GENTEC®
GENSTAR TECHNOLOGIES

Medical Gas System & Devices Overview

Technology for a Better Future

GENTEC ®

GENSTAR TECHNOLOGIES

Technology for a Better Future

Living a healthier, safer life...

Over 40 Years of Manufacturing Experience
www.gentechealthcare.com

Medical bedhead unit ⟶

- Aluminum alloy, powder coated to protect against oxidation

- Single & dual trunks available

- Gas and electrical channels are separated by trunks to ensure safety

- Easy installation and maintenance

- Custom-ordered color available

- 100% tested for leakage

NEW!

Company Overview

Genstar Technologies Company, Inc (GENTEC®), founded in 1969, is a world class manufacturer of high quality apparatus for high purity, medical and industrial markets.

For the medical industry, GENTEC® provides high quality products such as medical gas flow control systems, regulators, terminal-units, architectural products, and gas alarm systems.

GENTEC® manufactures its products in an ISO 9001: 2000 and ISO 13485 certified 150,000 square foot manufacturing facility in order to ensure the highest quality.
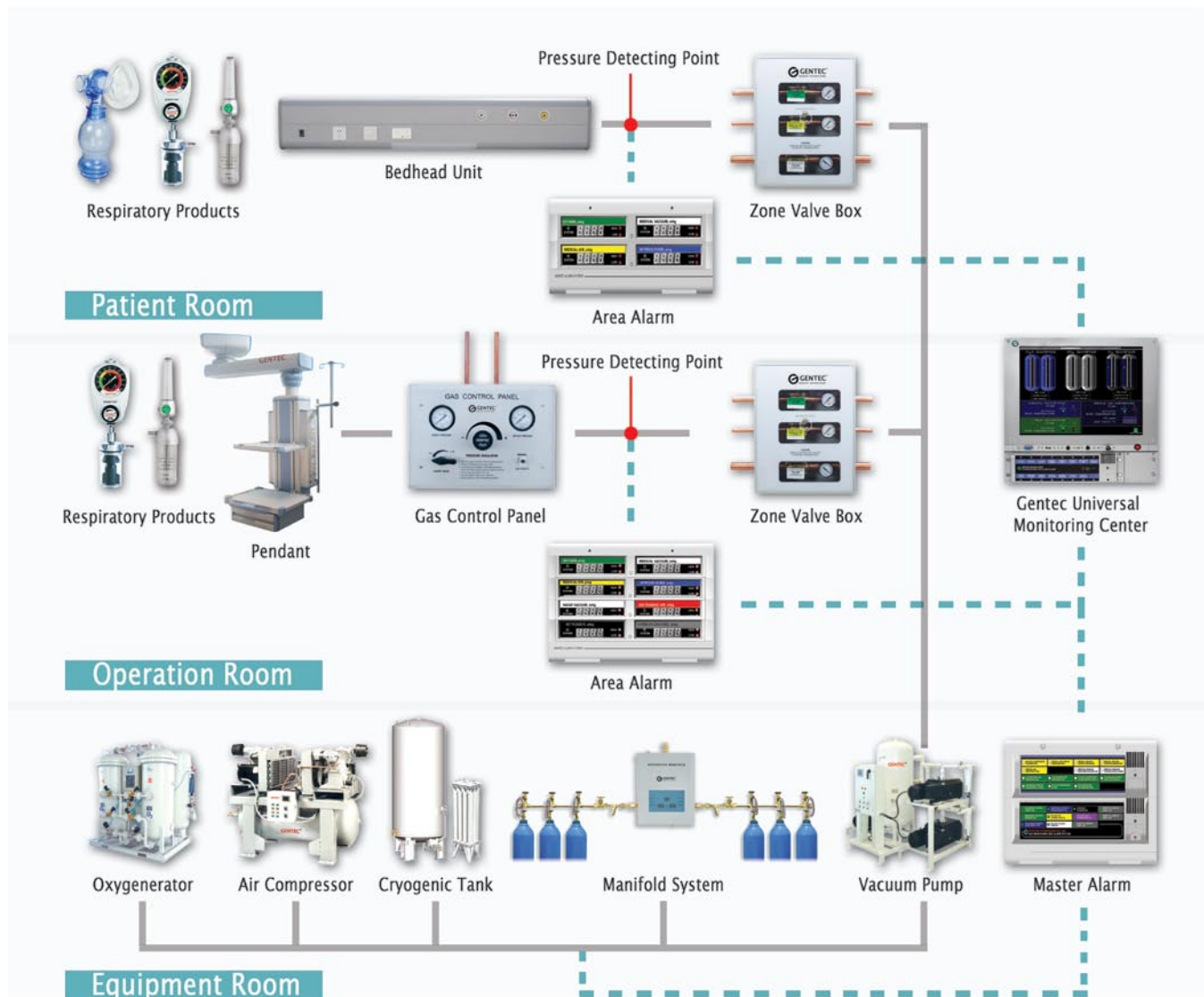
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GAS FLOW CONTROL SOLUTIONS

