MEDITEK®

MGPS

Central Medical Gas Supply Pipeline System

#Smart Solutions...
...since 1953!

SNG
Sun Narula Group

Srishty Medical Private limited

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ISO 9001 2015
ISO 14001 2015
ISO 45001 2018

IGBC

MEDITEK® Central Medical Gas Pipeline Systems [CMGPS] are offered **Srishty Medical Private Limited**, a member of the leading **SNG** group, engaged in healthcare solutions since 1953. Historically, the group has been engaged in providing MGPS Solutions to some over 1200 hospitals. In the recent years, has provided the MGPS Solutions in hundreds of Operating Rooms, ICUs & ERs and to turnkey hospital projects to some of the leading healthcare providers in India and South Asia.

With complete in-house design team **SNG** is competently placed to provide the most aptly designed bespoke solutions to its customers considering their architectural, structural, logistical & budgetary requirements. **SNG** has experienced, strong & expert in-house design, project's management & customer support teams, to ensure unmatched support to its clients, right from design to commissioning and after sales support, with a dedicated & centralized **SNG** Customer Care Centre.

Our customer support teams are located in Delhi, Mumbai, Chennai, Kolkata, Bangaluru, Hyderabad, Pune, Amdavad, Coimbatore, Vizag, Manipal, Kochi, Kathmandu, Colombo & Dhaka, with reach to all the corners of India & beyond to ensure quick response.

Apart from the customer support, regular training sessions are also accorded to end users and their engineers for system's applications, operations, day-to-day trouble shooting & maintenance.

All specifications and standards shown are updated and improved regularly and are subject to change without prior notice. Refer to updated datasheets

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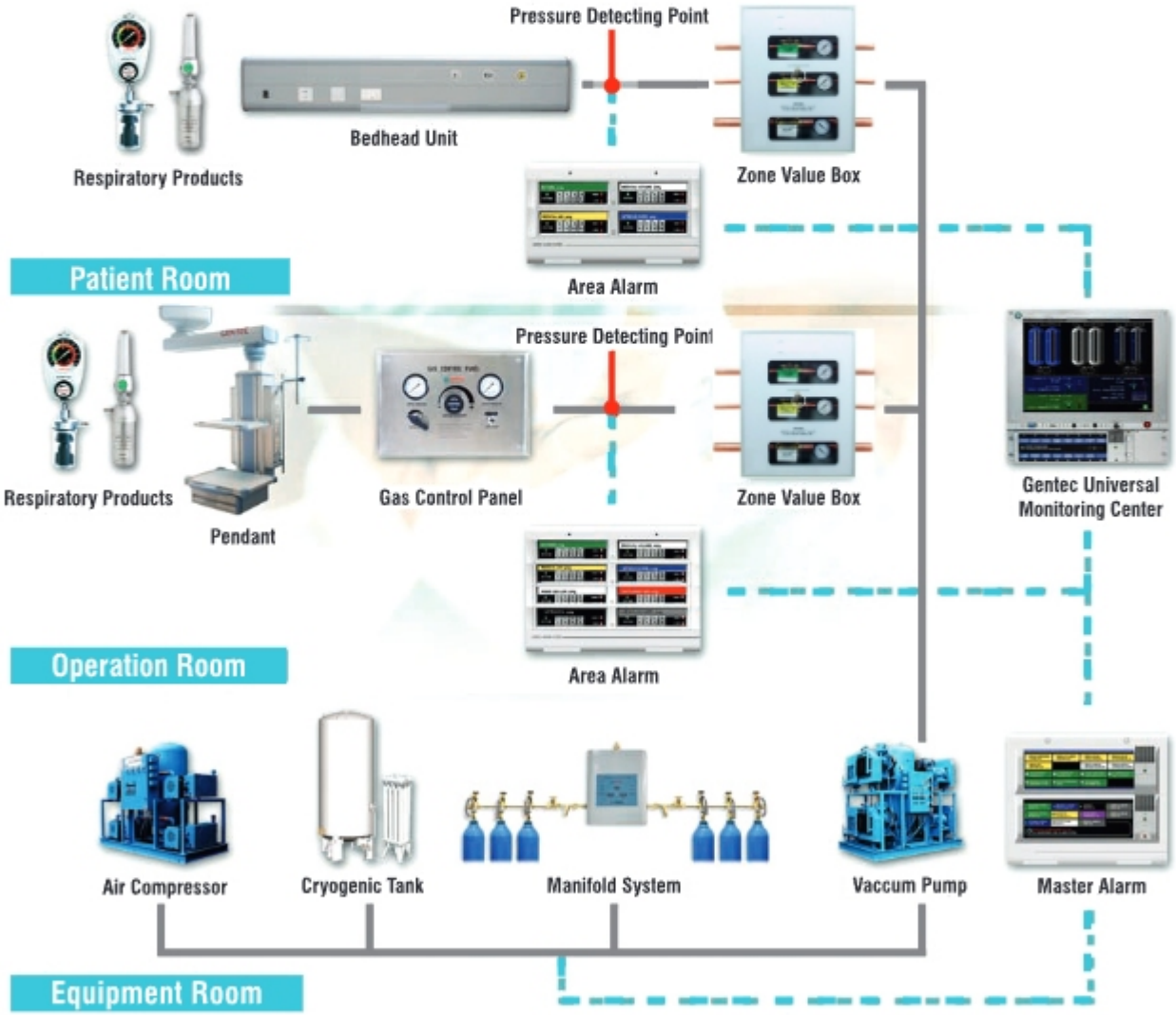
Design Principals

The basic design principals followed by our team for MGPS solution is to provide a safe and effective method of delivering the required gas from the source through a Pipeline distribution system to the patient via self-locking and self-sealing terminal units – the outlets.

Each gas must be supplied or generated from a separate independent system and it is essential that that gas should be tapped through a dedicated terminal gas unit and all the parts of each unit are gas specific and ensure that there is no possibility of cross connection between the gases.

During the design & implementation stage, all specifications, volumetric flow requirements, line pressure losses and sizing of pipes are important criteria which are planned by our teams based on each facility's bed strength and requirements.



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Complete Solution

SNG offers complete Medical Gas Supply solutions covering the entire medical & healthcare facility. The medical gases are used in hospitals for life-support that directly influence the maintenance of life of the patients. The gases supplied must be pure, clean and supplied under controlled and stable pressure.

