

Mechanical  
Electrical  
Plumbing

Fire Protection  
Fire Alarm System  
Security System

BIM Modelling

Energy Modelling

Company Profile



**Geometric Engineering Services**  
Engineering & Consulting

# About GES

GES headquartered in Vadodara, India is a leading engineering design, Consultancy and services company with commitment to client, quality design and technological innovation. From our local beginnings over 12 years ago to our vast international and domestic presence today, GES has enjoyed continuous growth and enrichment of its service offering. Every milestone reached has enabled us to better fulfil our purpose of preparing our communities and environment for the future.

We serve a diverse client base across a variety of market sectors. Our firm distinguishes itself as a operations-focused practice with experienced management leadership, expert technical resources and extensive portfolio of projects.

We are a full-service firm with the ability to lead complex projects at every stage — from process planning and design to construction. Our clients benefit from in-depth regional knowledge combined with deep experience in design standards, international best practice, innovation and cutting-edge, in-house technology.







## Market Served

We aim to improve the value of the services we provide, creating a closer partnership with our customers and sharing tailored solutions according to their needs that perform under all conditions to ensure the best possible match for client needs at lowest life cycle costs.

### Key Markets Served

- Automotive
  - Aviation
- Commercial
- Education
  - Energy
  - Food
- Government / Institutional
- Healthcare

### Services

Mechanical, Electrical & Plumbing  
Fire Protection, Fire alarm & Security System  
Design  
BIM Modelling  
Energy Modelling





# Mechanical, Electrical and Plumbing

GES offers mechanical, electrical and plumbing engineering for all types of industrial sectors according to our clients specific requirements. We work in close collaboration with the entire project team, ensuring optimal integration of all systems.

Our expertise covers every aspect of MEP engineering. Mechanical engineering is an important aspect of our integrated offering, including heating, ventilation and air conditioning (HVAC); computational fluid dynamics (CFD) modelling; rainwater and waste disposal systems; environmental control; building automation systems and controls; energy master-planning; and air filtration, among others.

Our electrical engineers' expertise ranges from energy usage analysis, electrical installations and power systems, to resilient utility network design.

Our specialists understand that plumbing engineering is essential in preserving public health and provide solutions ranging from design of potable water systems in high-rise buildings to pharmaceutical grade water for injection (WFI) systems; and from gas systems distributed throughout hospitals to buildings waste collection and treatment systems.

## MECHANICAL

Equipment Sizing	Centralize chill water plant design
Cogeneration System Design	Centralize heating hot water plant design
Trigeneration System Design	Centralize steam system design
Clean Room Design	Compressed air system design
Heat Recovery System Design	Water Cooled System Design
Custom Air Handling Unit Design	Air Cooled AC System Design
Ventilation System Design	VRF System Design
Outside Air System Design	High Pressure Steam
Laboratory Exhaust System	Low Pressure Steam
Commercial Kitchen Hood Exhaust	Passive House Certified
Indoor Air Quality Filtration	LEED Certified
Commercial Kitchen Hood Exhaust	Net Zero Certified
Indoor Air Quality Filtration	Thermal Load Calculations
	Pressure Drop Calculations


## ELECTRICAL

Lighting Design
Power Distribution Network
Emergency Generator Design
Electrical Riser Design
Security System Design
Intercom System Design
Low Voltage System Design
Lighting Design
Energy Analysis
Lighting Controls
Power System Study Analysis (Short Circuit, Coordination, Arc Flash)
Audio Visual Design
Grounding System Design

## PLUMBING

Hot Water System Design
Cold Water System Design
Vent Piping Design
Sanitary System Design
Commercial Kitchen Design
Commercial Laundry Design
Rain Water Harvesting System Design
New Gas/Water/Gas Service
Gas Piping Design
Plumbing Riser Diagram
Plumbing Fixture Schedule
Hot Water Heater Design



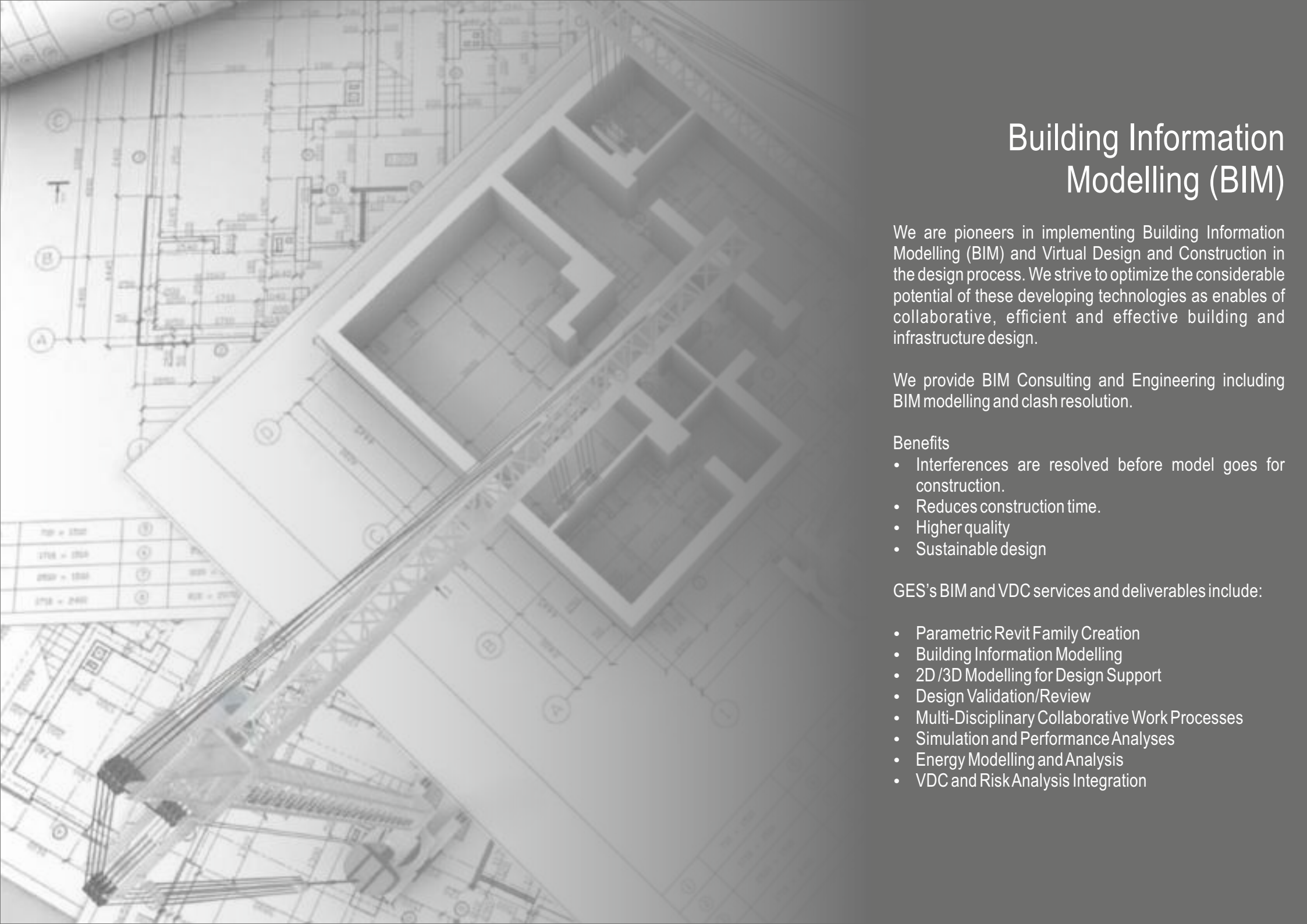


# Fire protection Fire alarm Security systems design

GES Provides fire protection, fire alarm and security system design and engineering services for major projects in USA, Middle east and India. We have in-depth knowledge of NFPA, FM Global, NBC of India, IS standards. Our engineering services include fire protection engineering services, Foam system design, fire pump house design, hydraulic calculations, fire hydrant system design, fire alarm system design.

## Expertise:

- Wet & Dry Sprinkler System Design
- Fire House Reel System Design
- Pump House & Fire Hydrant System Design
- Hydraulic Design of Wet and Dry Protection System
- Pre-Action System Design
- Foam System Design
- Clean Agent System Design
- Dry Chemical Powder Design
- Fire Alarm System Design
- Fire Alarm System Design



# Building Information Modelling (BIM)

We are pioneers in implementing Building Information Modelling (BIM) and Virtual Design and Construction in the design process. We strive to optimize the considerable potential of these developing technologies as enablers of collaborative, efficient and effective building and infrastructure design.

We provide BIM Consulting and Engineering including BIM modelling and clash resolution.

## Benefits

- Interferences are resolved before model goes for construction.
- Reduces construction time.
- Higher quality
- Sustainable design

GES's BIM and VDC services and deliverables include:

- Parametric Revit Family Creation
- Building Information Modelling
- 2D /3D Modelling for Design Support
- Design Validation/Review
- Multi-Disciplinary Collaborative Work Processes
- Simulation and Performance Analyses
- Energy Modelling and Analysis
- VDC and Risk Analysis Integration



# Energy Modelling

Energy modelling enables you to assess the energy consumption of your building zeroing down to specific systems like HVAC and lighting in a bid to determine the energy saving features that are most cost effective. Energy modelling allows you to select and optimize the systems for maximum performance and make better and informed decisions when it comes to designing.