Patient Room

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Respiratory Products

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Pressure Detecting Point

Zone Valve Box

Area Alarm

Gentec Universal Monitoring Center

Equipment Room

Oxygenerator

Air Compressor

Cryogenic Tank

Manifold System

Vacuum Pump

Master Alarm

Medical Vacuum Systems

- Seven types of vacuum pumps available:
  oil-sealed Rotary Vane, Dry claw vane, Specialized
  oil-sealed Rotary Vane, Specialized dry Claw Vane,
  Dry Rotary Vane, Liquid Ring, Side Channel blower
- High quality, easy to transport
- Advanced control system, easy to operate
- NFPA 99: 2005 and NEC compliant, UL approved

Medical Air Compressor Systems

- Two types of compressor available:
  oil-less reciprocating and scroll type
- Duplex, Triplex, and Quadruplex available
- High quality, easy to transport
- Advanced control system, easy to operate
- NFPA 99:2005 and NEC compliant, UL approved

Cryogenic Gas Storage Tank

■ Cryogenic storage tank is applicable to the storage and use of cryogenic gas: liquid oxygen, liquid nitrogen and liquid argon etc.

■ Strictly control the surface cleanliness degree of heat insulated layers and the selection of material in the production.

■ Advanced pipeline process design: refined liquid-filling system, efficient pressure regulating circuit and reliable double safety relief system ensures the low failure rate and high safety.
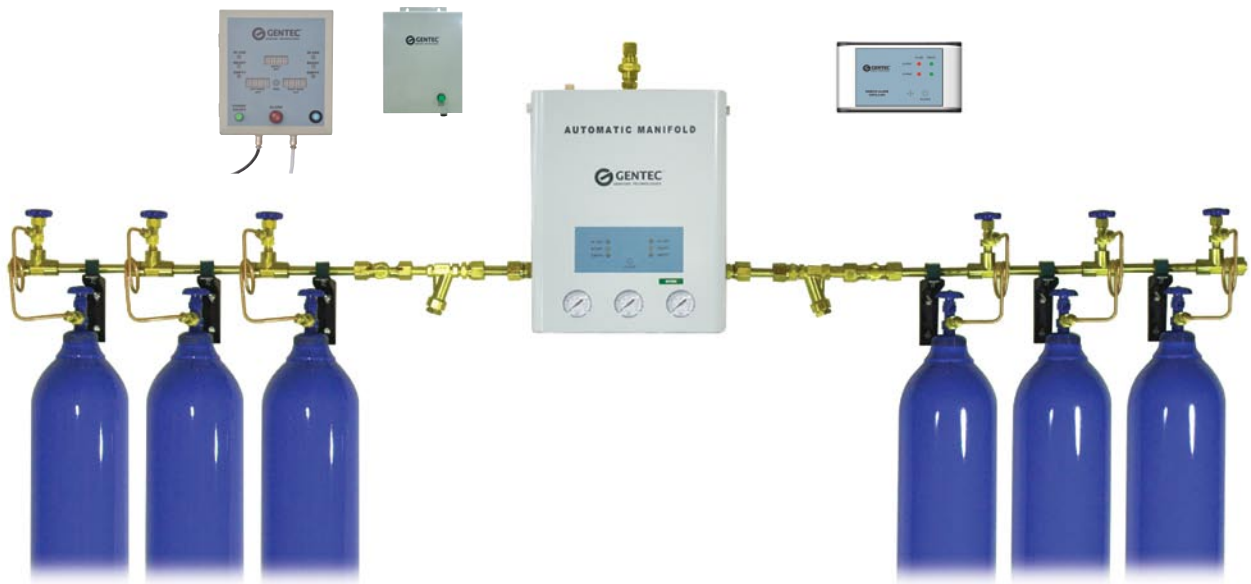
5500M Series Automatic Manifold System

■ GENTEC® 5500M series automatic changeover manifold provides continuous gas flow. The display includes LED lights to indicate working conditions and alarms. The manifold can changeover automatically, even in the event of a power failure. It is NFPA 99 compliant and HTM 02-01 and ISO 7396 approved. This product is patented.

