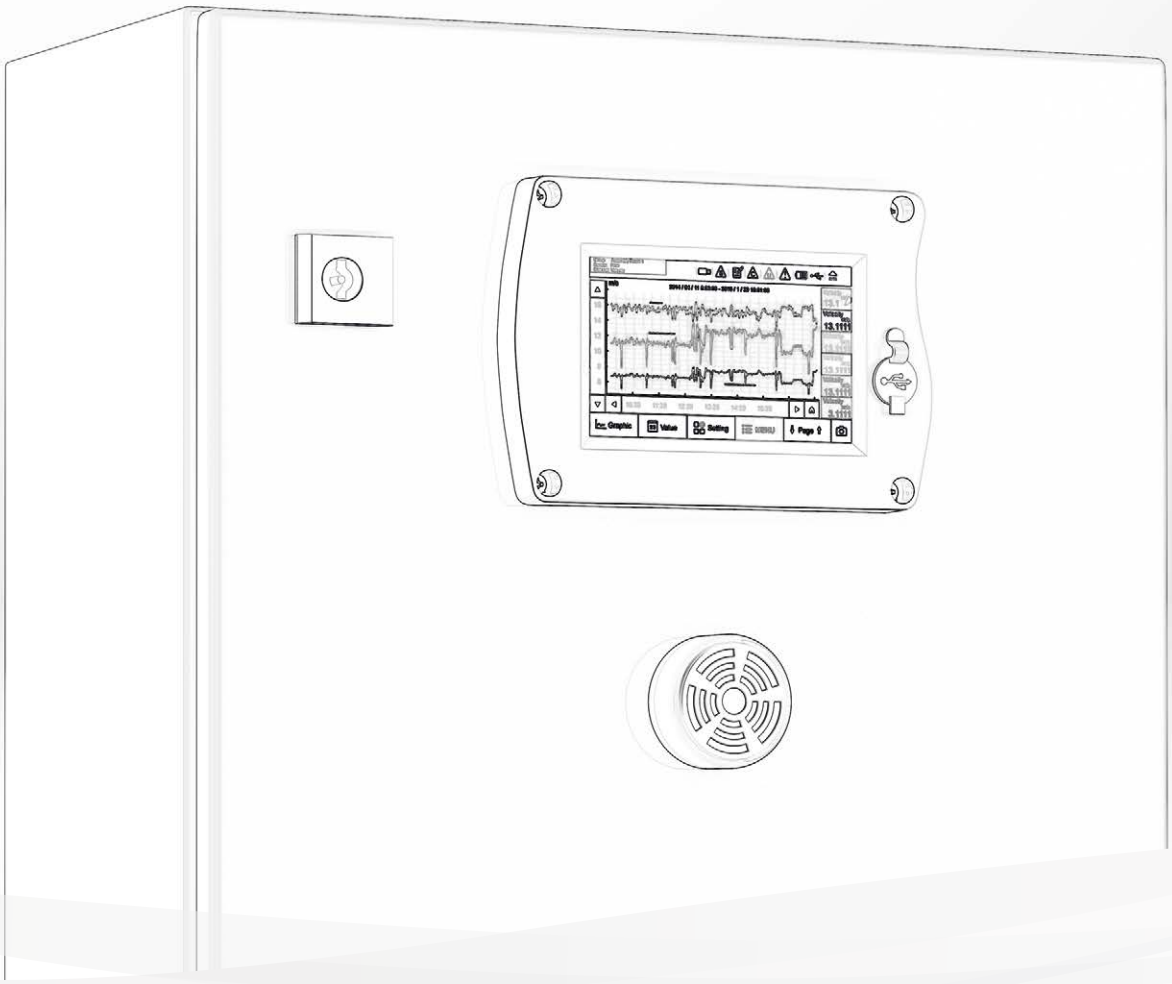
We control GASES

HTK HAMBURG



Future of gas analysis

HTK stationary and mobile analysis devices for monitoring medical compressed air and compliance with DIN EN ISO 7396-1

MDE 3100/MDE 3200/MDE 3300/MDE mobil

Rev.I_072020_BR_MDE 3100-3200-3300_engl • Subject to change

since 1978

MDE 3100/MDE 3200/MDE 3300/MDE mobil

Customized solutions

The quality of the compressed air is what counts

The analysers of the MDE series are the result of years of experience and constant innovation. They meet the requirements for the continuous analysis of medical compressed air according to the EN ISO 7396-1 standard and the specifications of the European Pharmacopoeia. The specifications apply with regard to compliance with limit values for carbon oxides, oil vapours, sulphur dioxide, nitrogen oxides and water vapour.