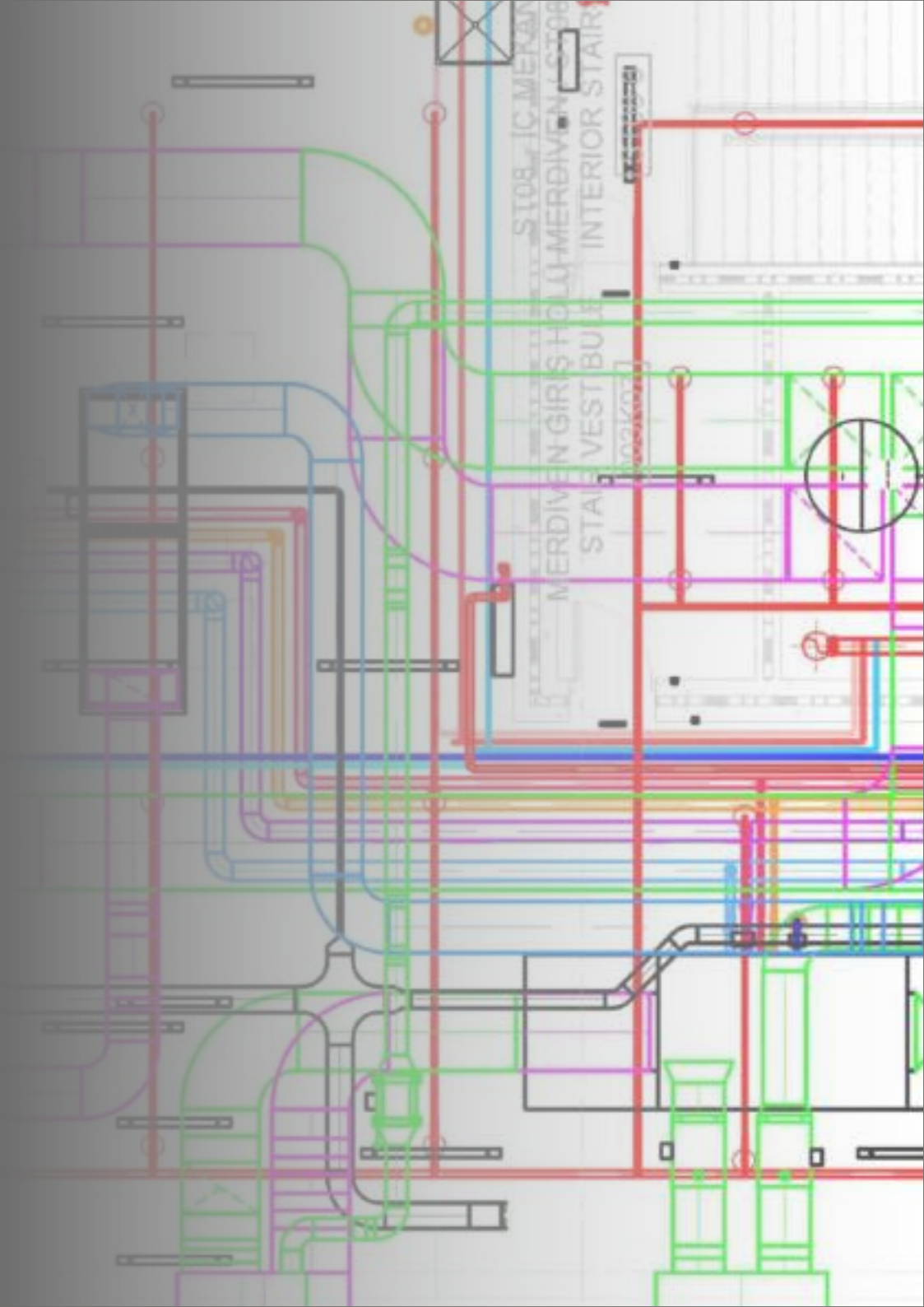
Energy modelling goes a long way in identifying the least expensive methodologies you can use to create an energy efficient home and get LEED or ILFI Zero Energy Certifications.

GES is a leading energy modelling firm specializing in creating energy efficient structures that strike the perfect balance between value and cost. We carry out several simulations based on our energy modelling to identify the opportunities for lower costs without compromising the functionality of your systems. Our team uses advanced solutions such as Quest and Excel Models to develop effective energy models which presents the real picture of your property.

We can help you to optimize energy consumption for the highly efficient buildings based on the information of our energy models. We invite you to join us in our endeavor of creating green buildings for a bright future free from the hazards of climate change and calamities.

## Benefits:

- Energy modeling assesses the various systems of your building to determine the most efficient and cost saving ones.
- Energy modeling can go a long way to educate building owners and property managers about the operating characteristics of the building before they take possession.
- Understanding total cost of ownership.
- Achieve Green Building certification goals.
- Cost savings.
- Proving quality of equipment and materials.
- Environmental impact.



## Representative



Jigar, Director of Design is a seasoned professional with over 12 years in the field, brings to the team a wealth of diverse international and domestic project experience.

Mr. Kothari has over twelve years of experience with most of his focus in Project Management and design of HVAC, Plumbing and Fire protection systems. His design experience includes, Automobile Plants, Pharmaceutical plants cleanrooms design, commercial facilities, various industrial plants, commercial and green buildings.

The vast range of skills and specialist knowledge found among together with experience of local, national and international projects, means can offer clients technical solutions tailored to local conditions that are one step ahead, that boost their competitive edge and are fully compliant with international standards.

## Major Projects Experience

### Jigar Kothari

Design Director

[jigar@geometricges.com](mailto:jigar@geometricges.com)

+91 76985 80730

### Key Achievements

Appreciation letter - Ford India Pvt. Ltd.  
Appreciation in Ghafari's newsletter

### Market Expertise

Aviation  
Industrial + Manufacturing  
Health + Wellness  
Workplace  
Automotive



**MAS GMR – Aircraft maintenance complex, Hyderabad, Telangana, India**

**CAPABILITIES:**  
1,50,000 Sq. Ft.

**PROJECT SCOPE**  
Mechanical HVAC, Plumbing  
Fire Protection



**Ford Motor Company, Sanad, Gujarat, India**

**CAPABILITIES**

**PROJECT SCOPE**  
Mechanical HVAC, Plumbing  
Fire Protection





## Representative



**AMMROC – US Defence MRO Complex**, Al Ain, Abu Dhabi, UAE

**CAPABILITIES**  
1,50,000 Sq. Ft.

**PROJECT SCOPE**  
Mechanical HVAC, Plumbing



**General Motors**, Silao, Mexico

**CAPABILITIES**

**PROJECT SCOPE**  
Mechanical HVAC, Plumbing  
Fire Protection



**Turkish Airlines**, Istanbul, Turkey

**CAPABILITIES:**  
72,00,000 Sq. Ft.

**PROJECT SCOPE**  
Mechanical HVAC, Plumbing



**Abu Dhabi Airport Expansion**  
Abu Dhabi

**CAPABILITIES**

**PROJECT SCOPE**  
Furniture, Fixture and Equipment system Engineering



## Representative



### Nilesh Rathod

President

[sales@geometricges.com](mailto:sales@geometricges.com)

+91 98791 02571

#### Market Expertise

Industrial & Manufacturing  
Mineral & Metal sector  
Chemical sector  
Health Care  
Commercial & Residential

Nilesh is having immense experience in Project Management of Mega EPC projects, Operation & Maintenance of Mineral & Metal industry.

Mr. Rathod has over 12 years of experience with demonstrated history of working in Industrial & Manufacturing with most of his focus in Engineering, Procurement and Construction management of medium to large scale to mega EPC projects. He has good command in engineering management and coordination.

Mr. Rathod have worked on following major projects during his tenure

#### Related Projects

Utility - Compress Air, Welspun India Limited  
Anjar, Katch, Gujarat, India



Precast power substation building - HPCL  
Pune, India



Steel Melting Shop  
Essar Steel India Ltd.,  
Hazira, Gujarat, India



Pipe Manufacturing Complex  
Essar Steel India Ltd.,  
Hazira, Gujarat, India



Lime Calcination Plant,  
Essar Steel India Ltd.,  
Hazira, Gujarat, India





## Representative



### Dipak Buch

Electrical Design Head

#### Market Expertise

Oil & Gas sector  
Power sector  
Aviation  
Chemical sector  
Automotive sector  
Health Care

Mr. Buch's electrical field experience total 40+ years with most of his focus on the design, construction supervision, execution, inspection of electrical systems.

His major experience includes electrical system design and execution work of Thermal and gas based power plants, refineries and petrochemical industries, expansion & renovation of existing and new airports, aircraft maintenance, repair and overhaul facilities, chemical industries and automobile plants. Mr. Buch was instrumental in execution of Reliance Petrochemical refinery at Jamnagar. He has a immense experience in design and construction supervision of HT and LT transmission lines

