CLINIQON HC

LEADING INNOVATIONS

Automatic Manifold

MGS-CL 201

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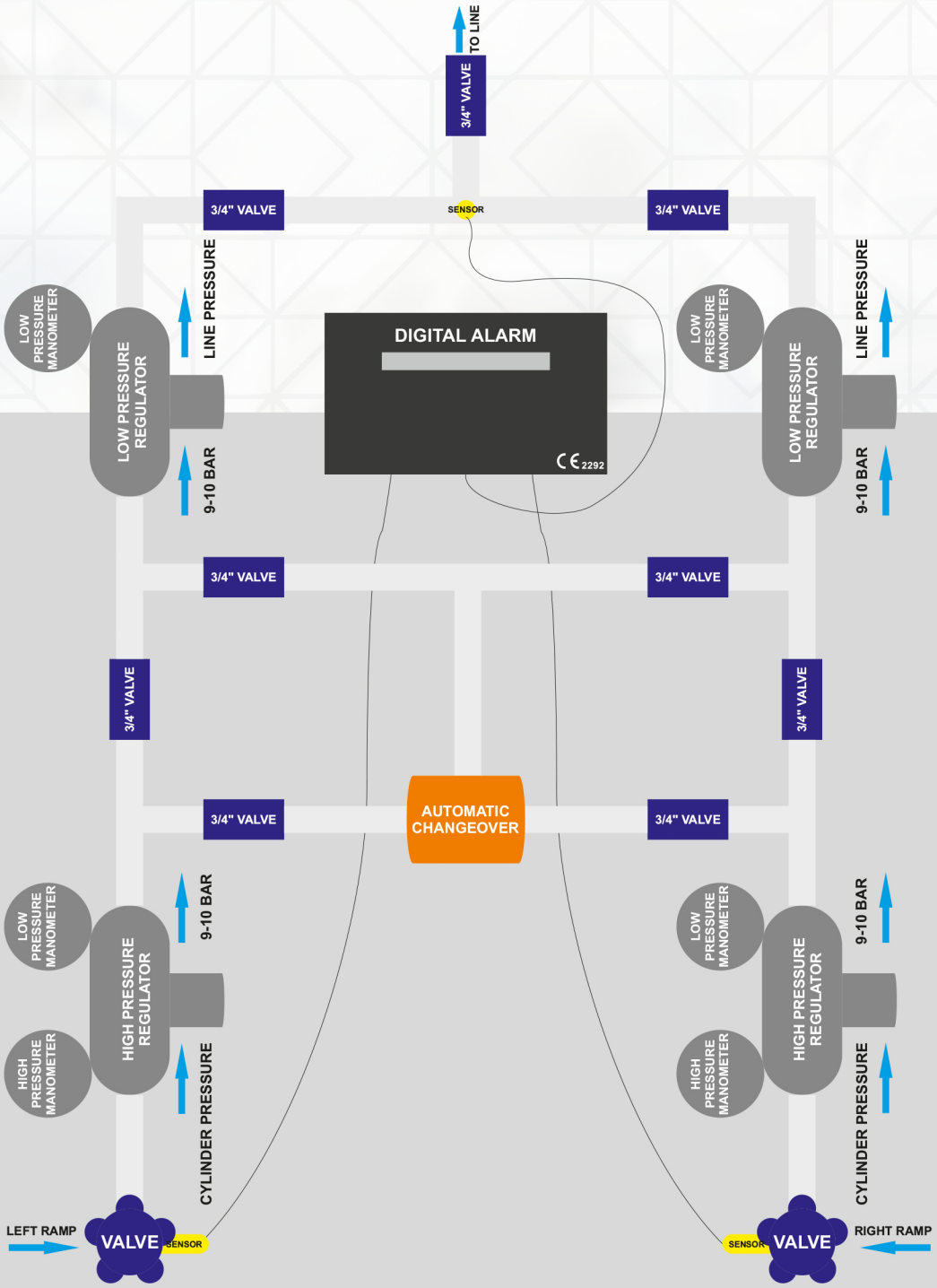
DESCRIPTION

