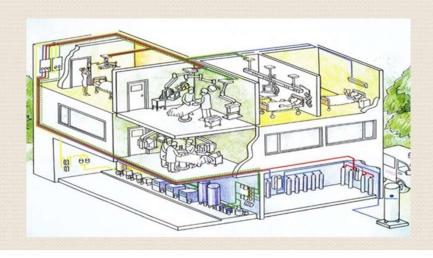




LSS ENGINEERING

Engineering Solution for LIFE SUPPORT SYSTEMS



Contact Us

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Website: www.lssengg.com

PROFILE

ABOUT US

LSS Engineering is a name synonymous with quality and reliability when it comes to offering the latest and unmatched quality solutions for building infrastructure. We are considered the one-stop destination for Medical and MEP Projects. We are highly experienced and professional of SITC of MGPS, MOT, NCS, Fire Fighting, Fire Alarm System, HVAC System and complete MEP Projects. We are serving to this industry since 06 years

OUR MISSION

We work on the mission of raising our standards high in terms of client service and quality product. Our unit is formed on three pillars and these are honesty, transparency and quality

OUR STRENGTH

- Variety of high quality Services under one roof.
- Clients best satisfaction .
- Best service assured
- We do work in all over India

OUR PRODUCTS & SERVICES

Central Medical Gas Pipeline System:

We undertake Designing, Supply, Installation Testing and Commissioning of all Type of Medical Gas Pipeline System

Pre-fabricated Modular Operation Theatres:

We undertake to provide Anti-Infection and Bacteria free infrastructure, a clean room based concept for Operation Theatres, IVF and Diagnostic Labs with state of the art equipments and accessories as per international quality and standards.

Operation & Running of Central Pipeline System for Medical Gases:

We undertake to provide our Man-Power to run your Central Medical Gas Pipeline system round the clock.

Advanced Nurse Call System: With & without voice communication.

HVAC SYSTEMS, VRF, VRV, DX TYPE, CHILLER BASED ETC

Sprinkler System

Fire Hydrant System

Automatic & Manually Fire Alarm System

FM-200 Waterless Fire Protection

Co2 Gas Flooding System

OUR MAJOR CLIENTS (STATE WISE)

- KGMU HOSPITAL, LUCKNOW, UP
- BREDTH GROUP, BIHAR
- SADAR HOSPITAL, JHARKHAND
- ROYALE HOSPITAL, DELHI
- FLINT INDIA, DELHI (PROJECT IN ASSAM)
- BHAGWAN MAHAVIR HOSPITAL, ROHINI, DELHI
- DR. MANISHANKAR HOSPITAL, DARBHANAG, BIHAR
- OXYGEN HOSPITAL, DALSINGH SARAI, BIHAR
- CHAUDHRY HOSPITAL, GREATER NOIDA, UP

Project Designing and Implementation

□ Pre-Project Documentation

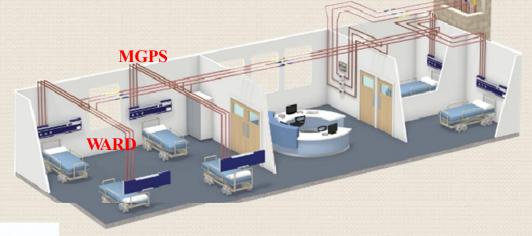
Site Surveys and joint meetings with all Concerned, Architects, Planners and with End Users for their overall inputs, choice of technology and Budget.

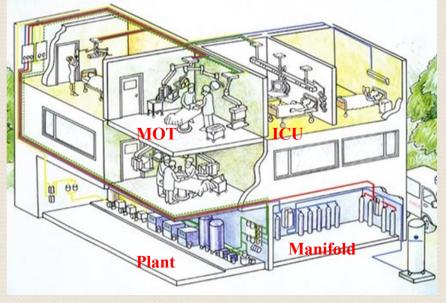
LSS designs the total System as per Client requirements and submits complete detailed proposal with CAD drawings for approval.