MEDITEK® medical gases supply solutions and equipment conform to the best international regulations and standards. The solution is with colour coordinated copper fittings & pipeline according to types gas, audio-visual monitoring & alarm systems, gases isolation valves & area service modules, gas manifolds & storage tanks, and gas outlets – whether it's HTM 02-01[UK] / EN 737 [UK] or DIN EN ISO 7396-1 / DIN EN 737-1 [EU] or NFPA 99 [US].

Legend	Medical Gas Supply System & Equipment in Hospital	
01. Oxygen Supply	07. Medical Gas Alarm Box	13. Anesthesia Pendant (Drop Down/Single/Double Arm)
02. Nitrous oxide Supply	08. Patient Trolly	14. Operation Table
03. Carbon dioxide Supply	09. Bed Head Panel (Horizontal)	15. Surgical Pendant (Drop Down/Single/Double Arm)
04. Compressed Air Supply	10. Column Pendant	16. Recovery Bed
05. Medical Air Supply	11. Medical Gas Distribution Box	17. General Bed
06. OT Light	12. Bed Head Panel (Vertical)	18. Medical Gas Wall Outlet

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Copper Pipeline

Only Medical Grade Copper pipes and fittings are used, which are Phosphorous, deoxidizes, non-arsenical, degreased seamless round copper tube [Grade: CW024A/Cu-DHP] conforming to EN 13348 with incorporation of amendment A1:2005 or as per BS 2871, are used, seamless pipes with fluxless silver brazing are used which should be as per ASTM standard and certification. All pipelines are color coded with paint or colored bands put at intervals of every 3m. Medical Grade Copper pipes are with internal residue not exceeding 0.02mg/dm2 as per HTM 02 01/ EN 13348 / ISO 7396-1.

Tests	Procedures
Blowdown	Lines are blown clear using oil-free dry nitrogen
Initial press test	System is subjected to 1.5 times working pressure to check leaks
Standing press test	System is subjected to 20% higher pressure for 24 h
Piping purge	Purging of each outlet until there is no discoloration of the white cloth held over it
Cross-connection test	One gas system at a time using O2 analyzer
Final tie-in test	Active vacuum pipeline joints are tested using an ultrasonic leak detector

Dimensions

Copper Pipe 12 mm OD x 0.7/0.9 mm Thk
Copper Pipe 15 mm OD x 0.9 mm Thk
Copper Pipe 22 mm OD x 0.9 mm Thk
Copper Pipe 28 mm OD x 0.9 mm Thk
Copper Pipe 35 mm OD x 1.2 mm Thk
Copper Pipe 42 mm OD x 1.2 mm Thk
Copper Pipe 54 mm OD x 1.2 mm Thk
Copper Pipe 76 mm OD x 1.5 mm Thk

*other sizes also available on request

Standards

BS:864 Copper fittings standards suitable for brazed socket connections
BS EN 13348:2016 Copper & copper alloys – seamless, round copper tubes for medical gasses or vacuum
ASTRM B819-00 Seamless Copper tubes for Medical Gas Systems

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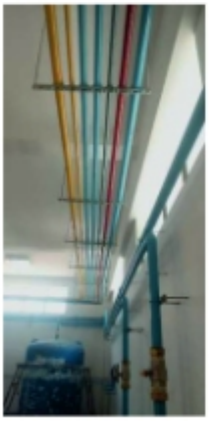
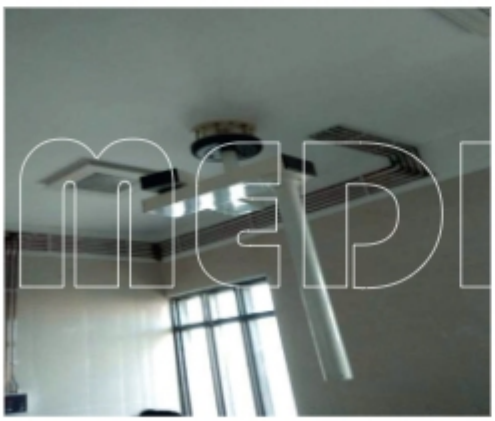
Pipeline Installation Guideline

Brazing is carrired out using oxy-acetylene [DA] flame source capable of achiveing brazing temperatures of over 600 dgerees abd vekiw nelting point of the metal.

Brazed pipeline joints (copper to copper) are made using silver-copper-phosphorous brazing alloy CP105 (5% Silver brazing filler metals rod] in accordance to BS EN 1044-1999, no flux is used. Copper to brass/bronze/Gun metal is carried out as per EN 1044.

Brazing is done using Oxygen free Nitrogen as internal intern gas shiled to prebent format of oxides inside the tubings and fittings.





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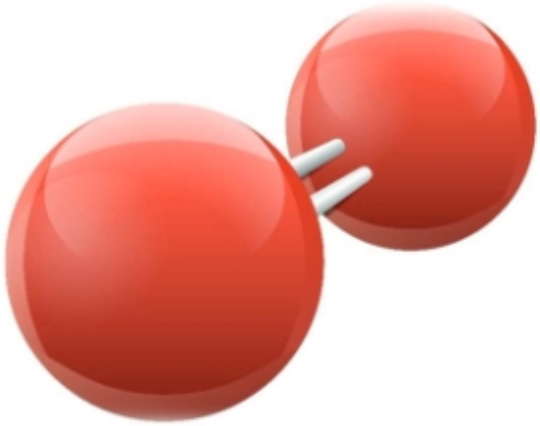
Manifold & Source

Oxygen



Continuous supply of oxygen is the primary requisite of any medical unit. According to BS EN 737-3:2000, there should be three independent supply sources: primary, secondary, and a reserve source adequate to meet the demand in the event of primary and secondary supply failure. The manifold room should have 2 banks of D-type cylinders, each holding a minimum of 2 days consumption, attached to a changeover control panel. Three-day consumption should be kept in reserve, as a contingency plan. Besides oxygen generators, liquid oxygen storage tank is an economical and convenient form of oxygen storage.

