



DEPARTMENT OF MECHANICAL ENGINEERING

INDUSTRIAL VISIT REPORT

Date: 30-09-2019

OVER VIEW OF THE VISIT

A report based on an industrial visit organized by ISHRAE Thane chapter 28 SEPT 2019 to Advantek Air System located at Mankoli Naka Bhiwandi Thane for the students of Mechanical Engineering of ISHRAE-APSIT in order to enhance their practical skills and let them having an overview of the working functioning and application related to AIR HANDLING UNIT. Prof Kedar Yeole was the faculty incharge for this whole industrail visit.

COMPANY PROFILE

ADVANTEK AIR SYSTEM PVT.LTD

Advantek delivers a high quality Air Handling Units (AHUs) that are reliable ,engineered to the highest standards.

The air handling unit is a an integrated piece of equipment consisting oh heating and cooling coils,air control dampers ,filters and silencers, air handlings are often called ahu.the purpose of this equipment is to collect and mix out door with that returning from the building space.the air mixture is then cooled or heated ,after which it is discharged into building space.

Through a duct system air handler is normally associated with heating\cooling (HVAC)systems. They are normally mounted on the floor of roof mounted. This also includes the following fans, filters, cooling coils, humidifiers and energy saving instrumentals and technology.

- DOUBLE SKIN HORIZONTAL FLOOR MOUNTED UNITS
- HORIZONTAL CEILING SUSPENDED
- VERTICAL AIR HANDLING UNITS
- VENTILATION UNITS
- EVAPORATING COOLING SYSTEM



SMART AHU UNITS

- Key Features
- compact design with optimal running cost.
- high efficiency fans & motors with low noise.
- permanent magnet motors with variable frequency drive.
- customized solution based on end.
- users requirement suitable for all applications like pharmaceuticals, it, commercial offices etc.
- Low space requirement.
- minimal cabling.
- cost reduction as no controller hardware required.
can be integrated with fire alarm system.

Function

- Temperature control with outdoor compensation
- (free cooling).
- Demand controlled ventilation.
- humidity control.
- CO2 control.
- variable fan speed control.
- constant pressure control.
- constant air flow control.
- escan support.
- integration with fire alarm system.



CLEAN ROOM SYSTEM

Advantek's Modular Clean Room Systems interface with floors, ceilings, and mechanical components to provide an ultra-clean environment with effective control of airflow, pressure, temperature, humidity and filtration. They can be customized to match specific requirements and provide a cost-effective alternative to conventional construction without compromising quality, durability or efficiency.

Modular clean rooms also utilize a flexible design that allows for fast, easy installation in a system that can be expanded or relocated as needed. The Cleanroom partitions provides complete flexibility with demountable walls allowing panels to be modified or removed without disturbing adjacent wall panels or the ceiling.

All systems use similar components so the aesthetics are consistent throughout and both can be easily integrated with existing modular wall systems. Cleanwalls are typically used for general purpose applications like laboratories, pharmaceutical packaging rooms, machinery and equipment enclosures, paint booths, and other areas requiring a controlled environment. Advantek is a pioneer in making Cleanrooms affordable to all, without compromising on the quality and provides equipments that ensure quality and efficiency. We specialize in designing, manufacturing and supplying modular panels to construct walls and walkable and non-walkable ceilings.

Advantek Modular Panels are Bounded with Polyurethane Puff, with density of 37kg/m³. Available thickness 50MM,60 MM,80 MM and 100 MM in standard dimension 5000 MM X 1200M



CONCLUSION

We are thankful to our faculties for organizing such an informative event for us and is also crucial to make us technically sound and make us familiar with some technical jargons. We have learned about different kinds of AIR HANDLING UNITS, manufacture for HVAC system.