Medical gas stations with cylinders are systems established to meet the medical gas needs of the hospital and to ensure the continuity of the system. The high pressure in cylinders for different medical gases could be reduced by these systems. In the supply of medical gas, the system consists of two parts; If the pressure value drops to a critical level, the second system automatically switches on, thus ensuring continuity. Except for single tube or bundle assemblies, the unidirectional valve should be mounted at the manifold end of each flexible link between the tube or tube bundle and the manifold.



GAS TYPES

Oxygen (O_2)
Nitrous Oxide (N_2O)
Dry Air
Nitrogen (N_2)
Carbon Dioxide (Co_2)
MIX Gas
Hydrogen (H_2)
Helium (He)
Acetylene (C_2H_2)
Ethylene Oxide (CH_2OCH_2)

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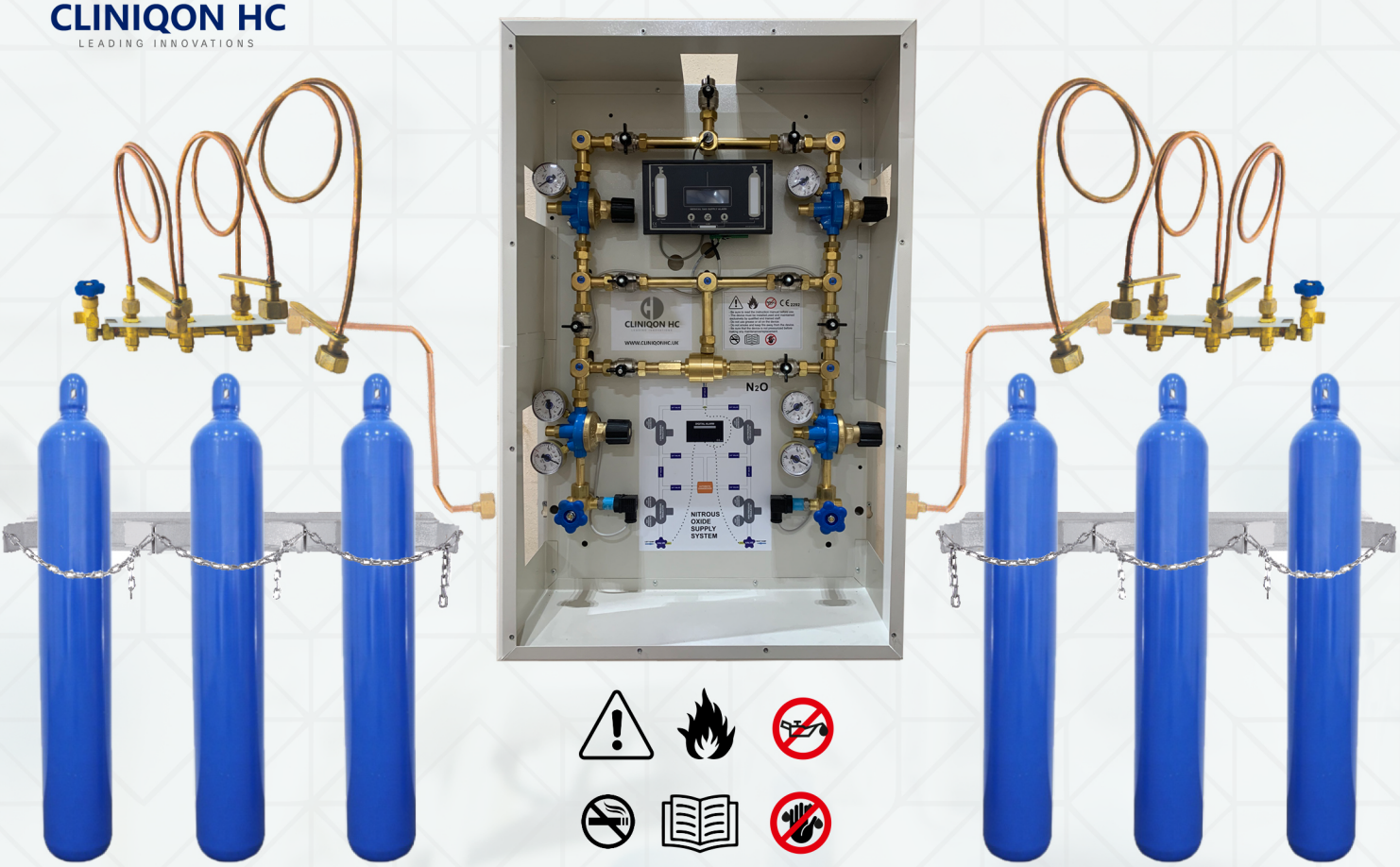