Other manifolds: 5400 Series Semi-Automatic Manifold / 5500MD Series Automatic Digital Display Manifold / 5700M Series Automatic Cryogenic Manifold

Zone Valve Box

- Designed to house up to six shut-off valves, where each valve controls a different gas
- Gas Service is distinguished by label color
- Copper tubes are welded to prevent leakage
- Window may be detached for maintenance of shut-off valves
- Wall mount style
- Parts are cleaned according to CGA G-4.1, tubings are 100% tested for leakage
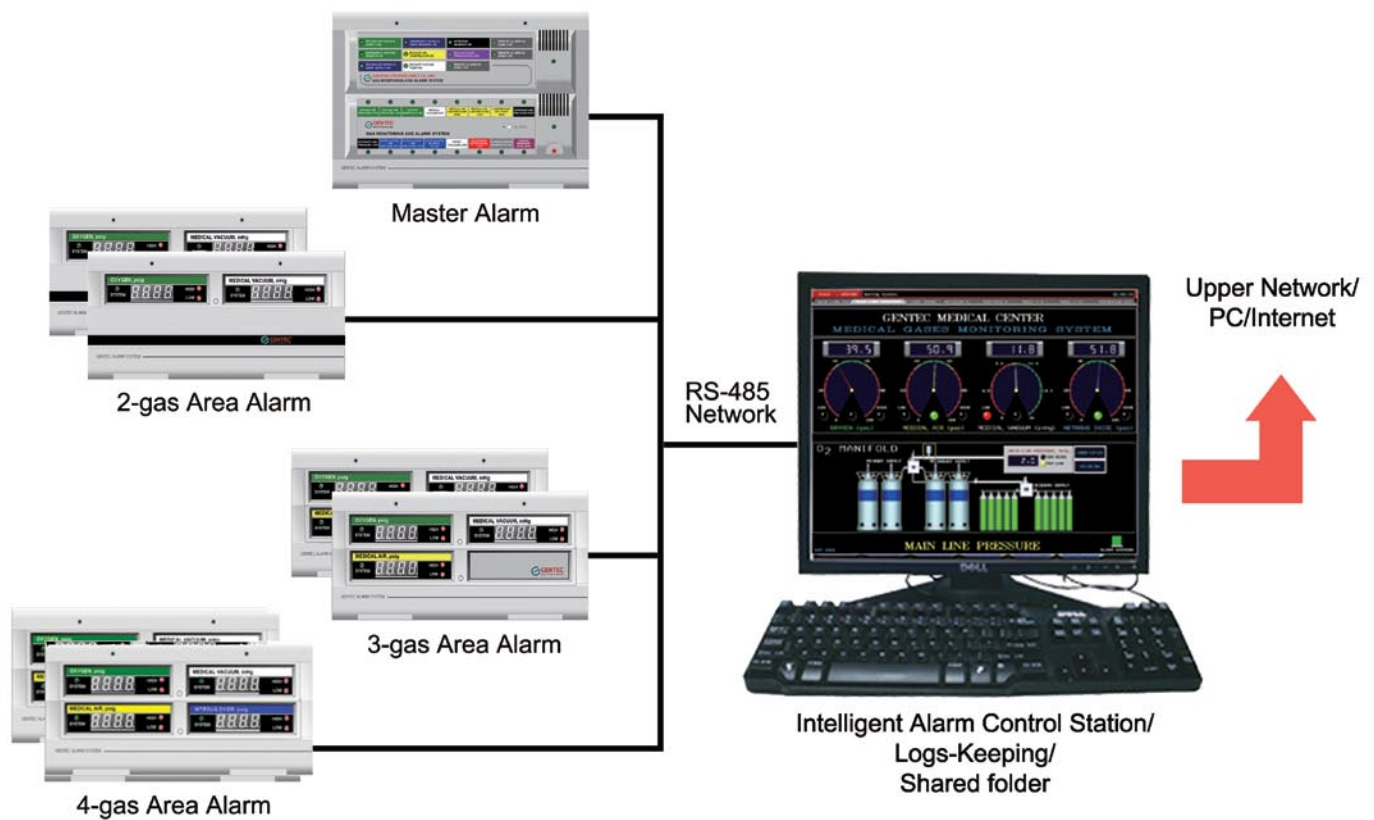- NFPA 99 compliant