Pressure Reduction Box

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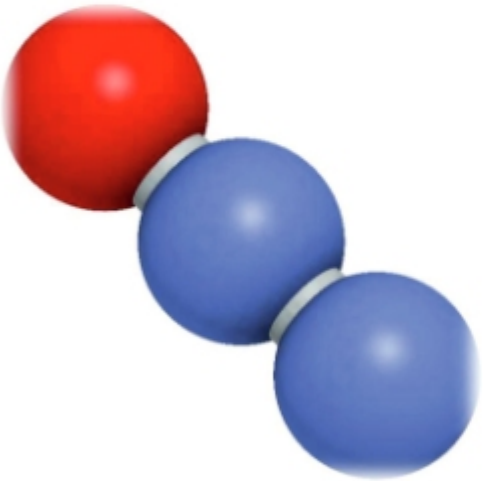
Carbon Dioxide

Continuous supply of Carbon Oxide is also required for Operating Rooms for certain procedures. The manifold room is designed with 1 or 2 banks of D-type cylinders, attached to a changeover control

Nitrous Oxide



Continuous supply of Nitrous Oxide is required for Operating Rooms. The manifold should have two sources: primary & secondary to meet the demand. The manifold room is designed with 2 banks of D-type cylinders, attached to a changeover control panel.

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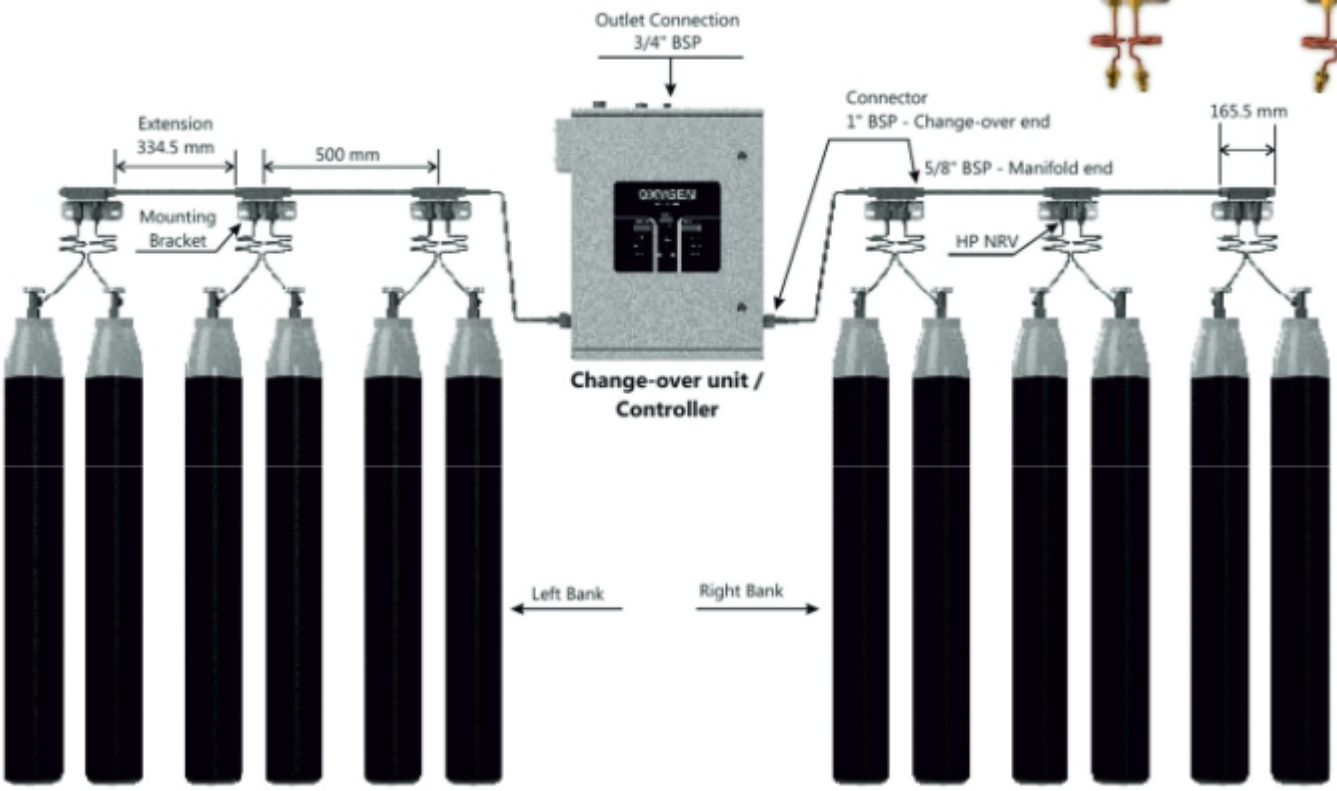
Modular Manifold Systems

Conforms to : IS / ISO 7396 - 1 : 2016 + A1 : 2017, HTM 02-01 Part A : 2006



Conforms to : IS / ISO 7396 - 1 : 2016 + A1 : 2017, HTM 02-01 Part A : 2006

Manifold header with HP NRV	Brass
Extension Connection	5/8" BSP
Mounting Bracket	SS 304 angle of 176 × 55 mm with slot for M10 fastener
End Blocker	5/8" BSP cap with Copper washer
Copper Washer	Ø 18.50 × Ø 12.50 × 2.0 mm
Test Pressure	1.5 times of max. working pressure (150 bar)

Modular manifold (including 2 Block assemblies, 4 high pressure NRVs, 4 Copper Tail Pipe assemblies, 2 End Blockers 5/8" BSP and 4 Copper washers)	2+2
Modular manifold (including 4 Block assemblies, 8 high pressure NRVs, 8 Copper Tail Pipe assemblies, 2 End Blockers 5/8" BSP, 2 Connecting Tube assemblies and 8 Copper washers)	4+4
Modular manifold (including 6 Block assemblies, 12 high pressure NRVs, 12 Copper Tail Pipe assemblies, 2 End Blockers 5/8" BSP, 4 Connecting Tube assemblies and 12 Copper washers)	6+6
Modular manifold (including 8 Block assemblies, 16 high pressure NRVs, 16 Copper Tail Pipe assemblies, 2 End Blockers 5/8" BSP, 6 Connecting Tube assemblies and 16 Copper washers)	8+8
Modular manifold (including 10 Block assemblies, 20 high pressure NRVs, 20 Copper Tail Pipe assemblies, 2 End Blockers 5/8" BSP, 8 Connecting Tube assemblies and 20 Copper washers)	10+10