Areas of application

Only reliably filtered and dried compressed air enables a mechanically and hygienically safe operation of the plant network in hospitals. Nevertheless, it is not possible to prevent hazardous substances from outside from entering the breathing air. This can quickly lead to situations that are hazardous to health or even life-threatening. The HTK Hamburg has been your contact and reliable partner in the field of analysis technology for 25 years.

Why you should decide for a device from our MDE series

- Continuous monitoring of the purity of medical compressed air
- Automatic alarm when limit values are exceeded
- Additional customer-specific adjustable alarms
- MDE3300 offers complete documentation of all measured values
- Avoid accidents due to contaminated breathing air
- Completely document the quality of the air you breathe
- Due to the modular design, you can expand the analysis units at any time to include additional gases
- Easy integration in new buildings, conversions or extensions of the breathing air supply

Why you should choose the HTK Hamburg as your partner

- We deliver everything from one source
- We are manufacturer of mobile and stationary analysis devices
- Autarkic and independent analysis technique applicable to all breathing air supply networks
- Own sensor production and calibration laboratory
- Europe-wide service by the HTK Hamburg

Gas analysis

Particle measurement

Pressure measurement

Oil vapour measurement

Dew point measurement

MDE 3100/MDE 3200/MDE 3300/MDE mobil

Innovation is our tradition

It all depends on the quality of the compressed air!

Air compressors use ambient air to produce medical compressed air. The quality and purity of the compressed air is highly dependent on the ambient conditions and can change rapidly depending on the environmental conditions and pollution levels. Regular or permanent monitoring of the medical compressed air is therefore necessary and prescribed in accordance with current standards and guidelines.

Medical compressed air in hospitals for the ventilation of intensive care patients is, next to oxygen, one of the most important gases in hospitals. Medical compressed air is produced directly in the hospital. Accordingly, the hospital also takes care of purity and quality. It is therefore the responsibility of the pharmacist to ensure and prove that the requirements for quality and purity are met.

Technical measures for compliance with the limit values must be defined and taken into account within the framework of risk and hazard assessment. We support you in complying with the standards through reliable, fast and precise analysis systems that can be integrated into any compressed air installation.

The EN ISO 7396-1 standard and the European Pharmacopoeia provide strict guidelines for maintaining the purity of gases.

Monitoring and compliance with the limit values of carbon monoxide and residual moisture in the compressed air system is a basic requirement for compliance with the EN ISO 7396-1 standard. The monitoring and compliance with limit values in medical compressed air, oxygen content (O2), carbon dioxide (CO2), carbon monoxide (CO), nitrogen oxides (NOx), sulphur dioxide (SO2), residual moisture (H2O2) and oil are clearly regulated in the Pharmacopoeia and must be checked and complied with at regular intervals.

MDE 3300 MDE mobil MDE 3100 MDE 3200

MDE 3100/MDE 3200/MDE 3300/MDE mobil

HTK Analytical instruments - every time the right choice

MDE mobil

Mobile measuring case for random analysis in compressed air lines. Fast and reliable analysis during operation without interruption.
Modular design for measuring CO and residual moisture, expandable to include the gases O2, CO2, SO2, NOx. Integrated data logger, graphic display, alarm display, 5“ touch screen, simple menu navigation.

MDE 3100

Independent and continuous analysis and monitoring of CO and residual moisture, to be integrated directly into existing compressed air lines

Analogue signal outputs for connection to existing control and evaluation systems on site..

MDE 3200

Continuous analysis and monitoring of CO and residual moisture, to be integrated directly into existing compressed air lines.
LCD display for measured value indication, easy to operate, 2 alarm outputs, USB interface.

MDE 3300

Continuous analysis and monitoring of CO and residual moisture, modular design and expandable to integrate the gases O2, CO2, SO2, NOx, directly into existing compressed air lines.

Integrated data logger, graphic display, alarm display, 5“ touch screen, Ethernet interface and integrated web server, easy menu navigation

MDE mobil

MDE mobil

Reliable mobile analysis

Mobile analysis systems for random measurement
of breathing air systems. Fast and reliable testing of breathing air systems during operation.
Integrated data logger, graphic display, alarm display, 5“ touch screen, simple menu navigation.

