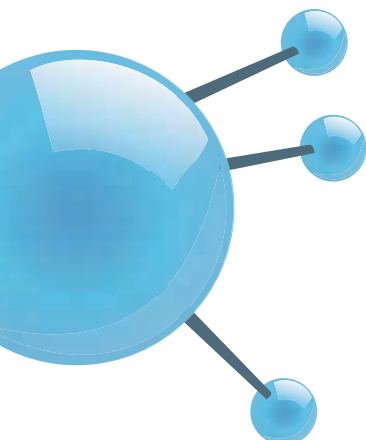


Forming Gas Mixer



Dynamic Gas Mixer is a fully automatic system generating high accuracy gas mixtures.

Best in class integrated analyzer for real time gas monitoring.



Applications

Cylinder replacement for gas mixture supply by onsite mixture generation.

Operation

Filling of an integrated gas buffer with a precise gas mixture generated by Mass Flow Controller (MFC) and ready to be supplied at the Point Of Use (POU).

The generated mixture concentration is continuously monitored by a gas analyzer. MFC are driven by advanced algorithm chosen for dedicated flow ranges.

-  ✓ Better RSD and process stability compared to cylinder supply.
- ✓ Increased safety by eliminating manual handling of cylinder
- ✓ Increased user tool availability by eliminating re-calibration
- ✓ Cost saving allowing ROC lower than 6 months

Forming Gas Mixer



Product description

Features

- Fully automatic system with PLC and 12" color touch screen HMI with real-time information: schematic, pressure and alarms
- Real time analyzers
- Automatic control of MFC drift
- Automatic MFC and analyzer purge for maintenance
- Back-up connection
- Venturi for efficient purge during component changeout
- TCP/IP Ethernet communication for SCADA monitoring
- Buffer vessel

Options

- Mass flow meter on outlet
- Quality Check Valve
- Dual AC source
- MFC redundancy
- Closed loop (dual analyser)
- Autocalibration (Calibration of the analyser(s) is done automatically)

Safety features

- Reduced operator intervention
- Fire detection when needed
- Gas detection management
- Standard exhaust flow alarm
- Easy and permanent survey of the alarm status
- Multi-level password protection to restrict access to critical functions
- Individual relief valve on buffer vessel
- Inboard-helium-leak tested

Technical specifications

Specifications

- Mixed gases (forming, lens, cleaning): H_2 , N_2 , O_2 , He, Ar, Cl_2 , etc.
- Large range of flow rates available: 50 slm, 100 slm, 200 slm, 300 slm, 700 slm, 1,200 slm
- Mixing ratio: from 0.5% to 50%
- Accuracy down to 1% RSD (standard 3% RSD)

Utility requirements

Inlet mixing gases	Max 7 bar, up to 300 slm Max 10 bar, up to 700 slm
Venturi service nitrogen	6 barg, 50 slpm
Clean dry air	6 barg, 10 slpm
Vent / exhaust	Connected to scrubber
Electricity (power & ground)	Single phase, 85-240 VAC, 250 VA, 50/60 Hz, Uninterruptible power supply
Volumetric exhaust flow rate (depend on cabinet size)	380 m ³ /h or 230 ft ³ /min
N ₂ venturi service pressure	5-6 barg
N ₂ UHP purge pressure	6 barg

Contacts

Air Liquide Electronics Systems

8, rue Méridiens – Sud Galaxie
38130 Echirolles – France
Phone: +33 (0)4 38 49 88 00
E-mail: frales-contact@airliquide.com
www.ales.airliquide.com

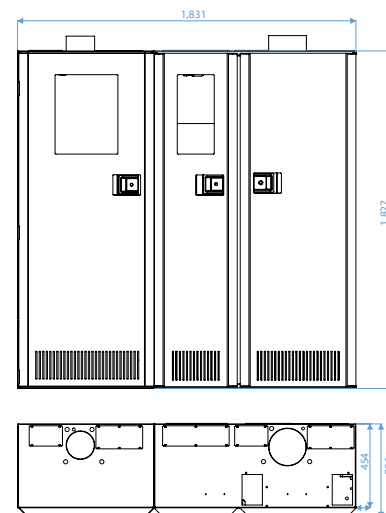
Dimensions

Cylinder enclosure specifications	Cabinet model	Size inches (width x depth x height)
Standard mixer cabinet	CC3	42.91 x 30.39 x 80.91" 1,090 x 772 x 2,109 mm
Enlarged mixer Cabinet	CC3 + CC2	70.87 x 30.39 x 80.91" 1,825 x 772 x 2,109 mm

Other dimensions available for flow rate > 300 slpm.

Certifications

- CE Mark
- Selo, ASME upon request



www.airliquide.com



The world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 73 countries with approximately 67,100 employees and serves more than 3.9 million customers and patients.