Note : Contact us for customized configuration

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Changeover Units

- Logic-controlled auto change-over
- Constant uninterrupted supply
- High flow output - 2100 lpm @ 4.2 bar
- Stable discharge pressure & flow
- Visual & audible signal
- Pressure unit display options - bar, psi & kg/cm^2
- Optimization of residual gas in cylinders

Conforms to: IS / ISO 7396 - 1 : 2016 + A1 : 2017
IS / ISO 10524 - 2 : 2018, IS / ISO 10524 - 4 : 2008
HTM 02-01 Part A : 2006

Certifications: ISO 13485:2016 – Medical devices – Quality Management Systems
ISO 9001:2015 - Quality Management Systems

MEDITEK ADS	MEDITEK AD	MEDITEK A	MEDITEK SA
Fully Automatic Micro-Processor Based 2100LPM @ 4.2bar	**Fully Automatic Pneumatic 1350LPM @ 4.2bar**	**Fully Automatic Pneumatic 1350LPM @ 4.2bar**	**Semi-Automatic Pneumatic 450LPM @ 4.2bar**
			
Fully Automatic Micro-processor-controlled Changeover unit	Fully Automatic Pneumatic-Changeover unit	Pneumatic- Changeover unit	Pneumatic- Changeover unit
Automatically resets itself for next cycle when depleted bank is replenished. No manual resetting required	Automatically resets itself for next cycle when depleted bank is replenished. No manual resetting required	Automatically resets itself for next cycle when depleted bank is replenished. No manual resetting required	Manual resetting required for next cycle of changeover
Digital pressure indicator for accurate reading	Digital pressure indicator for accurate reading	Analog pressure gauges for accuracy	Analog contact pressure gauges for accuracy and customized audio alarm settings
Pressure unit options: bar, psi & kg/cm	Pressure unit options: bar, psi & kg/cm		
Status indicators	Status indicators	Status indicators	Status indicators
Pressure Stabilizer for stable discharge pressure & flow	Pressure Stabilizer for stable discharge pressure & flow	Pressure Stabilizer for stable discharge pressure & flow	Stable discharge pressure
Audio-Visual Signal	Audio-Visual Signal	Audio-Visual Signal	Audio-Visual Signal
Designed to suit all medical gases for gas specific usage	Designed to suit all medical gases for gas specific usage	Designed to suit all medical gases for gas specific usage	Designed to suit all medical gases for gas specific usage
Optimized residual gas	Optimized residual gas	Optimized residual gas	Optimized residual gas

Conforms to	IS / ISO 7396 - 1 : 2016 + A1 : 2017 IS / ISO 10524 - 2 : 2018 IS / ISO 10524 - 4 : 2008 HTM 02-01 Part A : 2006
Inlet Connection	1" BSP, 3/4" BSP*
Outlet Connection	1/2" BSP, 3/4" BSP**

Manifold Header Connection	1/2" BSP
Modular Manifold Connection	5/8" BSP
Relief Valve Setting (Line Safety)	5.17 bar (75 psi)
Relief Valve Setting (High Pressure Regulator)	15.5 bar (225 psi)

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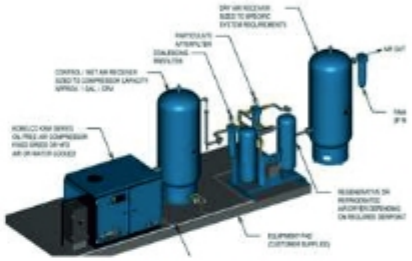
Compressed Air

It is used both as a driving force for equipment such as pneumatic drills [surgical air] or as an inhalational gas [medical air]. The plant must ensure a flow of 3 KL/min at 8 bar, reduced thereafter as per requirement. Medical air needs a flow rate of 80 L/min at 4 bar and surgical airflow at the rate of 350 L/min at 7 bar. The medical air quality should meet the standards laid by the European Pharmacopoeia, restricting the carbon monoxide level to 5 ml/m3. Integral dryers, filters, and dew point monitor control the humidity to its allowable limit of 67 ml/m3.



Vacuum System

Vacuum pressure of −300 mmHg is required at the terminal unit with a flow of 40 L/min. The Vacuum pipeline runs to the Operation threatres, ICUs and Wards for suction of fluids etc. during medical procedures and treatment. A robut Vacuum System with adquate design of the pipeline system is required in the hospitals.

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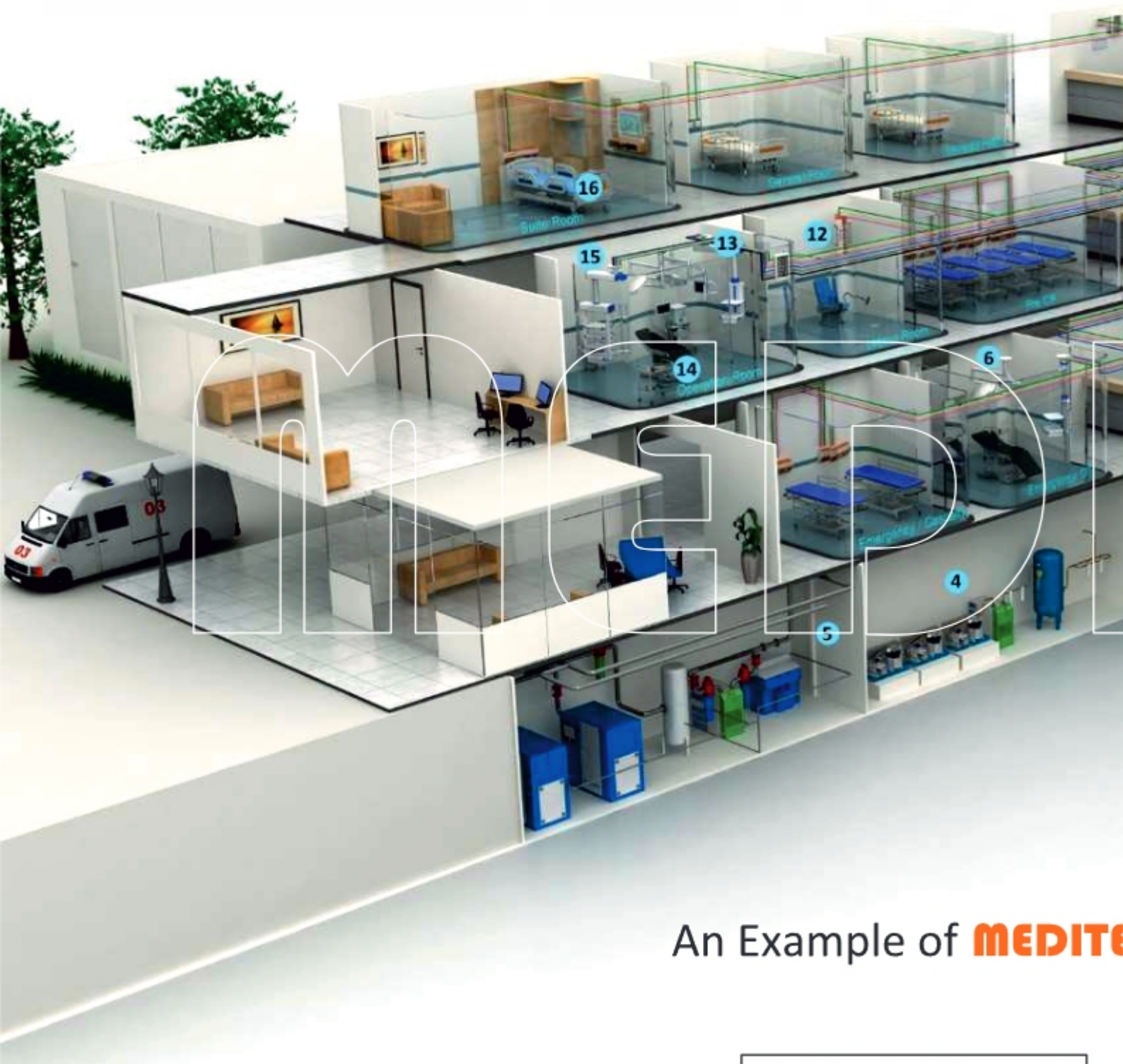