#### Related Projects

**Reliance petrochemical plant located,**  
Jamnagar, Gujarat, India



**Deepak Phenolics**  
Dahej, Gujarat,



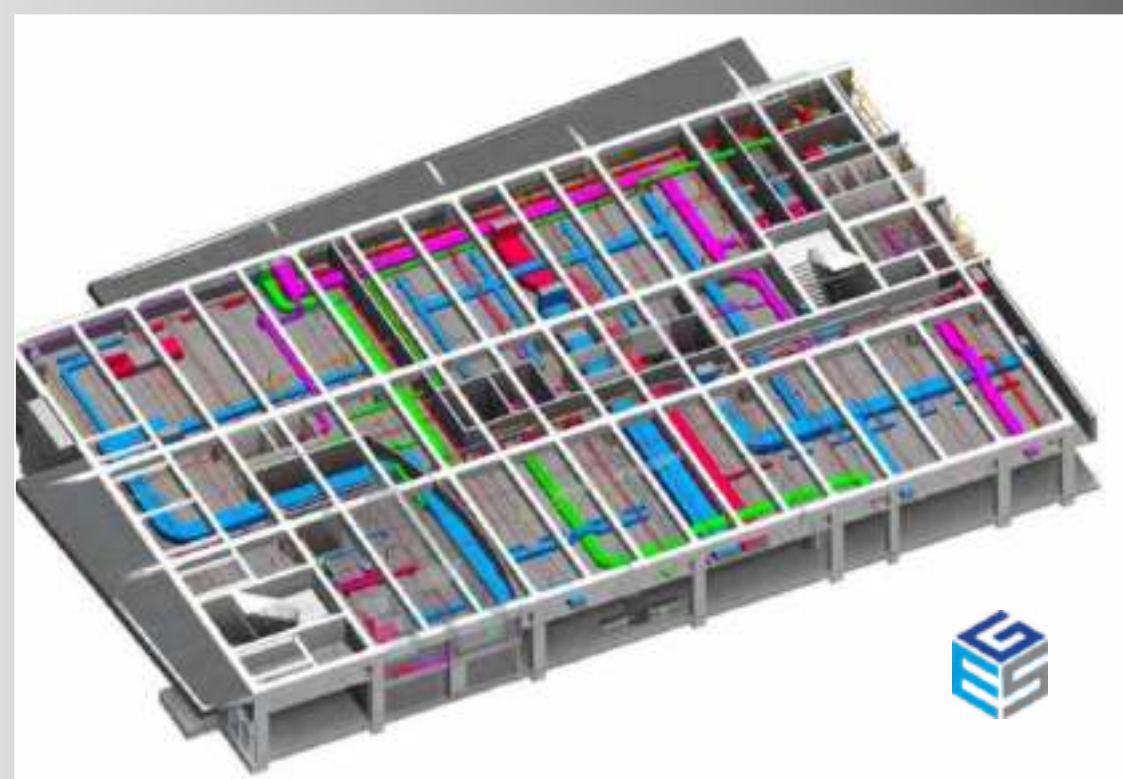
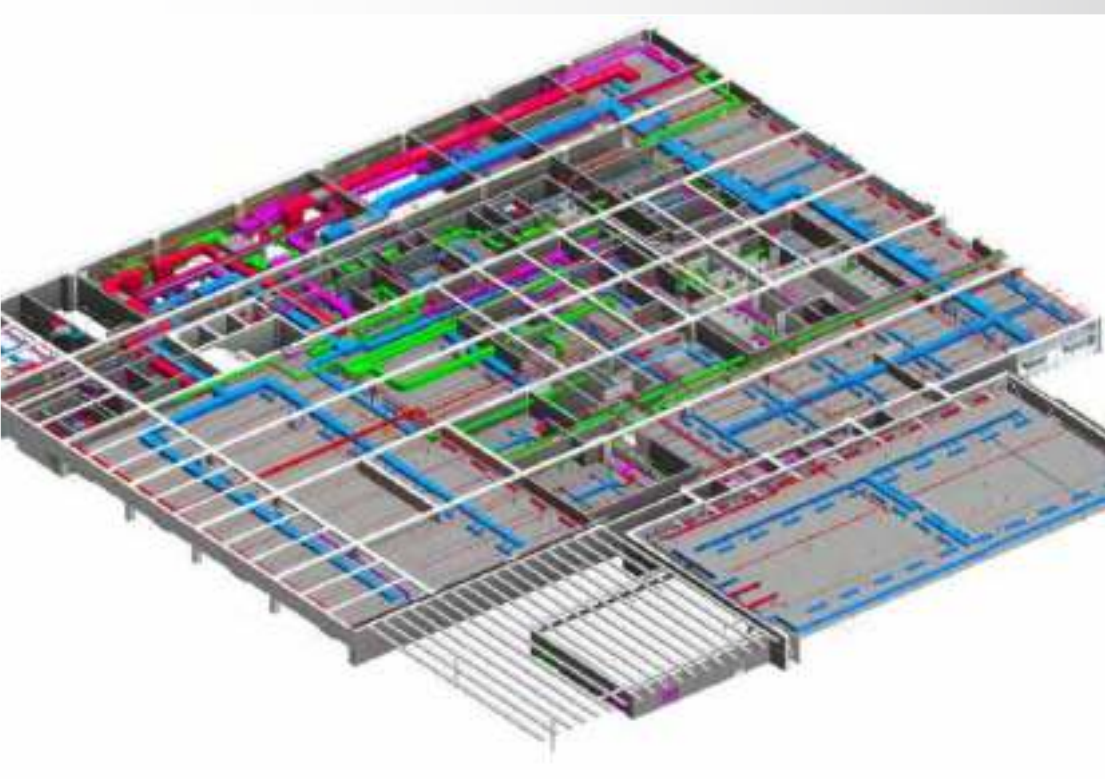
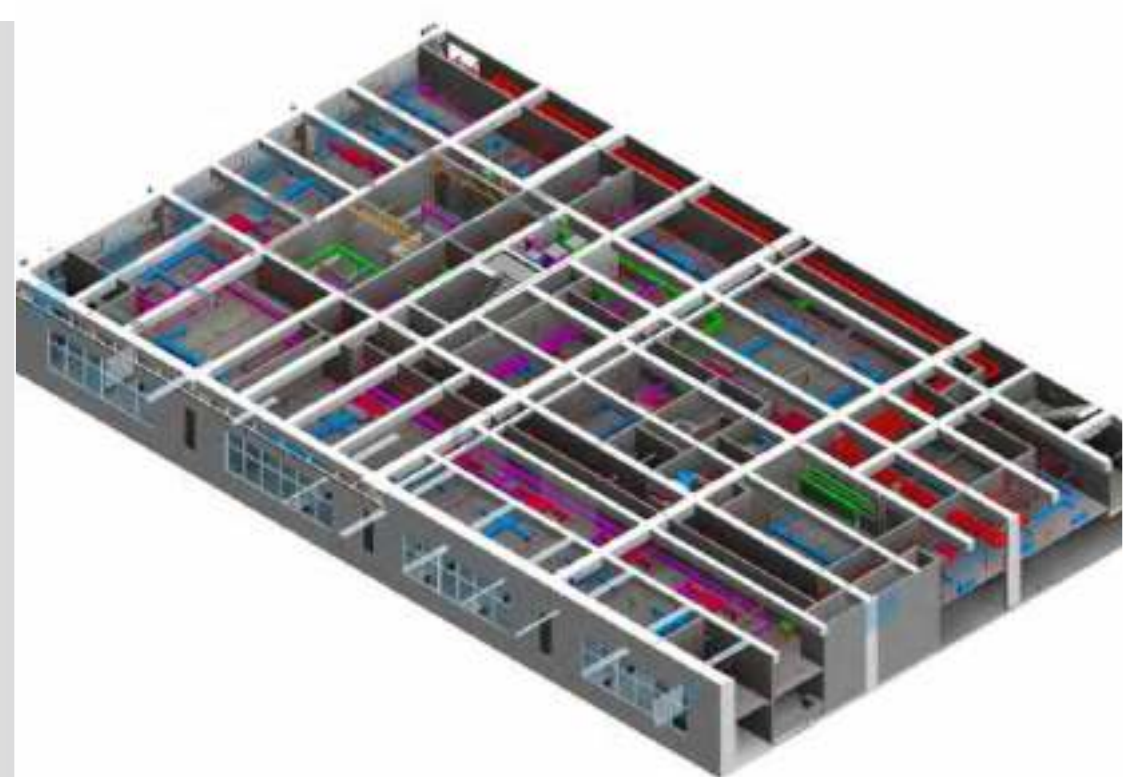
**Ford Motor Company**  
Sanad, Gujarat, India



