrupts the cell's DNA, preventing replication. Independent



laboratory reports show a reduction of E-coli and MRSA 'greater than 99 per cent'. A safety taggant enables verification that the unit includes the anti-microbial additive.

The new GEM Shield terminal unit features a 'modernised' trim plate that removes dust traps, decreasing cross-infection risk. The fixing screws can be accessed from the front, cutting the exchange time by 15 minutes.

All GEM Shield units can be easily retrofitted onto existing GEM 10 installations.

True to its original objective

From inception to the present day, MGPS Services says it has remained true to its prime objective – independence from suppliers, installers, and maintainers.

Director, Steve Goddard, said: "Offering a range of BTEC-accredited and bespoke courses for all staff involved with medical gases – including designers, installers, maintainers, porters, nurses, doctors, estates officers, and pharmacists, MGPS Services has worked with public and private healthcare establishments both in the UK and the Middle and Far East. Many of our clients have worked with us for many years."

MGPS Services also recognises the need for face-to-face training, and provides students with access to what it describes as 'one of the UK's best live medical gas training facilities'.

Steve Goddard added: "Training is, however, only part of our offering. System design, design evaluation, tender preparation, and system compliance assessments, are also available to customers willing to work with us in a strongly synergetic relationship."

MGPS Services can also provide both Authorising Engineer (MGPS) and Authorised Person (MGPS) services for Trusts and hospitals.

Making shutdowns easier to handle

BOC has launched a new Backfeed Kit for supplying medical oxygen to healthcare facilities while the main pipework infrastructure is being isolated.

The kit is typically being used for supporting wards, special care baby units, and high dependency units, during shutdowns, system failure, or pipeline breach.

BOC added: "Easy to use, lightweight, and secure, the system is designed to be a useful tool at the hospital engineer's disposal, available just a telephone call away."

Richard Maycock IEng MIHEEM, an Authorising Engineer (MGPS), and business manager, Medical Engineering Services, at BOC Healthcare, has a team that delivers medical gas training to ensure that estates, EBME, nursing, and portering staff, meet HTM standards.

Other services offered range from Operational Policy, and 'As fitted' drawings, to audits and risk assessments.

Permeation testing solutions

With the purity of medical gases critical, but with the potential for contamination and foreign gases to permeate in and out of equipment via valves, connectors, pipes, and tubing, Versaperm offers accurate permeation testing thanks to the 'latest-generation sensors' now installed on its 'already proven' medical permeability measurement equipment.

It said: "The most common impurity is water vapour, but a huge range of other impurities are widespread. This can lead to problems with medical equipment. Our equipment offers an accurate, highly sensitive testing solution, measuring to parts per billion with some applications."