An Example of MEDITE

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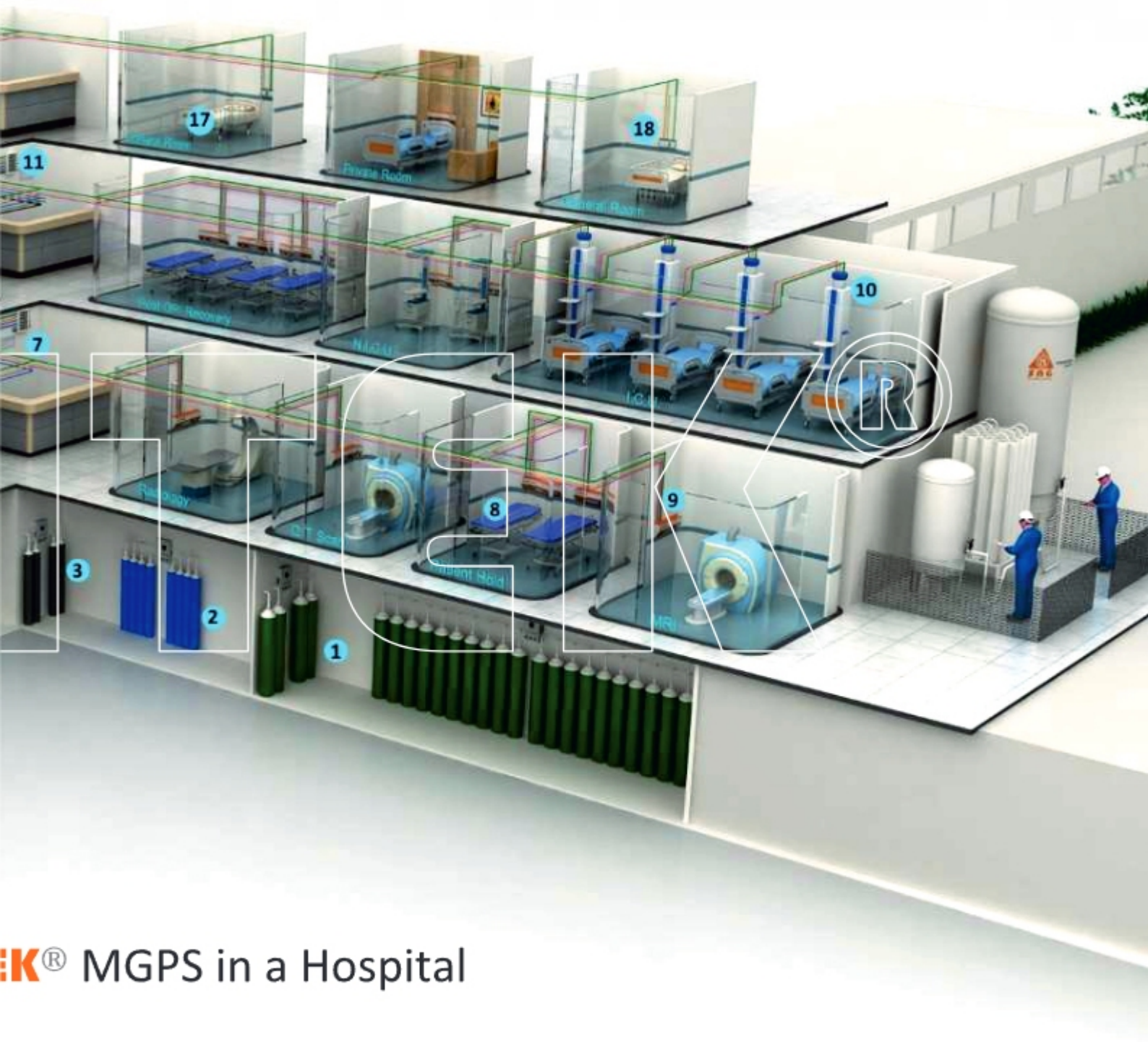

EK® MGPS in a Hospital

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Terminal Outlets

MEDITEK® DIN Gas Outlets

Other Standards

German Standard

British Standard

Ohmeda Standard

Mounting Options

Console

Installation Bracket

Flush Mount

Surface Mount

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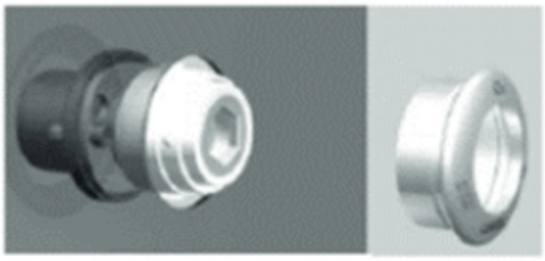
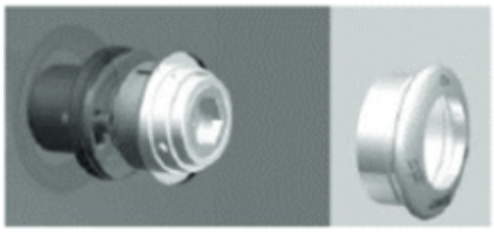
Design Schematic – Terminal Outlets