Technical Data	
Type	MDE mobil
Single gases	CO 0-50 ppm, residual moisture 0-100 ppm
Single gases Options	O2 0-25%, CO2 0-5000 ppm, SO2 0-10 ppm, NOx 0-10 ppm, Oil 0-100 ppm
Lifetime	Max. Lifetime of electrochemical sensors 12 months
Maintenance Calibration Recommendation	We recommend an annual system check, recalibration of residual moisture sensor every 12 months

Combinations of the individual sample gases are possible, the standard version is equipped with CO and residual moisture sensor. A wide variety of measuring methods are used, e.g. density measurement (DGF), electrochemical measuring methods (EL) and infrared measuring methods (NDIR). Other single gases or gas mixtures as well as pressure and flow measurements on request.

Display	5“ colour touch display
Inlet pressure	Max. 16 bar g
Recommended working pressure	4-8 bar g
Media temperature	0...+50°C
Ambient temperature	0...+50°C
Accuracy	Better +/- 0.5% full scale
Reproducibility	Better +/- 0.25%
Alarms	2 relay contacts for group alarm output/ Integrated signal transmitter and buzzer
Flow rate	Min. 100 ml/min. adjustable via integrated flow controller
Power supply	230 V AC or 24 V DC
Dimensions	Upon request, depending on the number of gas sensors
Weight	Upon request, depending on the number of gas sensors
Protection class	IP65
Memory	100 million readings
Interface	USB, RS-485, Ethernet, integrated web server
Certifications	CE Conformity RoHS EMV 2014/30/EU (EN61326-1) ISO 9001:2015

MDE 3100

MDE 3100

Compact, Precise, Independent

Independent and continuous analysis and monitoring of CO and residual moisture in the compressed air line.

Easy installation in existing compressed air systems, simple integration into existing BMS and evaluation systems through standard analogue output signals.

Technical Data	
Type	MDE 3100
Single gases	CO 0-50 ppm, residual moisture 0-100 ppm
Lifetime	Max. Lifetime of CO sensors 12 months
Maintenance Calibration Recommendation	We recommend a half-yearly functional and annual system check, recalibration of residual moisture sensor every 12 months
Inlet pressure	Max. 16 bar g
Recommended working pressure	4-8 bar g
Media temperature	0...+50°C
Ambient temperature	0...+50°C
Accuracy	Better +/- 0.5% full scale
Reproducibility	Better +/- 0.25%
Flow rate	Min. 100 ml/min. adjustable via integrated flow controller
Power supply	24 V DC
Output signal	2x 4-20 mA linear
Dimensions	265 x 235 x 145 mm
Weight	Ca. 0,75 kg
Protection class	IP65
Certifications	CE Conformity RoHS EMV 2014/30/EU (EN61326-1) ISO 9001:2015

MDE 3200

MDE 3200

Low cost analysis

Independent and continuous analysis and monitoring of CO and residual moisture in the compressed air line. Integrated pressure and flow control. Easy installation in existing compressed air systems. Large and easy to read LCD display for concentration and alarm indication. 2 freely programmable alarm relays for alarm forwarding in case of overflow, USB interface for configuration.

Technical Data	
Type	MDE 3200
Single gases	CO 0-50 ppm, residual moisture 0-100 ppm
Lifetime	Max. Lifetime of CO sensors 12 months
Maintenance Calibration Recommendation	We recommend a half-yearly functional and annual system check, recalibration of residual moisture sensor every 12 months
Combinations of the individual sample gases are possible, the standard version is equipped with CO and residual moisture sensor. A wide variety of measuring methods are used, e.g. density measurement (DGF), electrochemical measuring methods (EL) and infrared measuring methods (NDIR). Other single gases or gas mixtures as well as pressure and flow measurements on request.	
Display	LCD Display
Inlet pressure	Max. 16 bar g
Recommended working pressure	4-8 bar g
Media temperature	0...+50°C
Ambient temperature	0...+50°C
Accuracy	Better +/- 0.5% full scale
Reproducibility	Better +/- 0.25%
Alarms	2 relay contacts for collective alarm output / Optional: integrated signal transmitter and buzzer
Flow rate	Min. 100 ml/min. adjustable via integrated flow controller
Power Supply	230 V AC or 24 V DC
Dimensions	Upon request
Weight	Upon request
Protection class	IP65
Interface	USB for configuration of the evaluation unit
Certifications	CE Conformity RoHS EMV 2014/30/EU (EN61326-1) ISO 9001:2015

MDE 3300

MDE 3300

Modularly adaptable to your individual needs

A central analysis system for continuous analysis and monitoring of CO and residual moisture, modularly designed and expandable to integrate the gases O2, CO2, SO2, NOx directly into existing compressed air lines. 5“ graphic display, measured value display, alarm outputs, USB and Ethernet interface, integrated data logger with 100 million measured values.