STRUCTURAL FEATURES

Material of Panel	: Stainless Steel or Painted Sheet Metal
Material of Protection Cover	: Frame: Sheet Metal, Cover: Plexiglass
Dimensions of Panel w/cover	: L: 1000 mm W: 650 mm H: 260 mm
Weight of Panel w/cover	: 41.8 kg
Material of Ramp (Collector)	: Brass
Dimension of Ramp for 1 Cylinder	: L: 65 mm W: 65 mm H: 30 mm
Weight of Ramp for 1 Cylinder	: 0,300 kg + 0,800 kg (valve for discharge)
Material of Manifold Panel Piping	: Brass (Standard) / Copper (Optional)
Material of Cylinder Holder	: Painted Sheet Metal
Dimension of Cylinder Holder for 1 Cylinder	: L: 71 mm W: 307 mm H: 22.5 mm
Weight of Cylinder Holder for 1 Cylinder	: 1.5 kg
Flexible Connection Pipe	: Ø 8 x 2 mm Copper Pipe L: 11 00 mm (Standard)
Dimension of Flex. Pipe	: L: 1100 mm (Standard)
Available Jacks for Flex. Pipe	: 3/4" NPT (M) . 5/8" BSP (M)

Inlet Connection	: R 3/4"
Outlet Connection	: R 3/4"
Inlet Pressure	: 0-230 bar
Adjustable Pressure	: 0-15 bar
Gas Flowrate	: 35 m³/h, 150 m³/h, 300 m³/h
Operating Temperature	: -10 – 45 C°
Ball Valve Inlet & Outlet Connection	: R 3/4"
Max input pressure	: 0-40 bar, R ½" (M)
Changeover Dimensions	: L: 122 mm W: 58 mm H: 58 mm

- Tube holder, tube ramp, ramp inner kit and scavenging valveare used to connect and transfer several tubes for gas plants.
- For cylinder ramps, checkvalves are used to prevent gas transition between cylinders.
- At the end of each cylinder ramp group, there is a high-pressure scavenging valve.
- Cylinder ramps are used as three or five cylinders groups usually.
- For the transition between ramps, copper pipes or brass pipes are used.

ELECTRICAL FEATURES

	: Digital LCD, Alarm, Sound
Number of Poles	: Mono Phase
Rated Voltage (Un)	: 220/230 V AC ~50-60 Hz
Rated Current (In)	: 0,05 A
Rated Frequency (fn)	: 50
Rated Degree of Protection (IP)	: 20
Pressure Sensor inlets give	: 5V DC max 20 mA outlet

High Pressure Sensor and Cable | Low Pressure/Vacuum Sensor and Cable |

EMERGENCY SUPPLY MANIFOLD

Used as a backup system or used in manual plants.
Emergency Supply Manifolds offers a standby gas supply from either two banks of cylinders, or from one bank of two cylinders.
When the primary cylinder bank is depleted, manually "turn off" the valve on the primary bank and open the valve on the reserve bank to reactivate gas flow. The changeover of this system needs to be operated manually.
Same specifications of Automatic System are valid except changeover and regulation steps.