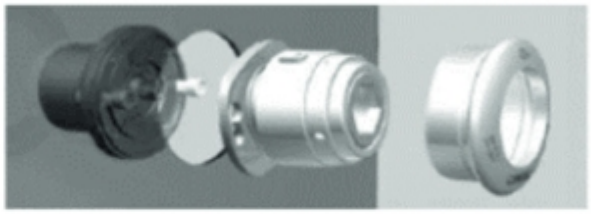


1. Pull the pressure lid off



2. Loosen the two retaining bolts 2-3 mm

3. Pull out the body at an angle



4. Replace the sealing ring without disassembling the panel mount

Probes / Connectors

DIN

British

Ohmeda

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Isolation Valves / Areas Valve Service Units

Copper seamless pipes are intercepted by the Area Valve Service Units [AVSUs] and Area Alarm Panels [AAPs]. AVSUs are placed in each clinical sector, to cutoff the gas delivery to the area beyond it during maintenance or to handle emergency. AAPs display the line pressures and have audiovisual alerts.

- Fully isolate area in emergency, maintenance, extension etc
- Valves housed in secured metallic box
- Full bore ball valves are medical compatible and comply with Pressure Equipment Directive 97/23/EC
- Flared tube ends for easy insertion of connecting tube
- Stub ends covered for dust protection
- Acrylic window for clear visibility of in-line pressure reading
- Window breakable in case of emergency

Conforms to: BS EN 331 : 2015
IS / ISO 7396 - 1 : 2016 + A1 : 2017

Certifications: ISO 13485:2016 – Medical devices – Quality Management Systems
ISO 9001:2015 - Quality Management Systems

Conforms to	BS EN 331 : 2015, IS / ISO 7396 : 2016 + A1 : 2017				
Flow rate @ 4.2 bar (max.)	1500 LPM				
Maximum Pressure	30 bar				
OD of Stub end	15 mm (22 mm for Vacuum)				
Length of Stub end	75 mm each side				
Tighten proof	50 bar				
Closing / Opening of Valve	90° (1/4th turn)				
Working Temperature	-20 °C to 60 °C [-4 °F to 140 °F]				
Gases	O_2, N_2O, AIR 4, AIR 7, CO_2, Mixed Gases & Vacuum				
Regulatory Status	Complies with Medical Devices Directive 93/42/EEC and Pressure Equipment Directive 97/23/EC				
Overall dimensions (in mm)	2 Gas	3 Gas	4 Gas	5 Gas	6 Gas
(L × H × W)	375 × 270 × 142	375 × 360 × 142	375 × 450 × 142	375 × 540 × 142	375 × 630 × 142

Valve box with side entry for 2 Gases - Oxygen / Vacuum
Valve box with side entry for 3 Gases - Oxygen / AIR 4 / Vacuum
Valve box with side entry for 4 Gases - Oxygen / N_2O / AIR 4 / Vacuum
Valve box with side entry for 5 Gases - Oxygen / N_2O / AIR 4 / AIR 7 / Vacuum
Valve box with side entry for 6 Gases - Oxygen / N_2O / AIR 4 / AIR 7 / CO_2 / Vacuum

NOTE : Contact for customization

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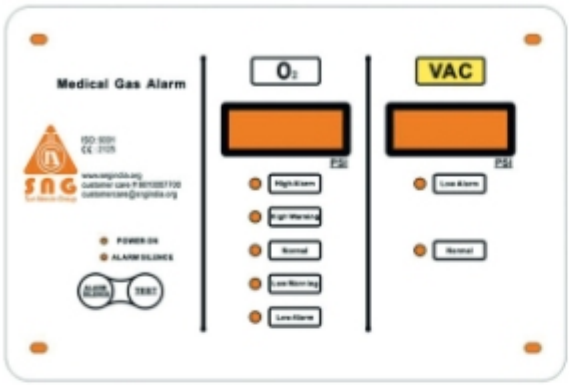
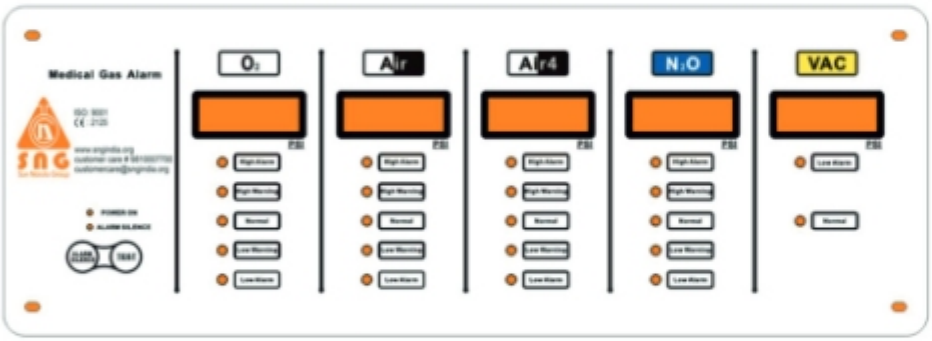
Alarm Modules





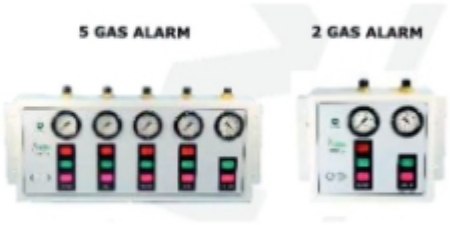
Microprocessor Based Digital Alarm: It has been designed for integration with the master alarm of central information system which have 16 zone display facility. Although nominal pressure is pre-set in factory, but high & low alarm triggering range can be varied through re-set button in consultation with the health care personnel.

External power adapter that accepts 240 V AC (50 Hz) as the input voltage and delivers output voltage of 12V DC, required only for auditory & Visual signals.