Area Valve Service Unit

- Includes shut-off valve and check valve with NIST connection, easy to operate and maintain
- Diaphragm-sensed regulator provides a consistent outlet flow
- Steel valve enclosure for durability
- Pressure gauges included to provide accurate reading of pressure
- HTM 02-01 compliant

Pressure Control Panel

- Designed for surgical tools & machineries
- Diaphragm-sensed regulator ensures a consistent outlet pressure
- CGA specified inlet connection
- Gas Service: N2 , AIR 800 (Instrument Air)
- NFPA 99 compliant

Master Alarm

2-gas Area Alarm

3-gas Area Alarm

4-gas Area Alarm

RS-485 Network

Upper Network/ PC/Internet

Intelligent Alarm Control Station/ Logs-Keeping/ Shared folder

GENTEC® Universal Monitoring, Alarm and Control System (GUMACSTM) is a highly modular system utilizing the most advanced technologies in electronics and software. Accepts all 4-20mA and voltage signals and can monitor customized reading ro alarm conditions such as humidity, temperature, concentration levels, and flow rates in addition to typical pressure readings. GUMACSTM alarm series complies with the latest edition of NFPA 99 and HTM 02-01.

Art Wall Enclosure

- Designed for hospital rooms where design is emphasized, replaces traditional bedhead units
- The painting sits on a sliding mechanism which can hide the medical equipment while they are not in use
- The art piece and exterior design can be customized to meet or match a variety of design requirements
- A wide range of medical products & accessories can be custom-ordered
- Gas and electric channels are insulated to ensure safety

Medical bedhead unit

- Aluminum alloy, powder coated to protect against oxidation
- Single & dual trunks available
- Gas and electrical channels are separated by trunks to ensure safety
- Easy installation and maintenance
- Custom-ordered color available
- 100% tested for leakage

Console Rough-In

Console Complete

Latch Valve

Wall Trim Plate

Wall Rough-In

Wall Complete

GENTEC® Medical Gas Outlets shall be UL Listed, cleaned for medical gas service, and compliant to the latest edition of NFPA 99. They shall accept only corresponding Ohmeda®, DISS, Chemetron®, or Puritan Bennett® style quick connect adapters. Outlets are designed with an universal rough-in assembly for interchangeability on different quick connects without removing the entire outlet. For outlets providing positive pressure gas, they shall have a primary and secondary check valve, where the secondary check valve allows for servicing without isolating an entire zone.

Latch Valve Assembly (front)
The latch-valve assembly shall have gas specific index corresponding to the gas service on the rough-in assembly to prevent interchanging of gas service. Each latch-valve assembly shall be color coded for it's specified gas service.

Rough-In Assembly (back)
The rough-in assembly shall be manufactured using (1/2" outside diameter) type "K" copper tubing, silverbrazed to the outlet body. The tubing allows 360 degrees swivel on the outlet body for easy installation. Rough-in assembly is manufactured to accept only the specified gas service by use of indexes.

American/ French /Australian Standard Medical Gas Outlets

- Accepts only Ohmeda, DISS, Chemetron, or Puritan Bennett style gas specific adapters
- Unique pin index for gases to prevent interchanging of gas service
- Universal rough-in assembly
- Color-coded for easy gas identification
- 360º swivel on the inlet pipe for easy installation
- 100% tested and individually packaged
- UL listed and complies with the latest edition of NFPA 99: 2005
- French Standard is UL listed, NF EN 737-1 compliant
- Australian Standard complies with NF EN 737-1 and AS 2896-1998

German/British/Japanese Standard Medical Gas Outlets

- Color-coded for easy gas identification according to ISO 32
- Pressure lid can be disassembled during maintenance
- Multiple assembly methods
- With inspection valve, easy to maintain
- 100% tested for gas leakage
- German Standard is CE listed and compliant with EN 737-1 and DIN 13620-2
- British Standard is CE listed and compliant with HTM 02-01, EN 737-1 and BS 5682-1998
- Japanese Standard is compliant with JIST 7101

- GENTEC® Anaesthetic Gas Scavenging System is used for the safe removal of excess anaesthetic gas and anaesthetic vapors
- Complies with EN 737-2, EN 737-4 (TYPE 1)
- Color-coded for easy gas service identification according to ISO 32
- Flow: 25~50 l/min (Pressure drop: 0.15~0.29 psi)
- Air driving flow : 10~15 l/min (Pressure: 58 psi)
- 15 mm piping
- 100% tested and individually packaged