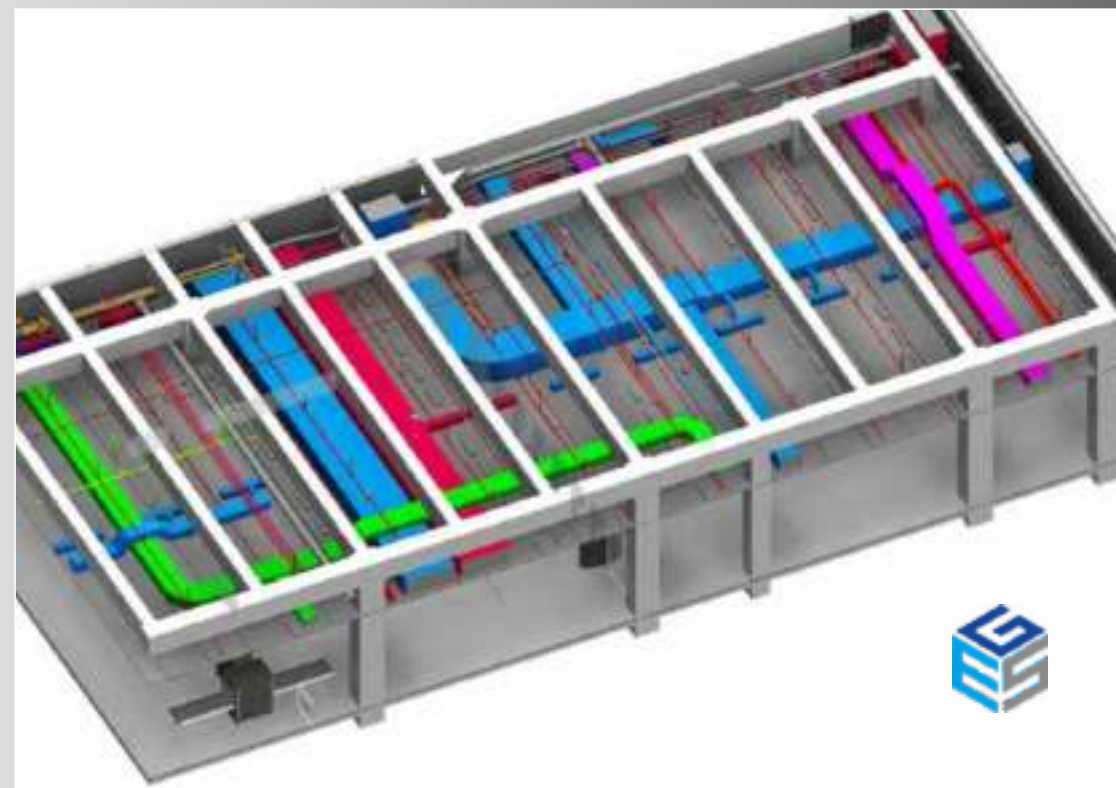
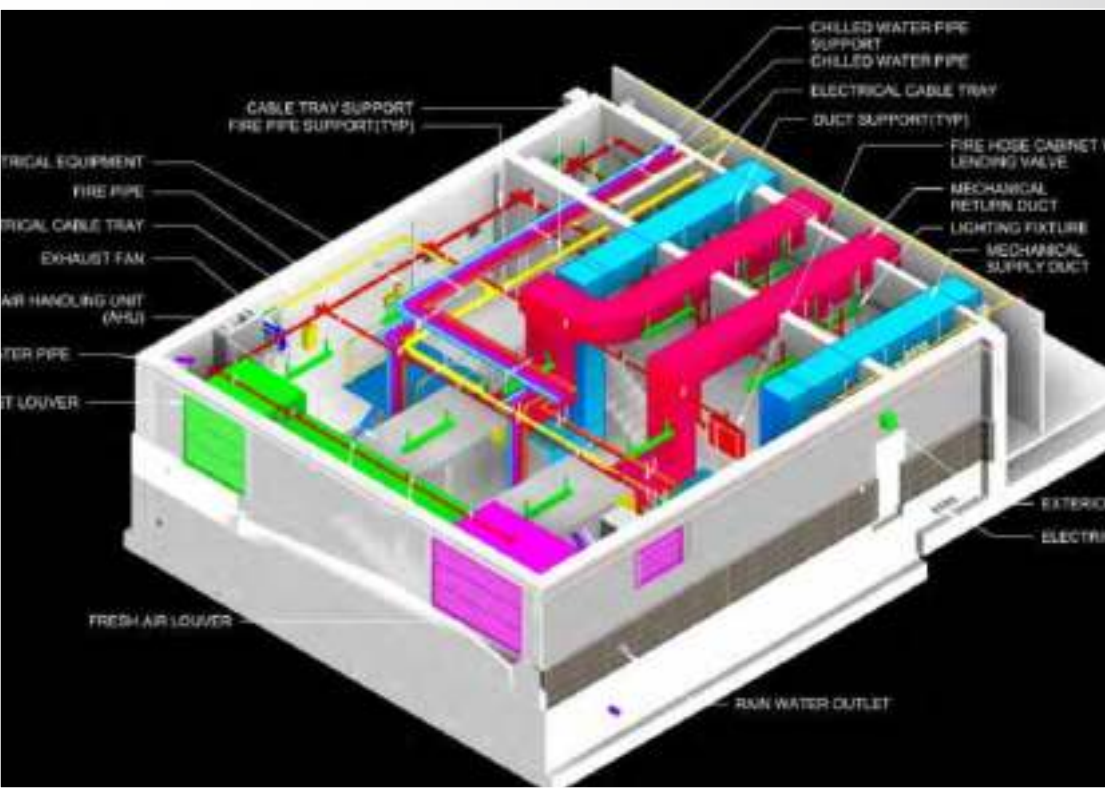
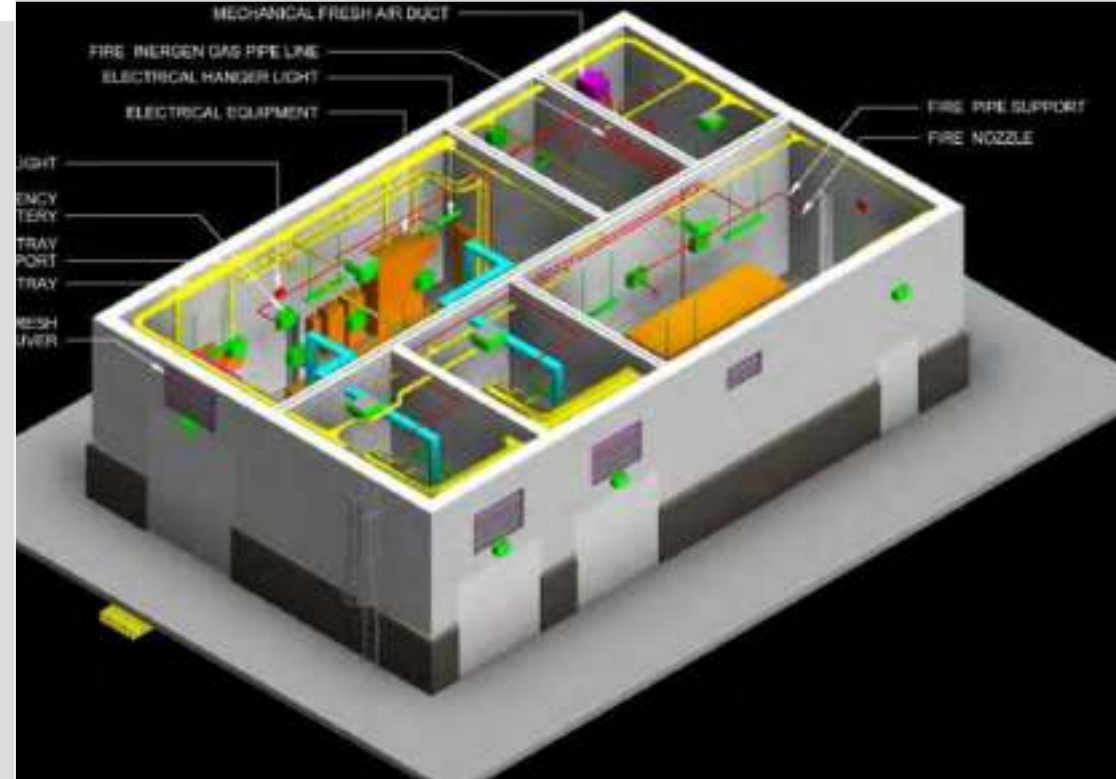
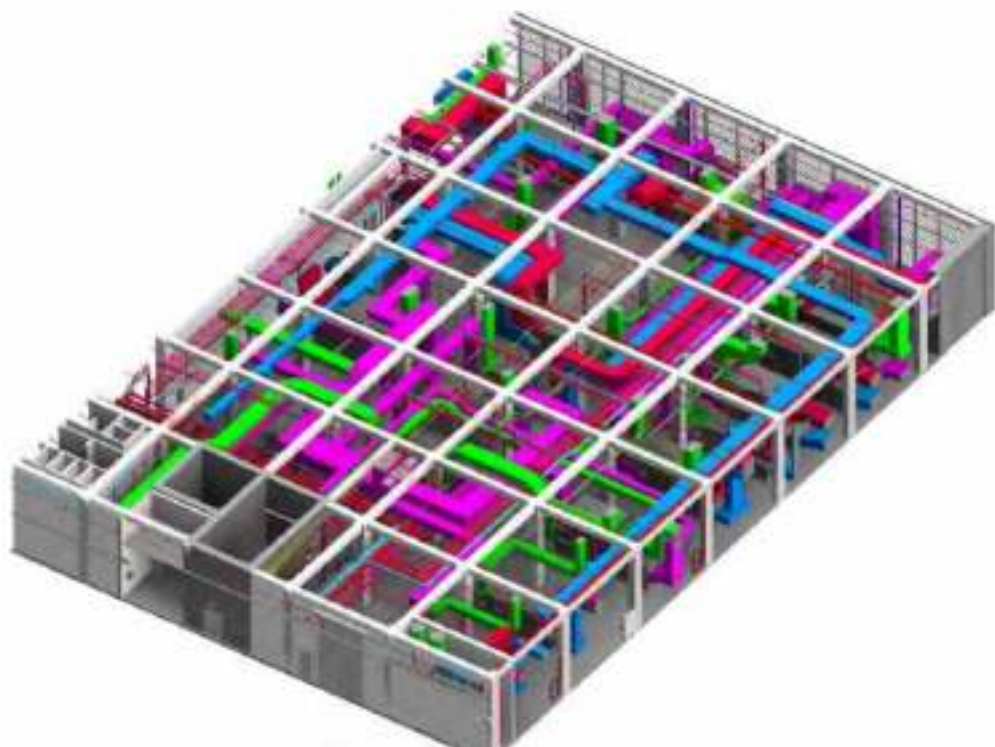
**Linde Gas plants installation,**  
South East Asia