Features:

- Gas specific temperature compensated silicon pressure sensor.
- Operating temperature range - °C [°F]: -40 [-40] to 85 [185]
- Humidity: (Dry gases): 0% to 95% RH, non-condensing
- Accuracy: ± 0.25% full scale span
- Total error band: ± 2% full scale span
- High/Low set points- Set points shall be adjustable by two on board push buttons.

Analogue Alarm: Analogue Alarm which sense the set pressure deviations through pressure switch.



Modular Area Valve Service Unit (AVSU) with integrated Local Area Alarm

- Microprocessor based module
- Highly accurate "Heavy Duty" pressure transducer
- Designed to serve 2, 3, 4 & 5 gas module
- Digital & illuminated LED display of "Normal", "High" & "Low"
- Digital pressure unit display options - psi / bar or kg/cm
- Adjustment & parameter setting by touch button
- Operational parameters can be set in-situ
- Audio mute option
- Reusable lock assembly
- Powder coated aesthetically designed enclosure
- Enclosure separable from the base for ease of installation
- Front door opens up vertically for comfortable access
- PED: 2014/68/EU certified full port Ball Valve (PN 30)
- Long extension copper pipes to connect MGPS network

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ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

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Alarm Module – Touch Panel

Microprocessor Based Digital LCD Touch Screen Alarm:

Highly visible 7" (178 mm) LCD screen
Alarms can be monitored audio-visual
Comprehensive monitoring of all the medical gas alarm panels
Alarm status will be visible through ethernet port on master alarm
Programmable pressure unit display (bar, kg/cm & mmHg)
Designed to serve 2, 3, 4, 5 & 6 gases including Vacuum
Powered by 220V AC to 24V DC external adapter
Operational parameters i.e., high and low level can be set "in-situ" to suit requirement in an area

Conforms to:
IS / ISO 7396 - 1: 2016 + A1: 2017
HTM 02-01 Part A, IS / ISO IEC 60601 - 1: 2015 + A1: 2020
Pressure Equipment Directive 2014/68/EU

Pressure sensing through piezoresistive sensing technology
Touch screen operation
Data display at a central monitoring station
Real time updating of status
Audio mute option
NIST connection for Gas input

Conforms to	IS / ISO 7396 - 1 : 2016 + A1 : 2017, HTM 02-01 Part A & IS / ISO IEC 60601 - 1 : 2015 +A1 : 2020
Body	Fire retardant dust-proof CRCA 18 SWG steel enclosure (NEMA 1 Enclosure)
Finish	Powder coating - Enclosure RAL 7035 grain finish
Mounting type	Horizontal - Surface mountable (Cover opens up horizontally)
Enclosure dimensions	330 × 250 × 100 (L × H × T in mm)
Gas services	2, 3, 4, 5 & 6 Gas including Vacuum
Gas & Vacuum connection	NIST connection for gas input
Power connection	External 220V AC (50 Hz) to 24V DC adapter for audio visual display
Warning system	Microprocessor based warning module should be adjustable in-situ to set operational parameters and digital pressure unit in psi / bar or kg/cm²
Touch Screen Display	Digital & illuminated touchscreen display for "Normal", "High" & "Low" with High/low alarm set-point for each gas (Low only for Vacuum) service Visible display coupled with audio warning in case of preset with the provision of "Mute" audio signal for 15 minutes max
Sensors	Fully calibrated and temperature compensated application specific Integrated Circuit signal conditioning (in a brass housing) Pressure Sensors a. Total Error Band: ±1.0% FSS (Full Scale Span) from -20 °C to 85 °C [-4 °F to 185 °F] b. Sensing pressure span : 60 mbar to 10 bar [1 psi to 150 psi] Digital Output c. Temperature span : -30 °C to 50 °C [-22 °F to 122 °F]
Information & Control	The information of alarm, current status & test conditions through "Touch Screen"
Display & Audio blocker	Provision to block display & audio signal of a particular supply line for long service period is built-in
Earthing	Protective earth
Protection	Class II & IP54

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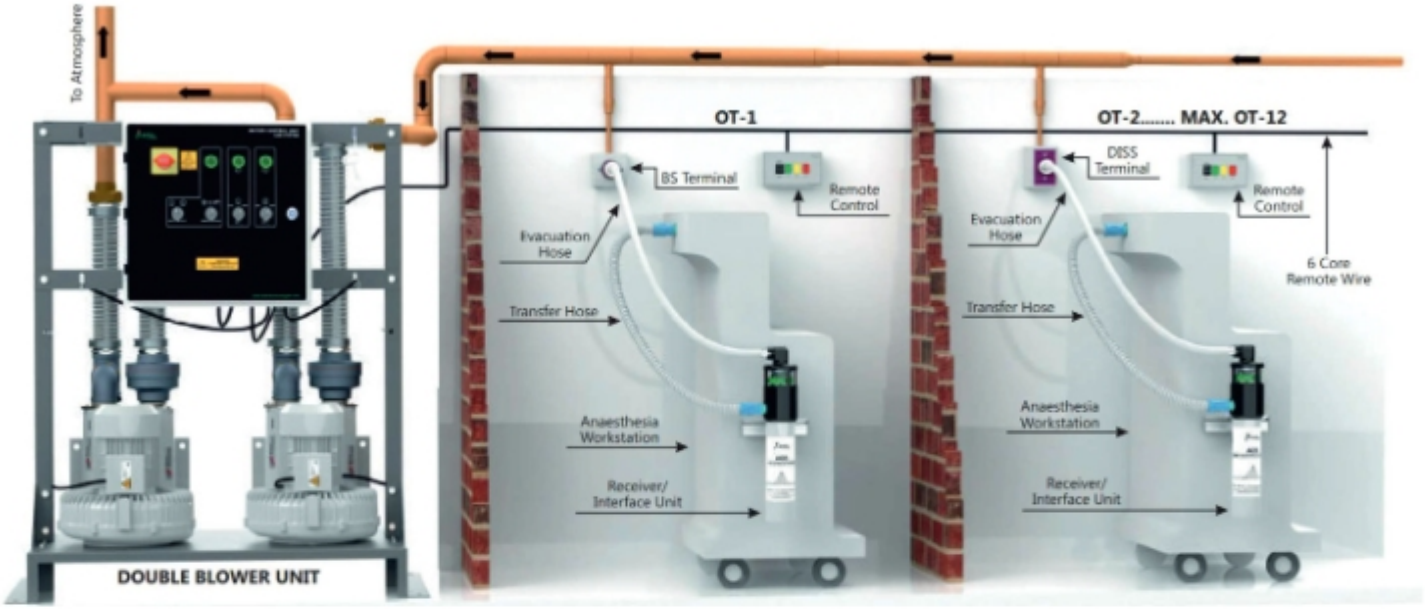
AGSS Units