Flowmeter

- Slim body flowmeter
- Available in anodized aluminum (FM197A) or chrome-plated brass body (FM191, FM197B)
- Polycarbonate tubes for maximum durability
- Agion® Antimicrobial protected control knob
- Back-pressure compensated
- Flow range: 0~15 LPM
- Calibrated at 50 psi *
- CE listed

Oxygen Flowmeter with Humidifier

- Polycarbonate flow tube and outer cover are impact resistant for maximum durability and service life
- Composed of flowmeter and oxygen humidifier; free combination for the detachable
- Inlet connection with filter
- Nasal cannula optional
- Built-in antimicrobial protection on flowmeter control knob

Oxygen Humidifiers & Nebulizers

Oxygen humidifiers:
- CGA 1240 standard connection
- External safety valve, pressure relief alarm

Nebulizer:
- Applicable to inhalation therapy
- With pressure relief alarm and medicine filling port
- Reusable

Medical Gas Regulators

- Suitable for emergency applications
- Chrome-plated brass body
- 1-1/2" diameter gauges
- Diaphragm-sensed or piston-sensed configurations
- Sintered inlet filter for longer service life
- Inlet cylinder connection: CGA, BS, DIN, JIS, GB

Aluminum Cylinders

- Three specifications available:
  1.1L, 3L, 5L

Refilling bridge

Cylinders Valves

Suction Regulators

- 882VR Series continuous only suction regulator has three modes available: CONT, OFF, and FULL.
- 881VR Series continuous-intermittent combination suction regulator has three modes available: INT, OFF, and CONT.
- Glow in the dark vacuum gauge
- Clockwise & Counterclockwise configurations available
- Vacuum trap prevents overflow of waste fluid from entering the suction regulator.
- Antimicrobial protected control knobs
- CE listed
- Patented

Canisters

Designed to collect wastes, can complement vacuum regulators.

- Autoclave up to 134 °C
- Ball float design prevents overflow
- Built-in bracket for easy installation
- Patented

Suction Tubing & Filter

Designed for use between suction jar and vacuum trap.

Canister Station

- Designed to support canisters
- Five-caster design ensures stable base
- Durable construction
- Supports up to 4 canisters
- Base diameter: 560mm
- Height: 640mm
- Easy maintenance

Electrically Operated Aspirator

The electrically operated aspirator uses oil-free lubricated vacuum pump, sturdy exterior, light-weight, novel design, low noise, convenient to carry; Three types of power supplies: AC, DC, and battery cell. Suitable for all emergency applications and outdoor applications where there are no AC power supply.

Oxygen Concentrator

Oxygen concentrator is applicable for hospital, retirement housing, home, and traveling use. Designed for patients who need respiratory assistance.

Nebulizer

GNC series compressed air style nebulizer can transform liquid medicine into vapor medicine of 5 microns in diameter for aerosol inhalation. Designed for inhalation therapy and treatment of rhinitis, throat inflammation, chronic bronchitis, emphysema, asthma, or skin infections. Recommended for all hospital and retirement housing. UL and CE approved, FDA registered.

GCN30B
(Cartoon)

GCN10B
(Normal)

Child

Adult

Nebu series nebulizers are small and portable. Designed for treatment of cystic fibrosis, asthma, COPD and other respiratory diseases through a mesh-sonic design. The mesh-sonic design breaks medical solutions into small aerosol droplets as a very fine mist for direct inhalation to the lungs. Common problems experienced from ultrasonic-wave nebulizers such as having too much liquid waste and heating of liquids can be solved with the GENTEC® Nebu series.

EMS Series

EMS Series are mainly used in the emergency medical services industry. The rescuer provides assistance to the patient by squeezing the resuscitator ball to create a positive pressure, which delivers oxygen to the lungs of the patient and exhale the carbon dioxide.

Main products: Mouth-to-Mouth CPR, Portable CPR, Artificial Resuscitator Ball(s), and Semi-Automatic/ Pneumatic Resuscitator Balls.

GENTEC Resuscitator Ball, is divded into two categories: disposable and non-disposable. Compliant with ISO 5336, ISO 8382, and ISO 10993.

The disposable Resuscitator Ball is made of medical grade PVC of high elasticity. The non-disposable Resuscitator Ball is made from medical grade liquid silicone of high elasticity with elastic silicone valve.