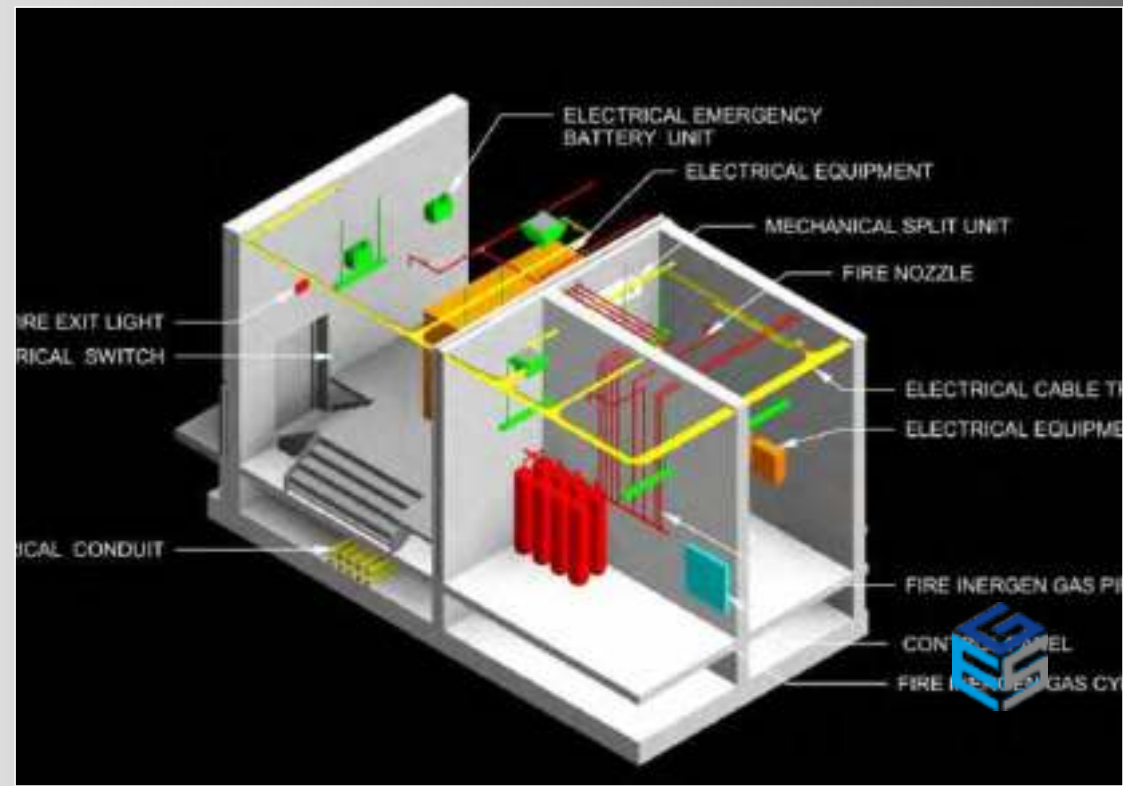
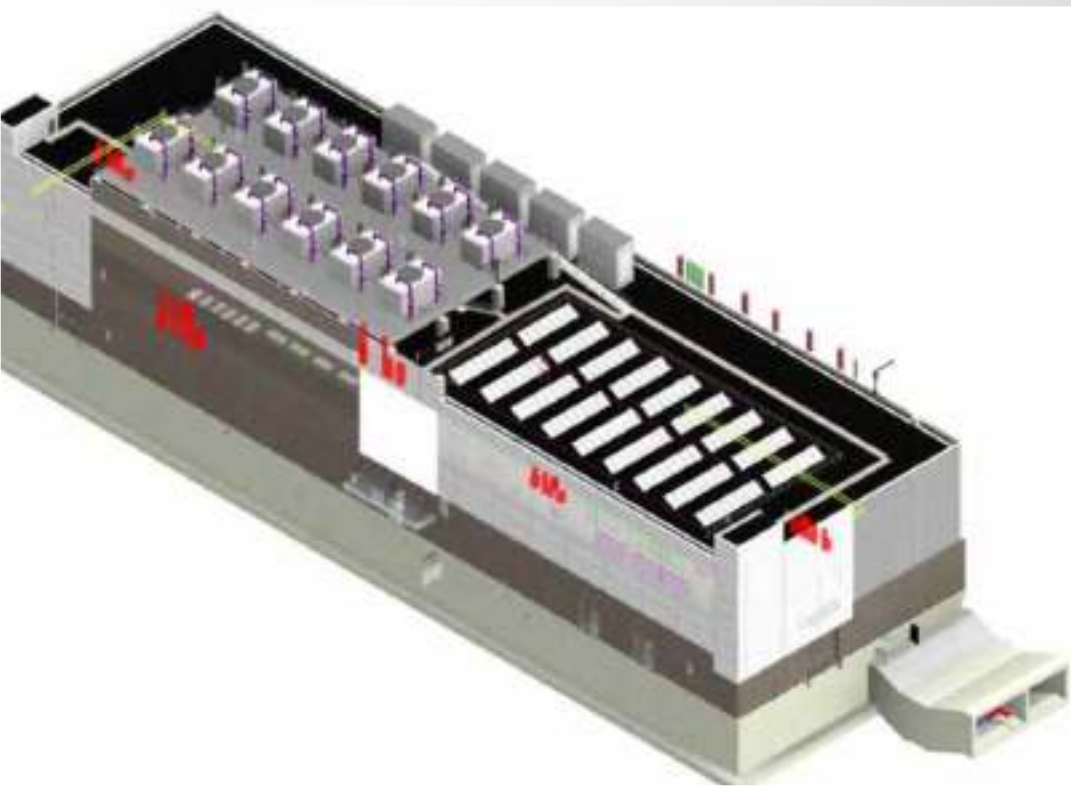
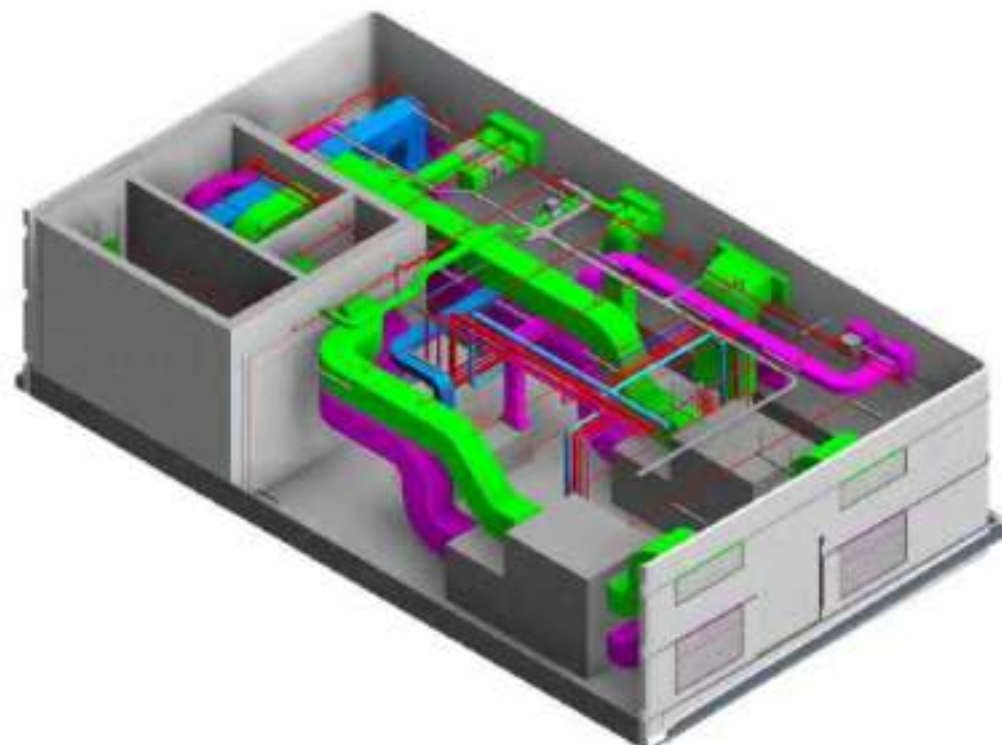
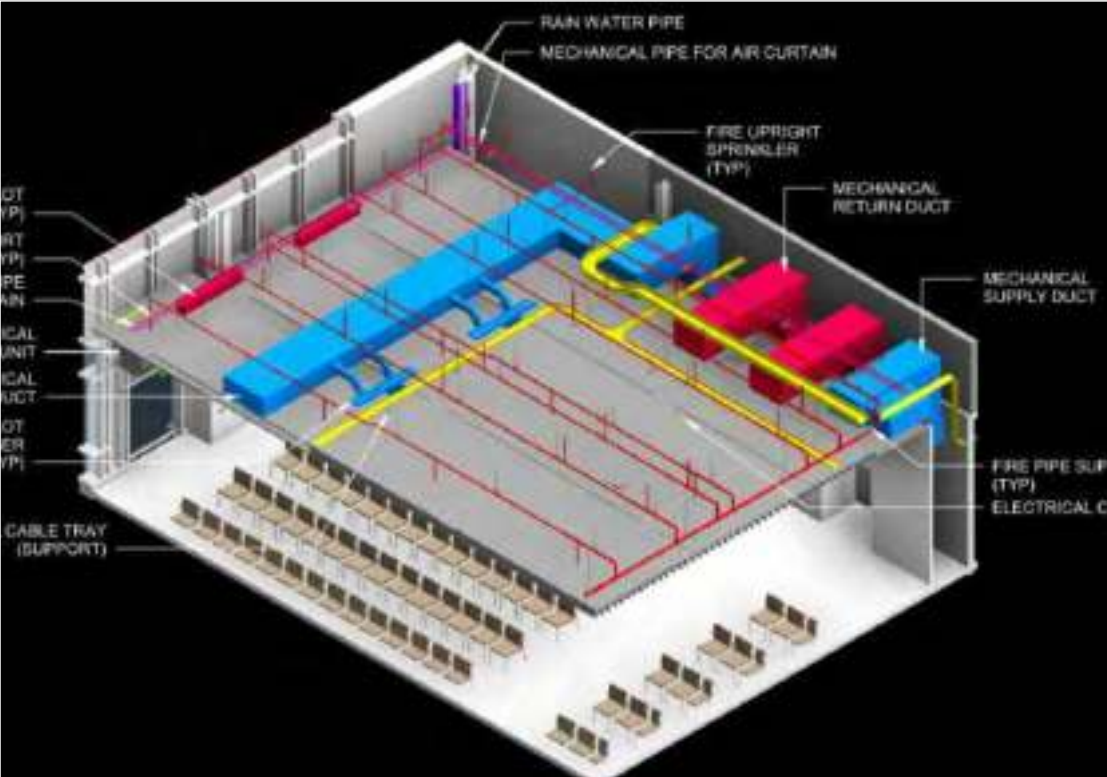