Anesthetic Gas Scavenging

Anesthetic gases are considered to be substances hazardous to health as per the Control of Substances Hazardous to Health Regulations 2002 except where they are administered to a patient in the course of treatment. Exhaust of both the systems should be carefully positioned away from the windows and intake of air compressors and ventilators. To control the greenhouse effect of the anesthetic gases, the anesthetic gas scavenging systems should incorporate a canister system which captures the unused gases, filters, and recycles them. The evacuation process is intended to reduce the exposure of healthcare personnel and provide a safe, healthy workspace by controlling occupational exposure to waste anesthetic gases. AGS units are available in Single Blower (MONO) and Double Blower (DUO) configurations. These are dedicated low velocity evacuation and disposal system for collection of excess gases from one or more Operation Rooms and discharged to the outdoor atmosphere.

The powerful side channel exhaust blower makes the unit very compact, reliable and creates sufficient negative pressure, so that cross-contamination does not occur in a dedicated pipeline where multiple ORs are connected.

Special Features

Robust & Compact design
User friendly controller
Low 110V Remote Switches
Compliance: MDR 2017 / 745
Choice of Single or Double Blower Unit
High performance side channel blowers
Optional Simple & Durable remote start switches
Optional Remote operation from multiple OTs available
Optional Receiving unit with Transfer & Evacuation Hose recommended for each OT to AGS

MONO or DUO are part of active evacuation and disposal system which can produce high capture levels and removal at the source eliminates the possible long term health hazards for the exposed medical staff in hospitals, stand-alone operating rooms, recovery rooms, dental operations etc. These are most suitable onsite disposal systems for health care facilities that have multiple operating suites. AGS unit "DUO" is a double unit set-up wherein, one unit is in operational mode while other unit is in stand-by mode but DUO has additional advantage of automatically supporting the operating unit in case of higher demand and remains operational till restoration of normalcy. It also offers a choice to pre-select operative & stand-by mode.

DOUBLE BLOWER UNIT

Type	System Capacity	Electrical Input	Power
Mono	650 LPM	3 Phase, 345-415V 50Hz	0.85 kW
Mono	1300 LPM		1.3 kW
Mono	2080 LPM		1.6 kW
Duo	650 LPM	3 Phase, 345-415V 50Hz	0.85 kW
Duo	1300 LPM		1.3 kW
Duo	2080 LPM		1.6 kW

Note: Suction capacity measured at intake of the unit at -125mbar (-1.5psig approx.)

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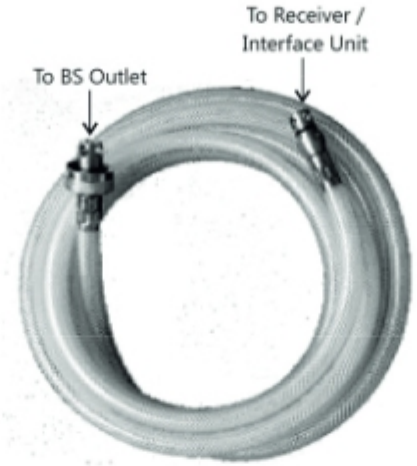
AGSS / WAGD Accessories

Anaesthetic Gas Scavenging Unit i.e. vacuum source plant (AGS MONO & AGS DUO) require accessories to make the system work effectively. Other than the vacuum source, accessories associated with the unit are optional. (Pipework excluded)

Harmony-Receiver / Interface Unit
Conforming to IS/ISO 80601-2-13:2011+A2:2018



3m BS Compatible AGSS Evacuation
Hose Assembly (5m on request)

Kink-resistance transfer hose
with a pair of 30 mm conical (ISO).
Male & Female connector.

Harmony-Receiver / Interface Unit with Transfer
& Evacuation Hose assembly (3m) conforming
to IS / ISO : 80601-2-13:2011+A2:2018

Remote Control Switch

Scavenging Connector for
Transfer Hose - 30 mm
ISO Conical Male & Female (Pair)

AGSS Outlet - DISS

AGSS Outlet - BS

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Other Accessories

Suction Jars

Capacity (Litre)		Dimensions			
Jar	Fill	A	B	C	D
1	0.8	127	105	168	195
1	0.8	127	105	168	217
1.75	1.0	160	140	150	181
1.75	1.0	160	140	150	203
2.25	1.75	160	140	214	244
2.25	1.75	160	140	214	266
4	3.5	160	140	363	394
4	3.5	160	140	363	416

Humidifier Bottle

- A passive process to humidify dry therapeutic gas (Category 3 Humidification)
- Micro bubbles through humidifier for efficient humidification
- Optimal RH achievable at various flow settings
- Autoclavable at 121°C (249.8°F) for 5 minutes (Minimum 5 autoclave cycles)
- Over pressure safety valve
- Flow: Up to 15 lpm @ 4 bar (58 psi) Construction material: Polycarbonate
- Capacity - 240ml at max water level (Jar 450ml)
- Patient connection port: Tapered hose barb suitable for 6 mm inner diameter plastic tubing
- Inlet connection port: DISS female adapter with chrome plated Brass nut embedded in ABS for hand-tightening

Suction Regulators

Description	Controllable Range (mmHg)	Gauge Range (mmHg)	Free Flow (lpm)
Adult regulator with analog gauge and trap bottle + filter	0-300	0-760	0-60
Pediatric regulator with analog gauge and trap bottle + filter	0-100	0-300	0-40

Adult regulator with analog gauge and trap bottle + filter

Oxygen Flowmeters

- High flow (HFOV) to improve oxygenation
- Stand-alone use
- Compatible to Air-oxy blender
- Precise flow
- Mount options
  - Direct onto the Outlet with choice of probes
  - Pole - Wall, Medical Rail, Pendant, Floor stand

Suction Trolley

Ward Vacuum Unit

HP & LP Hose Tubes

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Bed Head Units

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Ceiling Supply Pendants & Bridges

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