Product features: Low impedance to the air flow(<5 cmH20), excellent compliance and swift air exchange.

Airway series

Airway series are mainly used in eliminating upper respirator congestion.

The products include but not limited to: Suction Device, Household Sputum Aspirator, Oropharynx Airway Tube, Airway Laryngeal Mask, and Laryngoscope.

Laryngoscope is mainly used to facilitate tracheal intubation. GENTEC Laryngoscope Series are made of Germany imported stainless steel.

Pulmonary Series

Pulmonary Series are mainly used in exercising pulmonary inspiratory muscle to prevent alveolar collapse. The products include, but are not limited to: Humidity Filter, MDI fitting, Medical Air Conveying Device, Artificial Lung and Respiratory Monitoring Devices.

GENTEC Artificial Lung is designed by simulating adult respiratory system and referring to the pulmonary impedance and compliance in ordinary adult lung. It can be equipped with Rp20, Rp 50, Rp70 cmH20/s/L impedance fitting. The Artificial Lung can be repeatedly sterilized; its body is made of Dupont plastic steel.

Sleep Series

Sleep Series are designed for patients with dyspnea, apnea or hypoxia the due to obstruction of respiratory tract. Low or insufficient oxygen concentration caused by apnea may harm cardiovascular system and reduce sleep quality.

Sleep care products are aimed to improve breathing difficulties by maintaining a continuous positive pressure in the respiratory tract in the respiratory cycle. When the pressure in the throat suffices, the respiratory tract will be widened, and air is delivered to the nasopharynx. Products include, but are not limited to: CPAP Respiratory Machine, CPAP Mask(full-face mask/ nasal mask), CPAP Special Tube, Noise Silencing Valve, and Headband.

Oxygen and Aerosol Series

In the event that respiratory activity does not suffice to maintain the intake of oxygen or the extrusion of carbon dioxide, mechanical air change is needed. Oxygen and Nebulization Series are mainly used to assist in air exchange and a small portion of oxygenation. The products include, but are not limited to: Oxygen Generator, Nebulizer, Oxygen Masks, High Density Oxygen Masks, Oxygen Density Masks (adjustable / fixed), Tracheostomy Mask, Nasal Cannula, Nebulizer Masks, Nebulizer Tanks, Cushion Mask, Comfort Cushion Mask and Silicone Mask, etc.

GENTEC Oxygen Mask is ergonomic, designed to fit the human face curve, featuring good sealing performance and even pressure distribution. The masks are made of medical grade transparent PVC, and elastic strap are made of non-latex material, both of which do not cause an allergic reaction.

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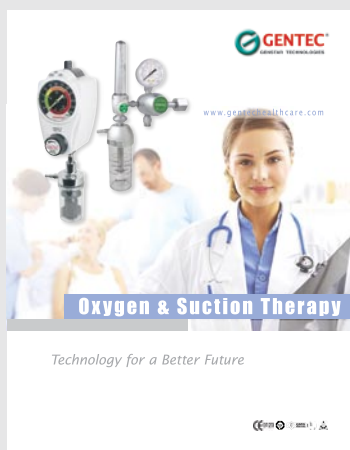
Oxygen & Suction Therapy

- Flowmeter with Humidifier
- Flowmeter with Humidifier / Nebulizers
- Oxygen & Air Flowmeter
- Humidifiers & Nebulizers
- Regulators with Oxygen Flowmeter and Humidifiers
- Regulators with Flowmeter
- Regulators with Flow Gauge
- Click-Style Regulators
- Cylinders
- Portable Oxygen Kit, Cylinder Valves & Refilling Bridge
- Medical Hoses
- Flowmeter Accessories
- Suction Regulators
- Suction Gauges & Suction Traps
- Canisters

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Medical Monitoring, Alarm and Control Systems

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- GUMACSTM Overview
- Medical Gas Area Alarm
- Medical Gas Master Alarm
- Medical Gas Combination Alarm
- Advanced Applications

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Medical Gas Pipeline Products

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- Medical Air Compressors
- Medical Air Treatment Center
- Manifold Changeover Systems
- Header Bars & Pigtails
- Behead Units
- Medical Gas Outlet
- Alarm Panels
- Zone Valve Boxes
- Dual Port Ball Valves
- Pressure Control Panels
- Emergency Oxygen Connections
- Medical Gas Flow Solutions
- Patient Care Products

GENTEC®

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CATA#:MED15V1011