BeaconMedæs®

Part of the Atlas Copco Group

AGS - Anaesthetic Gas Scavenging

Key Features

1. Motor control panels

2. Skid mounted plant
3. Robust pumps
4. Flow regulating valve

5. Digital pressure switch
6. Non-return valve
7. Copper inlet connection
8. Inlet filter (optional)

9. BMS- Building Management System (optional)

Benefits

- Allows for more user friendly access. Two separate control panels (duplex systems only) allow you to run one unit while the other unit is being maintained
- Accessible mounting holes provide easy installation
- Factory pre-piped, wired and tested for assured reliability
- Adjustable from the outside and can be placed on either side of unit
- Easy-to-read digital display indicates pipeline pressure
- Designed with minimal pressure drop for better plant performance
- Installation ready
- Easy to maintain and prevents large dust particles from entering the pump
- Allows for interface with additional monitoring system

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AGS Systems

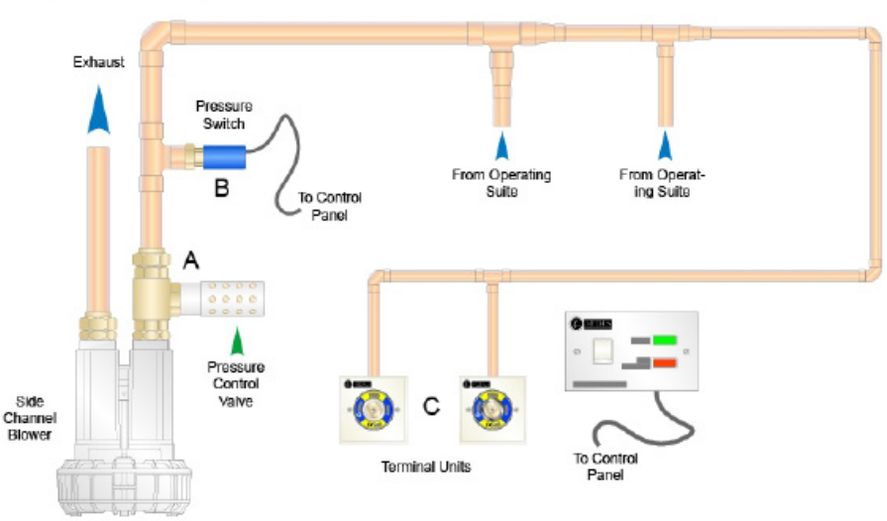
The Anaesthetic Gas Scavenging (AGS) system is an active system which removes anaesthetic gas mixtures from operating rooms and any other areas fitted with nitrous oxide terminal units. The removal at source thus eliminates the possible long term health hazards to exposed medical staff. By virtue of 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 (available separate).

BeaconMedæs terminal units incorporate an adjustable orifice, which enables the flow rate to be adjusted in line with any standard including BS 6834 and EN ISO 7396-2 high-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.

Simplified System Schematic



Duplex or Simplex 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.

Simplex systems are allowed. However, HTM02-01 states that wherever a single AGS pump is provided for a single operating suite, a spare pump for up to six units should be provided for immediate connection into the system in the event of failure.

Simplex model shown

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 days old to decades of service. This means that lower flow systems are not practical on 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 BeaconMedæs AGS systems meet the requirements of HTM 2022, HTM 02-01 standards and ISO 7396-2.

Standard	dP (kPa)	Flow (l/min)
BS 6834: 1987	1	130 max.
	4	80 min.
EN ISO 7396-2 - High Flow	1	80 max.
	2	50 min.
EN ISO 7396-2 - Low Flow	1	50 max.
	2	25 min.

The table above compares the three main standards in use for anaesthetic gas scavenging systems. BeaconMedæs AGS systems are easily adjusted to provide performance to match any of the three.

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