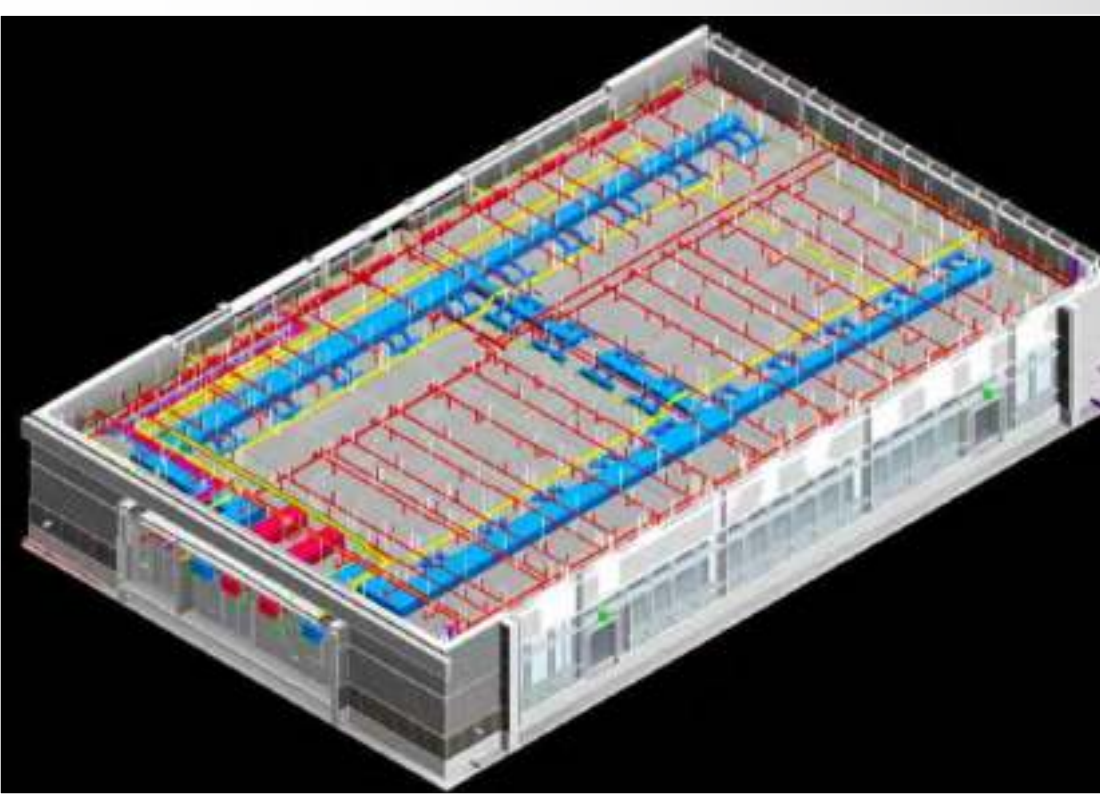
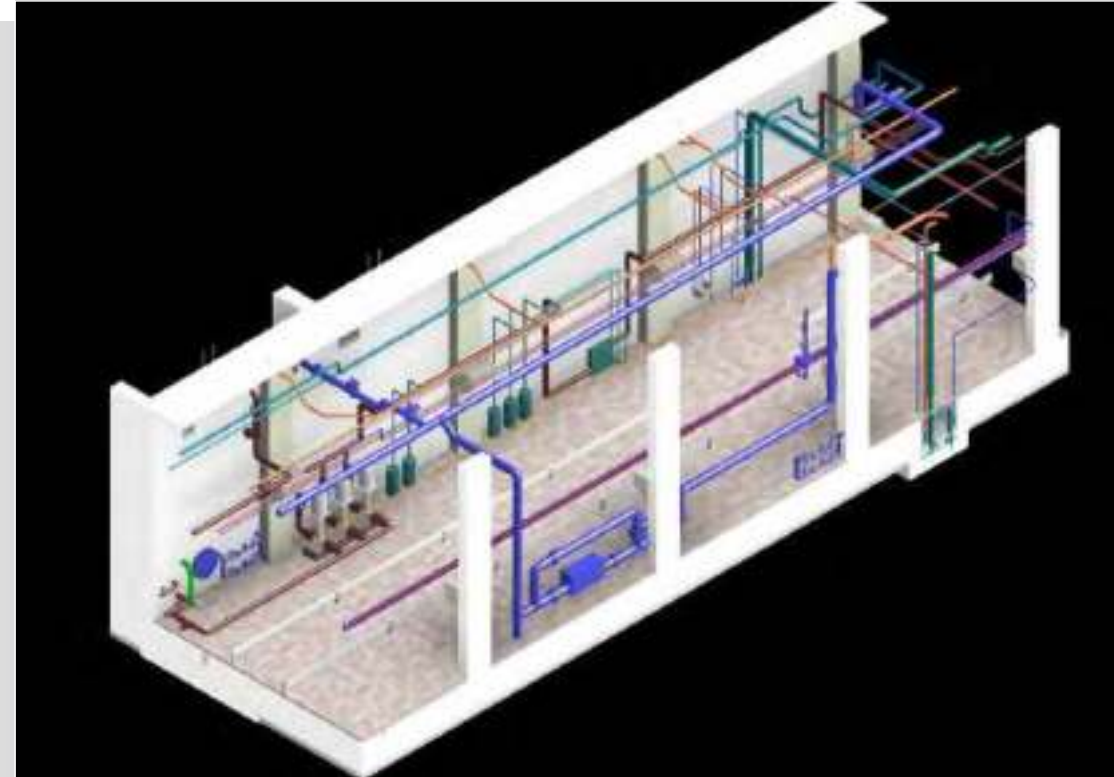
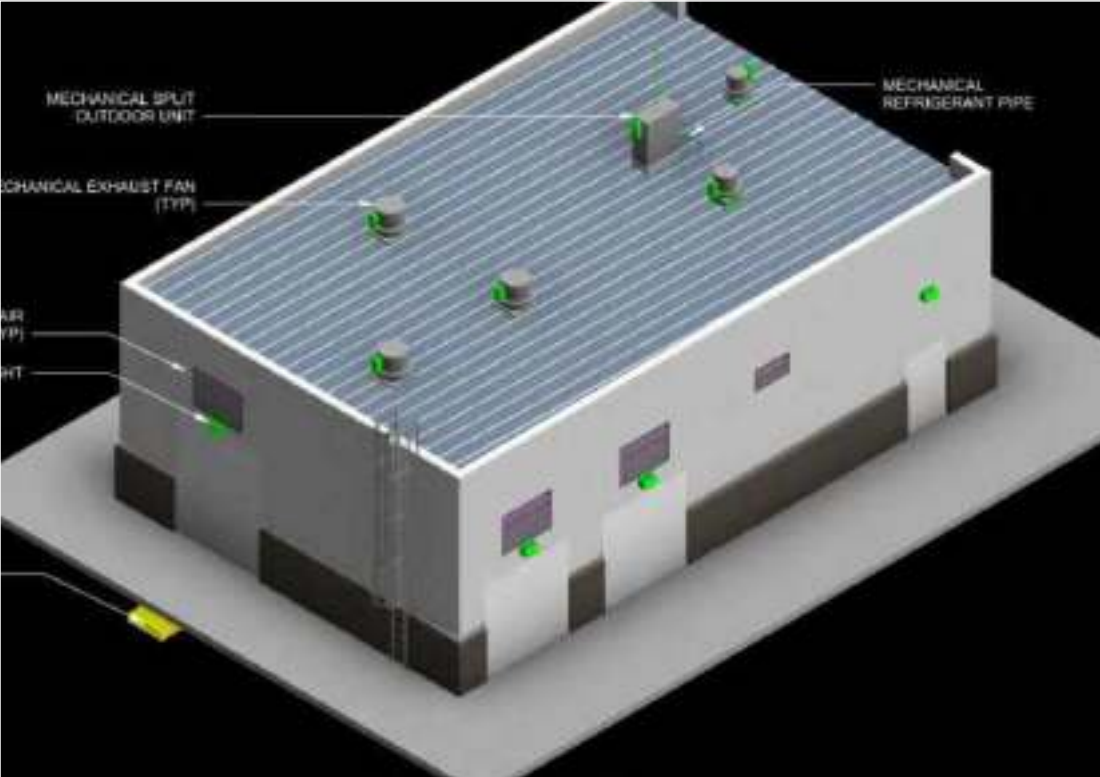