Technical Data	
Type	MDE 3300
Single gases	CO 0-50 ppm, residual moisture 0-100 ppm
Single gases Options	O2 0-25%, CO2 0-5000 ppm, SO2 0-10 ppm, NOx 0-10 ppm, Oil 0-100 ppm
Lifetime	Max. Lifetime of electrochemical sensors 12 months
Maintenance Calibration Recommendation	We recommend a half-yearly functional and annual system check, recalibration of residual moisture sensor every 12 months

Combinations of the individual sample gases are possible, the standard version is equipped with CO and residual moisture sensor. A wide variety of measuring methods are used, e.g. density measurement (DGF), electrochemical measuring methods (EL) and infrared measuring methods (NDIR). Other single gases or gas mixtures as well as pressure and flow measurements on request.

Display	5“ colour touch display
Inlet pressure	Max. 16 bar g
Recommended working pressure	4-8 bar g
Media temperature	0...+50°C
Ambient temperature	0...+50°C
Accuracy	Better +/- 0.5% full scale
Reproducibility	Better +/- 0.25%
Alarms	2 relay contacts for collective alarm output / Optional: integrated signal transmitter and buzzer
Flow rate	Min. 100 ml/min. adjustable via integrated flow controller
Power supply	230 V AC or 24 V DC
Dimensions	Upon request, depending on the number of gas sensors
Weight	Upon request, depending on the number of gas sensors
Protection class	IP65
Memory	100 million readings
Interface	USB, RS-485, Ethernet, integrated web server
Certifications	CE Conformity RoHS EMV 2014/30/EU (EN61326-1) ISO 9001:2015

SCENTY® Gas Warning Systems

Our all-round package!

Mobile and stationary measurement

Particle concentration measurement
- Measuring method according to ISO 8573 standard
- Latest technology in laser detection
- Smallest particle size 50% according to JIS, larger 100% according to JIS

Dew point measurement
- Large measuring range thanks to unique multi-sensor technology
- Long-term stable, reliable measuring methods
- High precision with an accuracy of ±2°C

Oil vapour measurement
- Latest photo ionization detector (PID) with self-calibration
- Wide measuring spectrum of oil vapour concentrations
- High precision with 5% of the display ± 0.003 mg/m3 Accuracy

Pressure measurement
- Most modern sensor technology
- Additional quality data about the compressed air system

Gas analysis
- Fast and reliable gas measurement
- Combined analysers with an evaluation unit
- Gas mixture analysis

Assembly & Commissioning

For your projects we take over - if you wish - the entire project management. Our own fitters or specialists trained by us install our systems or equipment on site and the final acceptance is carried out in close cooperation with the customer.

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Safety at the workplace to comply with the technical regulations for operational safety/hazardous substances TRBS 3146/TRGS 746

Gas Warning Systems for monitoring Gas Storage Sites

SCENTY® GWA 201

Our compact and very powerful gas warning system for 1 to 2 measuring points versatile and flexible.

SCENTY® GWA 401/ 801

The constantly increasing demands on complex gas detection systems require a high degree of flexibility.

SCENTY® GWA BUS

Our SCENTY® GWA BUS offers all the advantages of the GWA401/ 801 and the installation effort is significantly reduced by the BUS installation.

Personal Protection Instruments

SCENTY® PSA Easy

The SCENTY® PSA Easy gas detector is a disposable device and designed for use in hazardous areas.

SCENTY® PSA Easy P

The SCENTY® PSA Easy P is a portable single gas detector specifically designed to monitor the environment for oxygen .

SCENTY® PSA Easy N

The SCENTY® PSA Easy N is a single gas detector for CO2 and provides reliable and long-lasting monitoring of carbon dioxide.

SCENTY® PSA Multi

SCENTY® PSA Multi is a portable multi gas detector that can detect four different gases (O2, CO, H2S, flammable gas).

SCENTY® PSA One

The SCENTY® PSA One is a rugged, compact single gas monitor designed for use in harsh environments.

HTK®
HAMBURG

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