



LT Gas Mixer advanced 25...125 Nm³/h



LT GAS MIXER

advanced



LT Gas Mixer advanced

Digitization in production: High-tech has a name for our gas mixers: LT Gas Mixer advanced

Performance classes

Serial models come in the following performance classes:

Non-flammable gases or MAP gases for food processes

GM	25-2-A advanced	1 ...	25 Nm ³ /h
GM	125-2-A advanced	25 ...	125 Nm ³ /h

Flammable Gases

GMB	25-2-A advanced	1 ...	25 Nm ³ /h
GMB	125-2-A advanced	25 ...	125 Nm ³ /h

In terms of prices LT Gas Mixer advanced are comparable with static Gas Mixer with buffer vessel and Gas-Analyser – please send us your individual data.

convenient – precise – high tech

Digital solution

Secure provision and complete documentation of defined gas mixtures for your production with high-tech gas mixers:

- **Convenient** and intuitive to operate via touch screen, connection to supervisory control system. Fully automatic control
- Bidirectional **data exchange** with higher-level systems (eg furnace control, process control system etc.) Interfaces: Ethernet, Modbus TCP/IP, Profibus, CANopen
- Very precise gas mixture: **0.2% guaranteed** repeatability
- **Gas analyzer included**: Reliable measurement precision
Extractive continuous determination of combustible or non-combustible gas concentrations in gas mixtures
- Integrated **data logger** for documentation of inlet pressures, gas flow rates, gas analysis results. Data recording internally, data transferable to USB memory via USB interface on the front of the housing
- No additional software needed

Essential differences between gas mixer concepts

Static (mechanical gas mixer) – LT Gas Mixer type smart or comfort

Dynamic (MFC-based gas mixer) – LT Gas Mixer type advanced

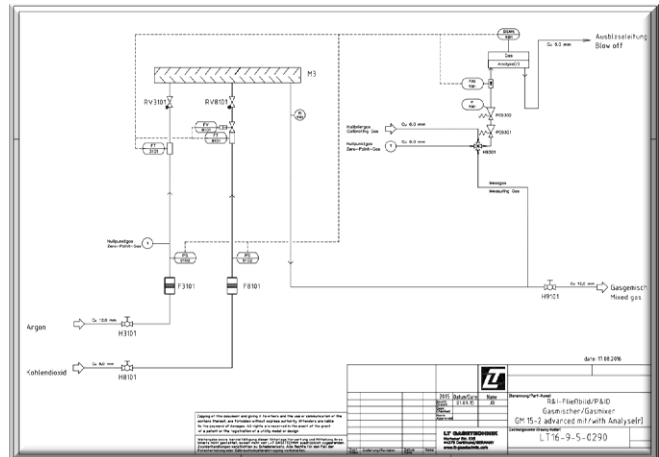
	Gas Mixer static (smart or comfort)	Gas Mixer dynamic (advanced)
Gas mixture adjustment	Static gas mixer: Manual adjustment via metering valves, with manual data reading via manometer and flow meter	Adjustment electronically and reproducibly via local control unit as well as via data transfer e.g. from a central control system. Automatic compensation of pressure and temperature changes
Reproducibility *	+/- 0.5%	+/- 0.2%
Achievement of exactly the same gas mixture after changing the gas mixture setting	Accurate reproduction is not possible without downstream gas analyzer due to parallax errors and different metering valve settings by different thread flanks settings	Accurate reproduction is easily possible using electronic values
Documentation of gas mixture	Possible with manual writing, which is subject to parallax errors	Fully automatic documentation of the mass flow rates of the individual gases. Transfer of data via USB-Drive or interface for evaluation e.g. by Excel.
Gas mixture adjustment	Static gas mixer: Manual adjustment via metering valves, with manual data reading via manometer and flow meter	Adjustment electronically and reproducibly via local control unit as well as via data transfer e.g. from a central control system. Automatic compensation of pressure and temperature changes
Special features	<ul style="list-style-type: none"> - Long lasting - Safe - Easy to maintain 	<ul style="list-style-type: none"> - Adjustable on the integrated touch-screen -> Convenient and user-friendly - Comprehensive documentation of the individual values -> Quality assurance - Remote control -> Integration into higher-level control possible - High accuracy -> Best gas mixture results - More options -> Upgradable

* Reproducibility is meant as a repeat deviation of the individual measurement from the respective reference measured value for the gas mixers offered here. This requires operation within the design limits, approximate temperature equilibrium of the gases, constant pressures, as well as a proper maintenance according to the technical and manufacturing regulations.

Both gas mixer concepts have the possibility to **remotely switch on and off** the gas-withdrawal via solenoid valve.

Options

- GSM modem, for **e-mail** or SMS dispatch
- **Own Homepage** with indication of the actual mixing result
- VPN module for **remote control** or remote data access. Temporary online customer support via remote support with ID and one-time password also behind firewalls, e.g. to help with troubleshooting
- **Inlet pressure**-transmitter in every gas line
- Inlet gas filter in every gas line
- **Gas-Analyzer** with possibility for reference measurements with manual 5 ways ball valve or with the full automatic calibration on zero point and endpoint with full automatic switch over
- Status messages (limits and failures) in the display, which are also provided via two potential-free contacts on terminals, e.g. for transfer to the control system or for indication by a stack lamp
- Outdoor erection



Configuration to your needs

Your specification, our solution

- Gas mixer delivered from few l/Min up to 10.000 Nm³/h
- Redundant design with full automatic bump free switch over
- Gas mixer for 2 up to 20 gases for
 - o toxic and poisonous gases
 - o fuel gases and non-flammable gases
 - o corrosive gases

And of course we as well provide commissioning, training, service and maintenance!



Advantages of LT Gas Mixer advanced

Convenient digital and precise gas mixer:

Degree of automation ⇒ **easy handling, precise mixture**

- Possibility to connect to a supervisory plant control system to automatically follow the specified values
- Automatic restart after Gas Mixing System shutdown
- No manual interventions on product changeovers (e.g. recipe control on specification from supervisory plant control system)
- Even without supervisory plant control system, full automatic functionality through local operating panel
- Only a dynamic (= fully automated) version ensures that the gas mixture quality continuously and precisely corresponds to the set points



Proven Design ⇒ **Reliable, durable and easy to maintain**

- Technically tight on permanence
- Use of reliable components for harsh production environments
- Very durable design, resistant to environmental influences
- Easy accessibility and maintenance
- Competent in gas mixing technology since 1971



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beyond standards

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