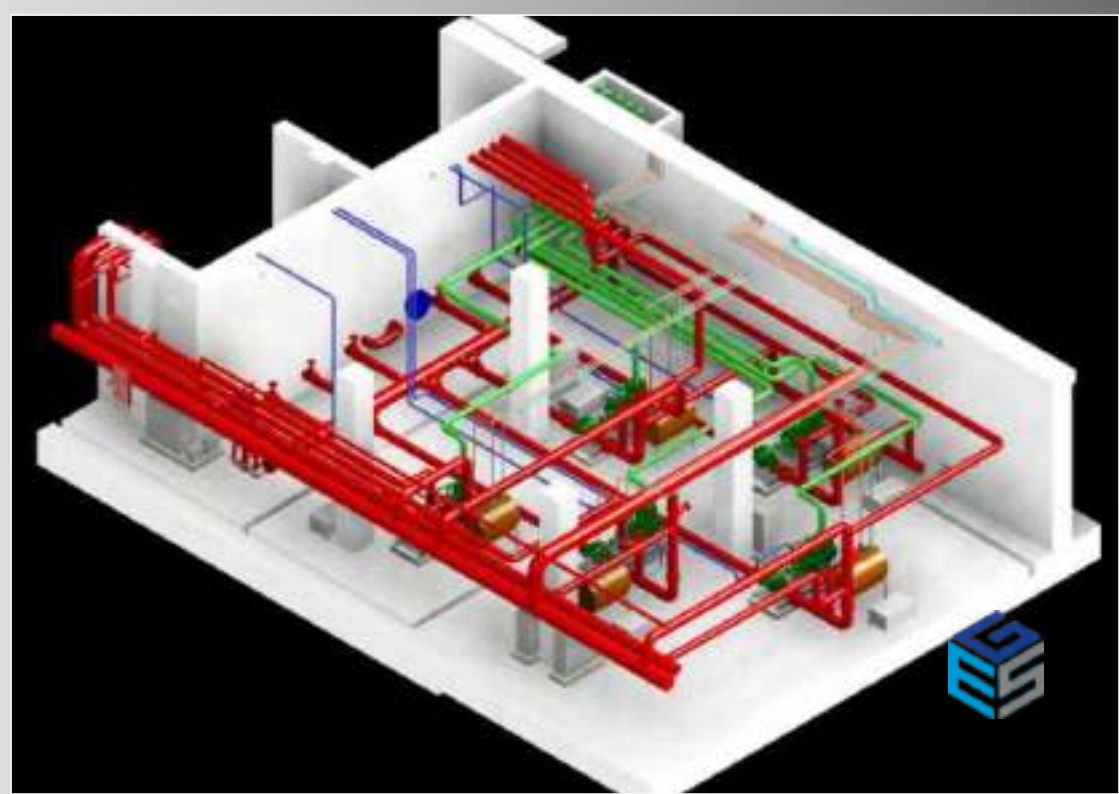
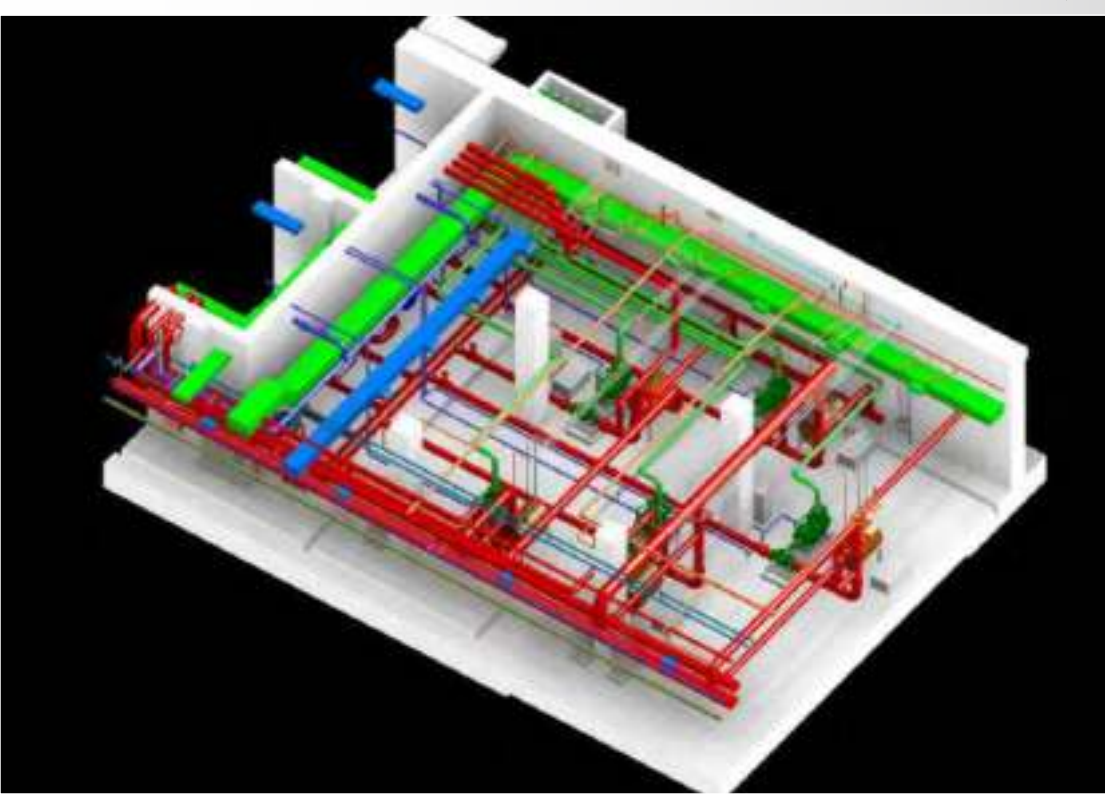
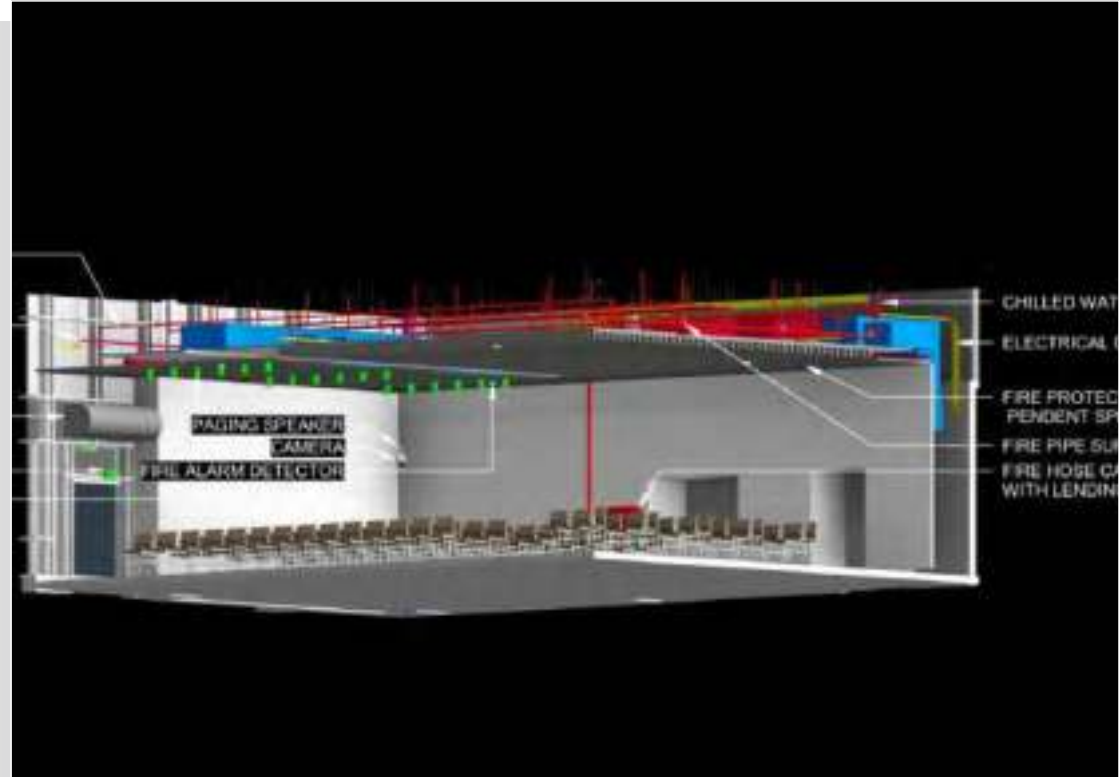
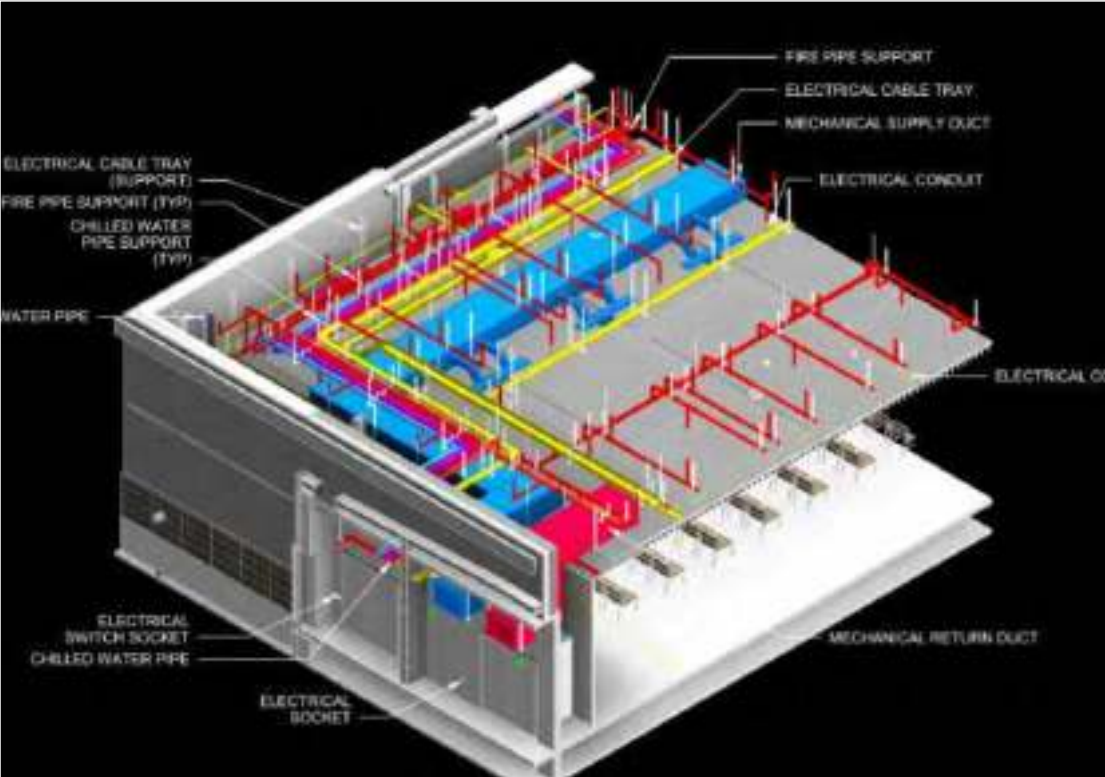