□ Project Execution

- Submission of shop drawings for client Approval.
- Allocation of Project Manager, Site Engineer, Site Supervisor and Project Execution Team as per Project Size and Completion Schedule.
- Material Procurement and Delivery strictly as per schedule.
- Joint meetings with Client on regular basis for project progress updates.
- Supply, Installation, Testing & Commissioning and handing over the System as per completion Schedule.

Medical Gas Pipe line System Specimen Sectional View of Hospital





- 1. Manifold
- 2. Plant
- 3. MGPS
- **4. MOT**
- 5. ICU
- 6. Ward

1. Manifold

Manifold Based Gas: O2, CO2, N2O (4 bar pressure)







Control Panel

- 1. Fully Automatic
- 2. Semi Automatic

This is used for uninterrupted gas supply



Manifold Left and Right Gas Bank



empty then automatic supply start from right side and in the mean time empty cylinder can be replaced





2. Plant

Plant Based Gas: Air 4 bar, Air 7 bar, Suction, AGSS

COMPRESSOR

- 1. Reciprocating Comp.
- 2. Scroll Comp.
- Compressor used to supply Medical Air 4 bar and 7 bar
- Medical Air Plant is NFPA 99 / HTM and NEC compliant system
- Air cooled design, no oil used in operation of the compressor so the discharge air is 100 % oil free

MEDICAL VACUUM PUMP

Oil free Rotary Vane

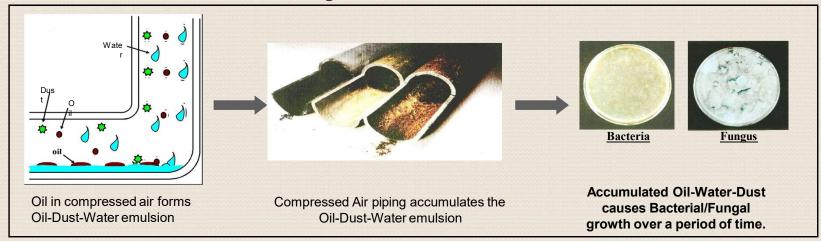
- Vacuum Pump used for suction pressure
- 100 % dry, Low noise level, Vibration free operation
- Package requires minimum Space



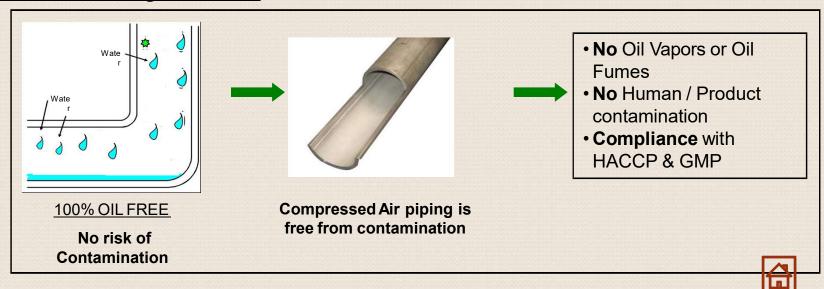


2.1 Why Oil Free Compressor Need?

Compressed Air with Oil Mist & Oil Vapors



100% Oil Free Compressed Air



3. MGPS (Medical Gas Pipe Line System)

Medical Gas Distribution System

Pipe Line : Copper pipe as per EN 13348

Copper Fittings : As per BS 864/ASTM (Medical Grade)

Copper Piping Sizes: As per HTM 2022 (e.g. 15 mm OD x 0.9 mm thick)/NFPA 99

Joining Method : Flux-less Silver Brazing

Brazing : Burning of Oxygen & D. Acetylene and purging of Inert Gas

(Nitrogen) through Copper Pipes during Brazing.





