



SIMPLEX



DUPLEX

Conforms to: IS / ISO 7396-2 : 2007, IS / ISO 80601-2-13 : 2011 + A2 : 2018
HTM : 02-01 Part A

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





AGS System - Simplex and Duplex

Anaesthetic Gas Scavenging Systems

SKUMAR MEDICAL offer anaesthetic Gas Scavenging (AGS) System which are intended to provide a continuous low level vacuum supply to pipeline systems in healthcare facilities for the removal of waste anaesthetic gases captured from patient breathing circuits via AGS receivers. The plant shall be a simplex configuration such that the vacuum supply is maintained in single fault condition. The stated volumetric flow rate shall be delivered with one blower running.

AGS Plants shall comply with BS EN ISO 7396-2 | BS EN ISO:80601-2-13:2012 & HTM:02-01 PART A

The entire AGS Plant shall be skid mounted, fully assembled and factory tested as a complete system. A test certificate shall be provided showing the results of all tests, which shall include the free-air flow rate obtained with the system delivering a working pressure of -125 mbar gauge.

Regenerative Blowers

One sized regenerative blower shall be provided. The blower shall be oil-less, air cooled side channel regenerative type, suitable for both continuous operation and frequent start/stop. The motor shall be directly coupled to a fully enclosed impeller with contact free operation. All bearings shall be sealed and greased for life, requiring no further lubrication in service. The motor shall also be afforded protection by means of a thermal overload relay with a manually reset function.

Motor Control Panel

The plant control unit shall incorporate a Switch Mode Power Supply to provide a nominal 24 V DC electrical supply to all internal controls and remote start switches and Main Isolator Mounted on control panel door.

The vacuum level at the plant inlet shall be displayed on "0.56" inch Seven Segment Display mounted on the plant control unit. The display measure range between 0 to -1000mbar gauge pressure and have an accuracy of +/-25% of the full scale span.

Vacuum Regulation Valve

The pipeline vacuum level shall be regulated by a vacuum relief valve fitted to close to the interface with the pipeline system. The valve shall incorporate a wire mesh filter to prevent ingress of large particulate, thereby protecting the impeller and housing.

At the pump outlet, the exhaust pipe shall be provided with a polymer coated autoclavable Pyrex drain flask at the lowest point.

Remote Control Box

Remote control box shall be connected in parallel such that the plant can be operated from any switch and the plant will continuously operate until all switches are turned off. Option for wireless remote control box also available on request.

Building Management System Contacts

Means shall be provided to enable plant status

Indications to be relayed to a building management system (BMS) via an optional BMS relay module (supplied separately on request) with both normally open and normally closed volt-free contacts.

TECHNICAL SPECIFICATION:

MODEL	TYPE	SYSTEM CAPACITY	ELECTRICAL INPUT	POWER
-------	------	-----------------	------------------	-------

Single Blower Unit

AGSS-M650	SIMPLEX	650 LPM	415VAC-50HZ-3PHASE	0.85Kw
AGSS-M13H	SIMPLEX	1300 LPM	415VAC-50HZ-3PHASE	1.3Kw
AGSS-M20H	SIMPLEX	2000 LPM	415VAC-50HZ-3PHASE	1.5Kw