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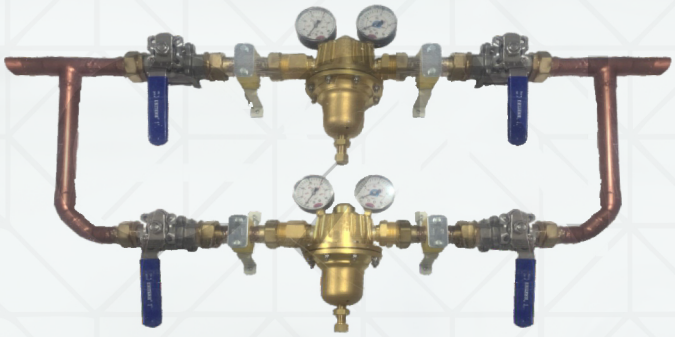
LIQUID TANK CYCLE UNIT

In case of any problem in liquid tanks, it is the system that activates the backup system. Regulates the gas according to necessary line pressure and helps to avoid gas shortage in system.
Same specifications of Automatic System are valid except changeover and regulation steps.



CERTIFICATION PROPERTIES

General medical
EN ISO 13485:2012 : Medical devices - Quality management systems - Requirements for regulatory purposes
EN 62366-1:2015 : Medical devices — Part 1: Application of usability engineering to medical devices
EN ISO 15223-1 : 2016
EN ISO 14971 :2012 : Medical devices. Application of risk management to medical devices
EN 1041 :2008 : Information supplied by the manufacturer of medical devices
EN 62366 :2008 : Medical devices. Application of usability engineering to medical devices.
EN ISO 11197 :2016 : Medical supply units.
Medical gas pipeline
EN ISO 7396-1 :2016 : Medical gas pipeline systems — Part 1: Pipeline systems for compressed medical gases and vacuum
EN ISO 7396-2 :2007 : Medical gas pipeline systems — Part 2: Anaesthetic gas scavenging disposal systems
Gas outlet
EN ISO 9170-1 :2010 Terminal units for medical gas pipeline systems — Part 1: Terminal units for use with compressed medical gases and vacuum
EN ISO 9170-2 :2010
Pressure regulators and Compressed air
ISO 10524-1:2006 : Pressure regulators for use with medical gases — Part 1: Pressure regulators and pressure regulators with flow-metering devices
ISO 10524-2:2006 : Pressure regulators for use with medical gases — Part 2: Manifold and line pressure regulators
BS ISO 8573-1:2010 : Compressed air Contaminants and purity classes
Anaesthetic and respiratory
BS EN ISO 15001:2011. : Anaesthetic and respiratory equipment. Compatibility with oxygen
EN ISO 18082:2014/A1:2017 : Anaesthetic and respiratory equipment. Dimensions of non-interchangeable screw-threaded (NIST) low-pressure connectors for medical gases
Electricity
EN 60601-1-2 :2015 : Medical electrical equipment. General requirements for basic safety and essential performance. Collateral Standard. Electromagnetic disturbances. Requirements and test
EN 60601-1 :2006 : Medical electrical equipment. General requirements for basic safety and essential performance
EN 60601-1-6 :2010 : Medical Electrical Equipment - Part 1-6: General Requirements For Basic Safety And Essential Performance
EN 60601-1-8:2007 : Medical electrical equipment. Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
Medical Device Directive 93/42 / EC ANNEX II (Except Article 4)Full Quality Assurance System
2014/30 / EU Electromagnetic Compatibility Machine Directive 2006/42 / EC
Electricity Class: ISO 60601-1:2015 according to Article 6, Class I
Regulation on Pressure Equipment (2014/68/EU) , (93/42/AT ANNEX IX, Rule 11)
Class IIb

CE ISO 9001:2015 CERTIFIED ISO 13485:2016 CERTIFIED

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