3.1 Fittings Material















4. MOT (Modular Operation Theater)



OT View



S. Pendant



S. Control Panel



OT Table



OT Table



X-Ray Viewer



5. ICU (Intensive Care Unit)





Flooring



ICU View



ICU Bed



ICU Curtain



Bed Head Panel

Medical Gas Alarms

- Area Alarms: Digital sensors, Illuminated LED display, Adjustable high/low set-points, Optional interface
- Master Alarms: Up to 60 functions in a standard configuration, repeat alarm adjustable, Optional interface
- Function: it gives alarm when supplied pressure goes above or below from the set point

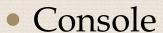




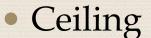
Medical Gas Outlet

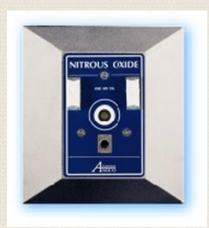














Ceiling Column

Console – DISS

Ceiling - DISS

Accessories













HVAC SYSTEM & & FIRE ALARM SYSTEM

HVAC SYSTEM

- An HVAC installation is designed to ensure the thermal and acoustic comfort.
- A building's occupants, use energy efficiently and comply fully with safety requirements.
- Installation design takes in to account the air exchange rates in the building, the number of its occupants and their activities, its interior characteristics and the materials from which it is constructed.

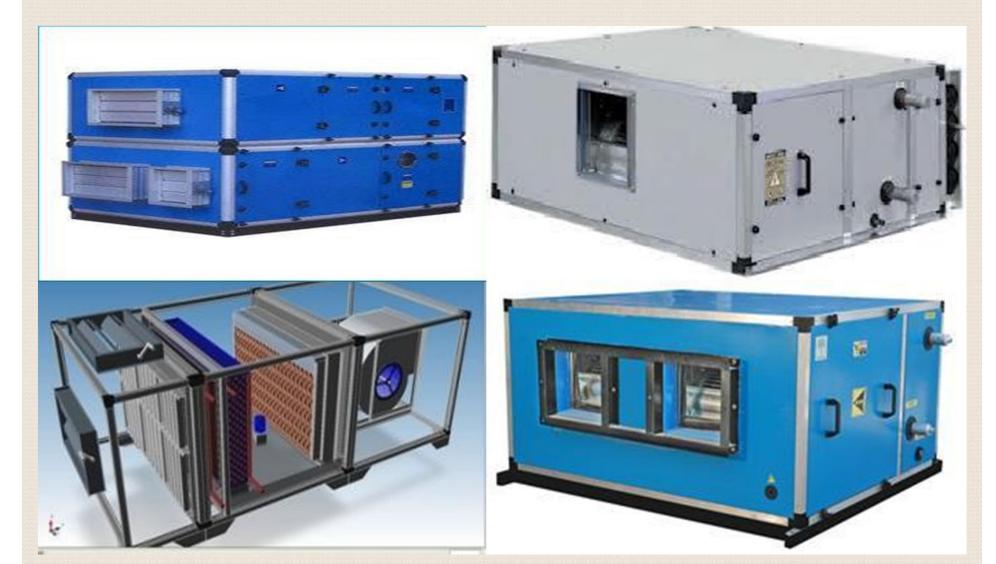
AIR DUCT SYSTEM

• Air Duct Systems In air conditioning systems the 'duct' is considered A static component of the installation through which air flows within the building, connecting all parts of the system and via which used or exhaust air is discharged.

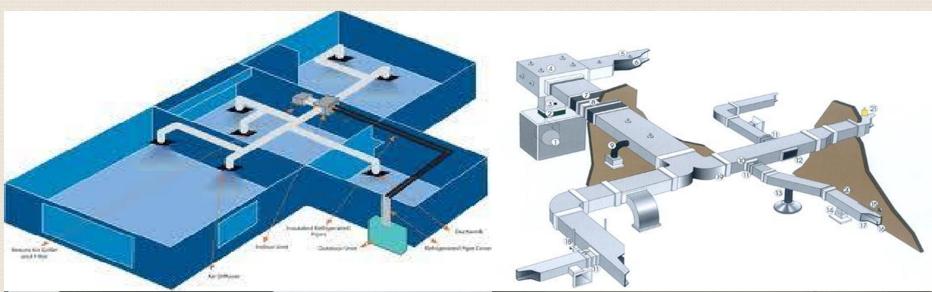
THE ADVANTAGES OF AIR DUCT SYSTEM

- Centralized filtration.
- Humidity control.
- Quiet operation all air handling equipment is centrally located allowing much simpler acoustic design.
- Centralized maintenance and easy installation filters, humidity systems, mobile heat exchangers and equipment all located in the same area.

