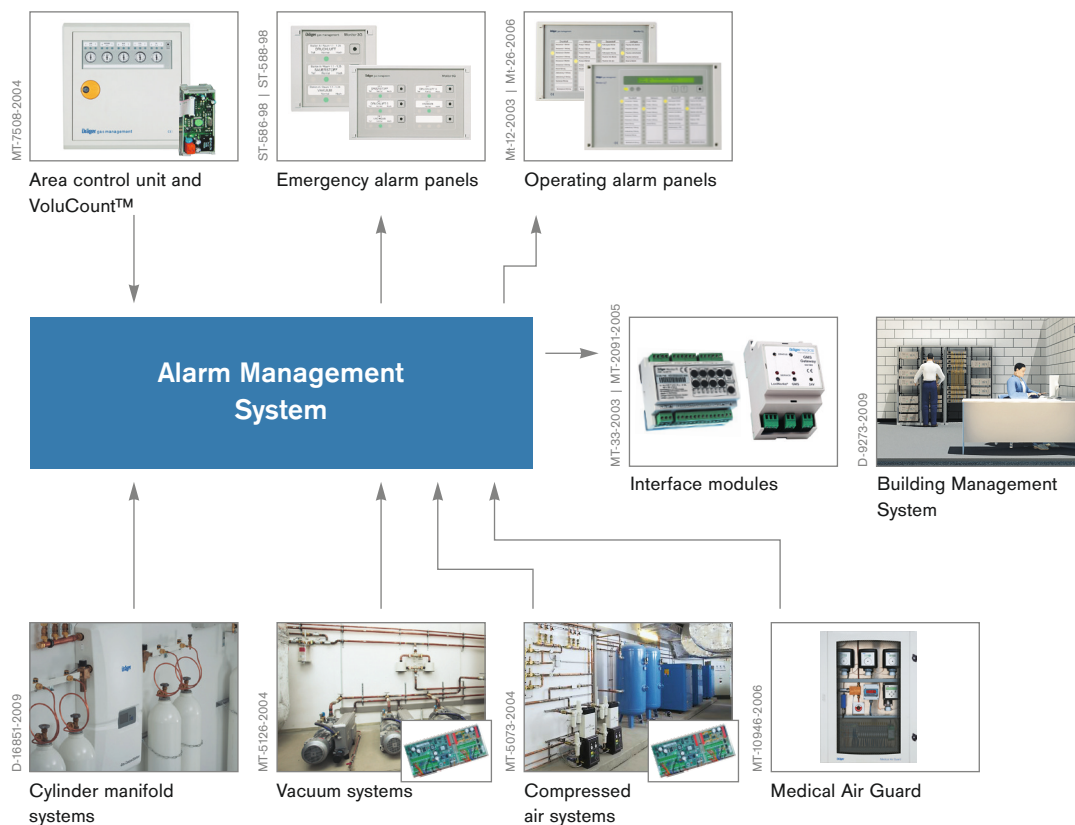# Alarm Management System
Gas Management Systems

Dräger's Alarm Management System is a surveillance system that provides personnel with clear and precise information on all aspects of your medical gas supply system.

Area control unit and VoluCount™

Emergency alarm panels

Operating alarm panels

Alarm Management System

Interface modules

Building Management System

Cylinder manifold systems

Vacuum systems

Compressed air systems

Medical Air Guard

Benefits

Intelligent components

The system consists of a number of independent components that communicate with one another via data line. Each component has a special function and can independently process the required messages from the system.

Data collector

To receive operational and alarm signals from the supply control centers, the Alarm Management System has data collector modules which can directly switch the supply system signal output via input terminals. The system is able to process signals from any device that is equipped with potential-free alarm contacts. A data collector can receive 16 – 64 signals.

Area Control Units

The area control units monitor the gas supply in the individual areas of the hospital. A special alarm system interface collects the data from the pressure monitor and the optional gas consumption reader and provides this data to the Alarm Management System. If the gas pressure should become too low or too high, additional signals can carry the alarm message to Monitor 6G at the nurse's station or forward the alarm and measurement values to a Building Management System.

Operating Alarm Panels

System alarm and operational messages are displayed on the Monitor LLT consisting of 48 labelled light displays or a text display. The more basic displays feature the Monitor LL, with 46 light displays and the Monitor L with 22 light displays. The type of alarm, e.g., operational message or emergency alarm, can be configured as needed.

Interface modules

A GMS gateway is used to transmit all signals and readings from the Alarm Management System to a Building Management System. The gateway translates the signals from the Alarm Management System into standard LONWorks® signals that conventional control systems can directly process. This allows all the functions of the control system to be utilized for transmitting alarms and analyses, such as alarm notifications by phone or e-mail, alarm lists, or trend analyses. The relay module Monitor R is also available for transmitting multimessaging signals via potential-free contacts to external alarm systems. In this module, up to 200 messages can be configured on each of the eight relay outputs for transmission, regardless of the data transmission protocol.

Custom configuration

Due to the modular design, the Alarm Management System can be adapted to ambient conditions. Depending on the number of signals, more or fewer data collectors or displays are used. Communication is established through a simple connection using a two-core network line. Configuration software is used to define how

Benefits

the com ponents interact. This decentralized structure allows the addition of new components or changes to existing configurations at any time. This allows the system to expand, along with the monitored facility.

Safety through independent monitoring

In a monitoring system, no message should ever get lost. To ensure that every single message is displayed, the Alarm Management System works as a closed network that does not allow any other messages in its network system. Furthermore, the components of the Alarm Management System monitor each other by querying the data collector at regular intervals and reporting a communication error if they do not receive the correct response. The Monitor LLT or the Building Management System can then directly display from which module the error is coming from.

Cost benefit from network technology

The use of network technology makes very flexible and easily expandable solutions possible. In particular, where a large number of messages need processing, a data network offers outstanding price/performance ratio as compared to conventional wired systems. A programmable system delivers even more benefits when existing systems need to be changed or expanded. A simple reconfiguration of components may be all that is needed to make small changes. If new areas need to be added, the new components can be linked to the existing system and the system configuration modified accordingly. There is no need to change the existing cabling!

A great investment – for today and tomorrow

Dräger works continually on further developing its Gas Management System, and existing facilities can benefit from the Alarm Management System. Due to the use of a standard data transmission protocol, new or enhanced components will always be able to communicate with existing ones, and because each component brings ist own functionality, even an existing facility can utilize the new functions. This keeps your Gas Management System at the cutting edge without major restructuring.

Notes