The Anaesthetic Gas Scavenging (AGS) system is an active system which removes anaesthetic gas mixtures from operating rooms and any other areas fitted with nitrous oxide terminal units. The removal at source thus eliminates the possible long term health hazards to exposed medical staff. By virtue of its design, the active disposal system can produce high levels of capture simply by connecting the terminal unit to the anaesthetic breathing circuit via a receiver unit, thereby removing the majority of “pollution” at source.

The AGS system is fully compatible with any AGS receiver unit. BeaconMedæs terminal units incorporate an adjustable orifice, which enables the flow rate to be adjusted in line with any standard including BS 6834, EN 740 and EN ISO 7396-2 high-flow flow and low-flow systems. The AGS system is activated by remote switches that can be installed at any convenient location either in or close by the operating and anaesthetic room.

Key Benefits

- Ensures a safe working environment for medical staff - ensuring compliance with the most stringent occupational exposure standards
- Inherently safe system without the risks of venturi systems that waste your essential medical air supply
- Robust pumps that are factory pre-piped, wired and tested for assured reliability
AGS Standards

Improvements in anaesthesia workstation designs have led to reduced flows of gas being used, and hence less potential gas ‘spillage’ during induction and maintenance of anaesthesia. Over the years, AGS system design standards have evolved to take account of this, but anaesthesia workstations in use today range anywhere from a few days old to a few decades of service. This means that lower flow systems are not practical in all applications.

HTM 02-01 provides guidance on the selection of an appropriate standard for system flows based in a number of practical scenarios.

The chart and table below compare the three main standards in use for anaesthetic gas scavenging systems. BeaconMedaes AGS systems are easily adjusted to provide performance to match any of the three.

It is increasingly common to use a centralised AGS system in dental applications. Dental AGS systems are generally different and do not require the AGS receiver unit (commonly known as an ‘air brake’), which is necessary for anaesthesia during surgical procedures. A dental AGS system is normally required to provide a continuous flow of around 45 l/min to ensure the safe and efficient collection of waste gases.

Duplex Systems

Where planned preventative maintenance or a breakdown of a blower could interrupt the smooth running of the operating department, a duplex system is strongly recommended. In the event of a blower malfunction, the stand-by unit is automatically brought on line, ensuring the AGS system continues to provide protection for medical staff, and that operations do not have to be delayed or cancelled.

Please contact your local representative for applications and design support, and advice on equipment selection.