HVAC EQUIPMENT



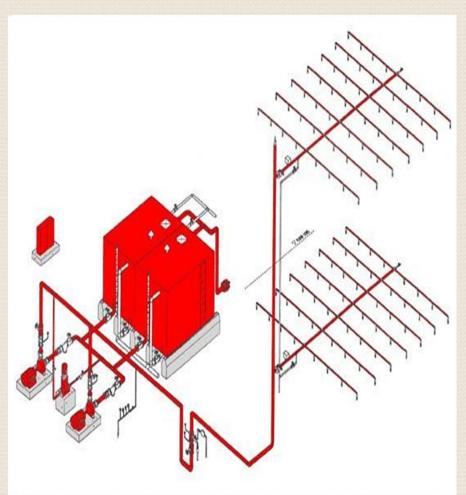
AIR DUCT SYSTEM







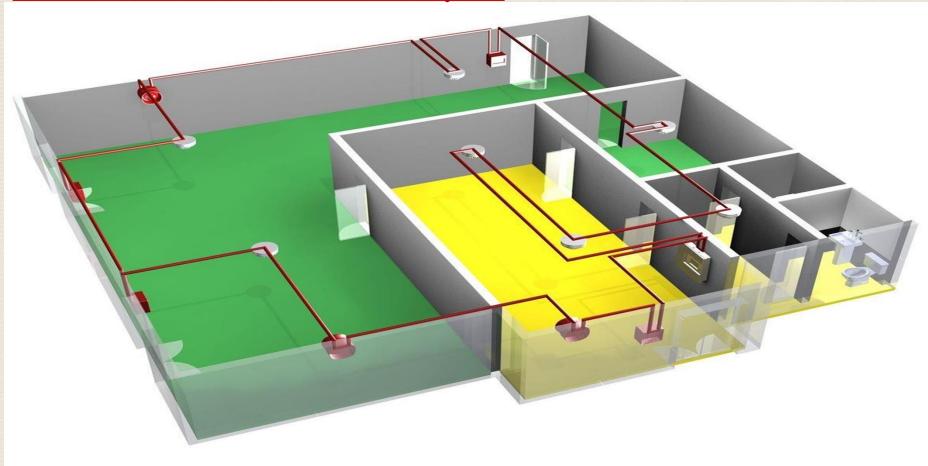
Sprinkler and Hydrant System



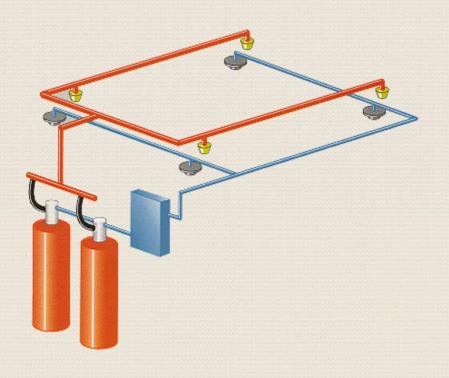


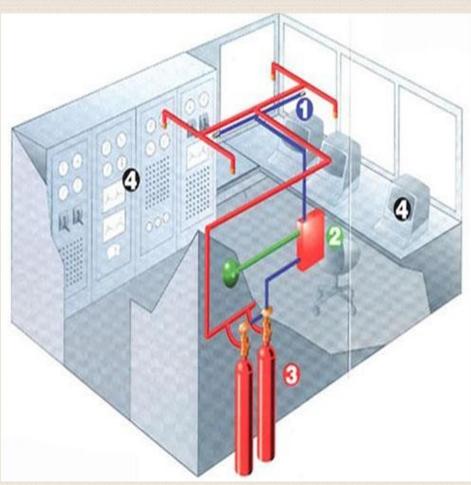
Fire Alarm System

Addressable & Conventional Fire Alarm System



CO₂ FLOODING SYSTEM





Thanks for Your Attention!