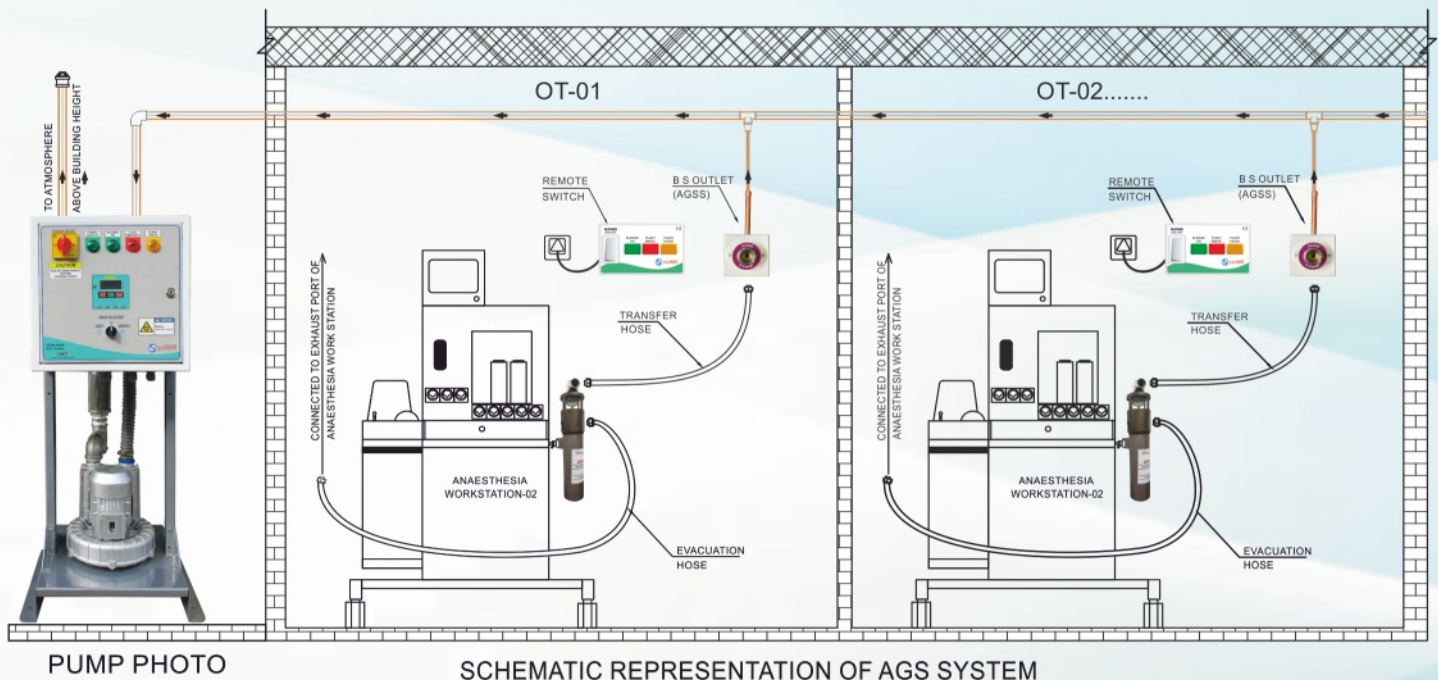
Double Blower Unit

AGSS-D650	DUPLEX	650 LPM	415VAC-50HZ-3PHASE	0.85Kw
AGSS-D13H	DUPLEX	1300 LPM	415VAC-50HZ-3PHASE	1.3Kw
AGSS-D20H	DUPLEX	2000 LPM	415VAC-50HZ-3PHASE	1.5Kw
AGSS-D25H	DUPLEX	2500 LPM	415VAC-50HZ-3PHASE	2.2Kw
AGSS-D35H	DUPLEX	3500 LPM	415VAC-50HZ-3PHASE	3.7Kw

Key Features:

- ◆ Factory Tested.
- ◆ Compact Design.
- ◆ High Quality Components.
- ◆ User Friendly Controller.
- ◆ Simplex & Duplex operating with 24VAC control supply for safety purpose.
- ◆ 0.56" display for pipeline vacuum pressure.
- ◆ Option for Wired / Wireless Remote Start switches.
- ◆ Drain jar fitted to each exhaust port.

AGS System required some essential accessories to work effectively. A simplified Schematic represents the additional components as shown below.





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



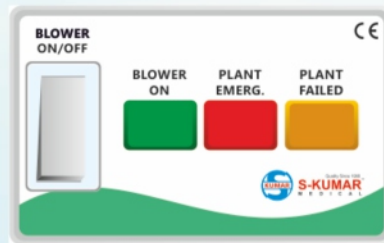
3m BS Compatible AGSS Evacuation
 Hose Assembly (5m on request)



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



AGSS Outlet - BS



Wired / Wireless Remote
 Control Box



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

Benefits:

- ◆ Accessible mounting holes provide Easy installation.
- ◆ Factory pre piped ,wired and tested for assured reliability.
- ◆ It also offers a choice to pre-select operative & stand-by mode.
- ◆ Designed with minimal pressure drop for better plant performance.
- ◆ Easy to maintain and prevent large dust particles from entering the pump.



S-Kumar Engineering Works

Register office:

14, Raju naidu 2nd street
Behind Lotus Hyundai Showroom
Ganapathy, Coimbatore - 641006

Machinery unit:

7/50-3, Keeranathan Road
Opposite to CRI RANSAR Ltd
Keeranatham, Coimbatore - 641035

Fabrication Unit:

7/18-G, Industrial Estate
Keeranatham Road
Coimbatore -641035

+91 9894430303, +91 422 2330358 | skumarengg@yahoo.com, skumarengineeringworks@gmail.com

www.skumarmedical.com