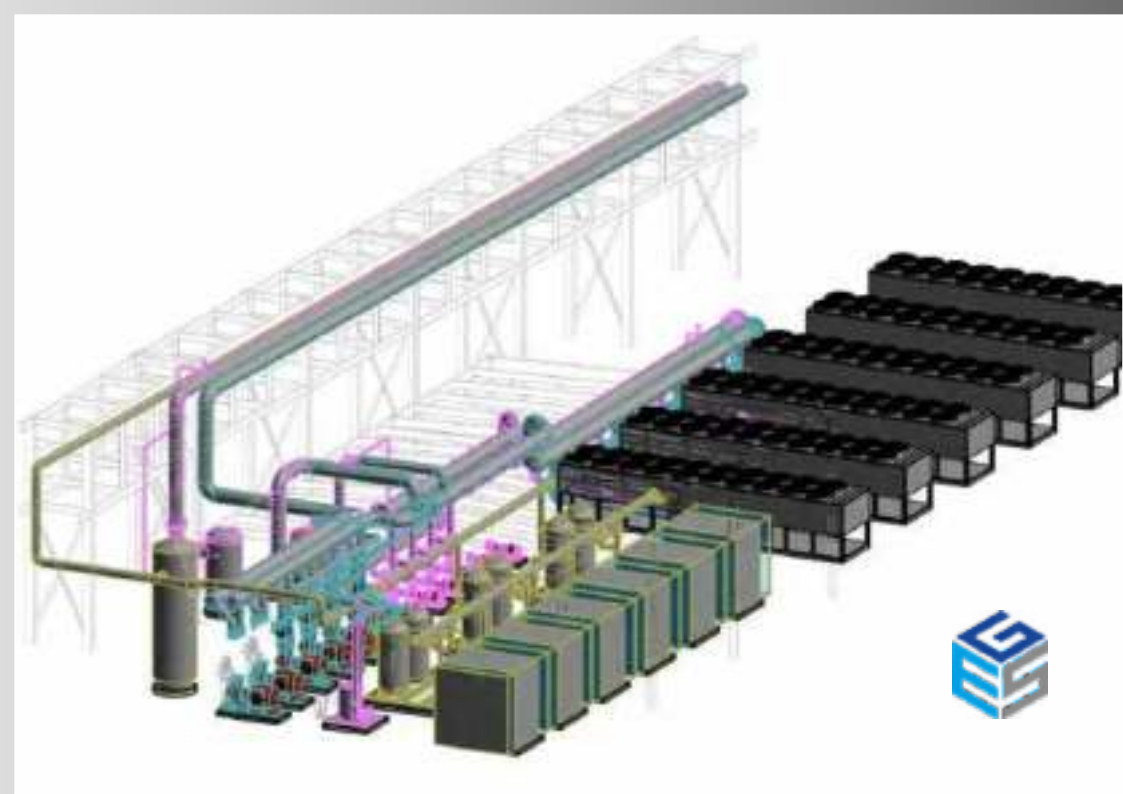
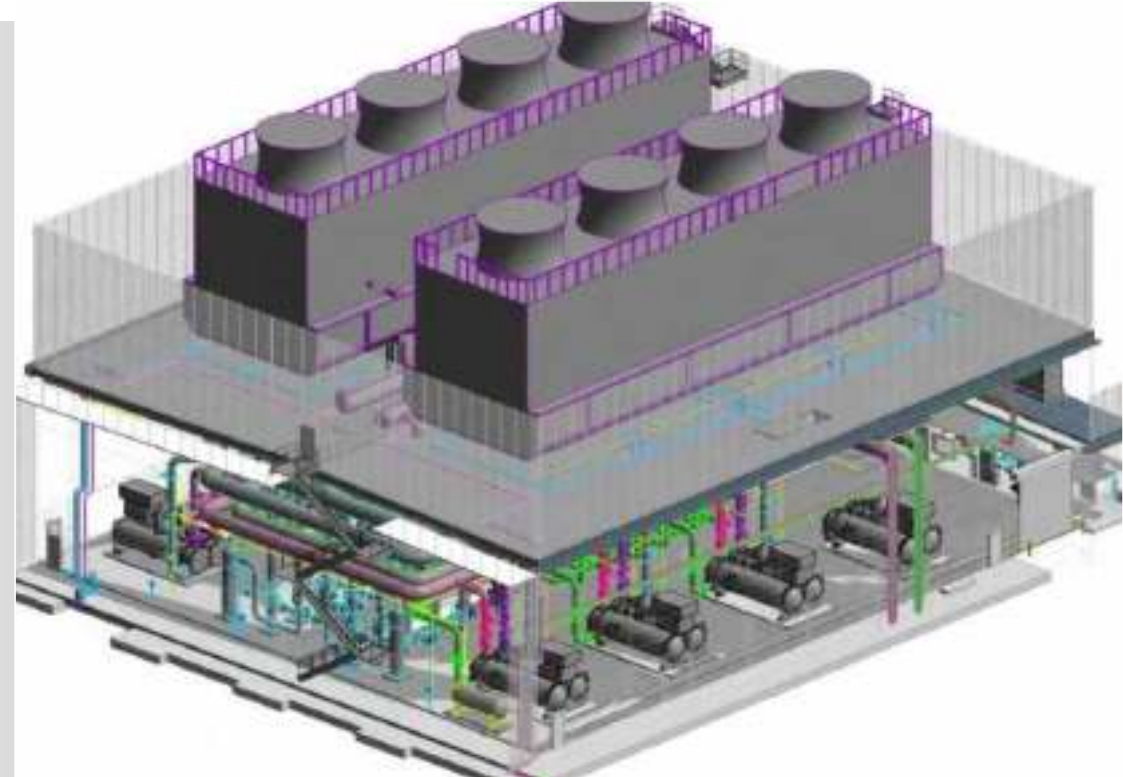
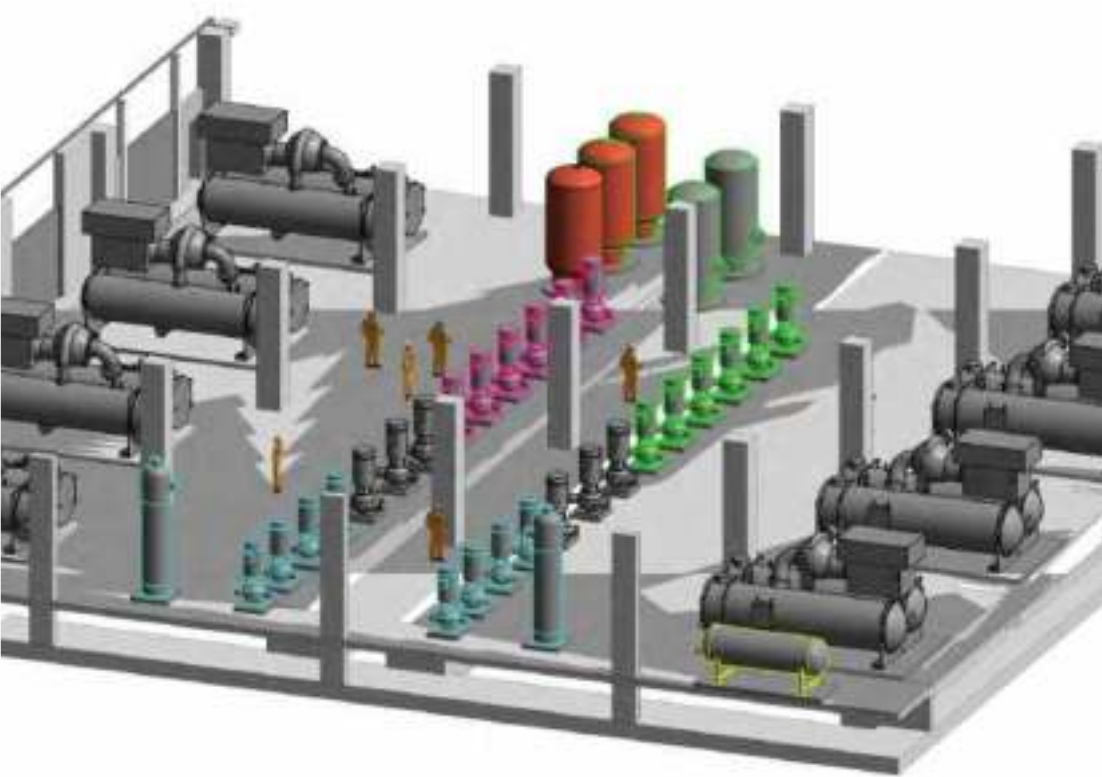












## Clients

GES is committed to providing its clients with the best possible quality in all aspects of design and delivery.

Client long-term success is the foundation of everything we do. Our passionate team deliver the right services for your individual challenges today and in the future.

This commitment is built upon existing and coming trust worthy partnerships. Your confidence is our promise.

Over 85% of GES's business comes from repeat clients.

Engineering / Project Management Company / EPC



Industrial Manufacturing





## Clients

Food & Food Packaging



**Flint**Group

Pharma



Health Care

Oil & Gas



Education

Commercial





Date: 06/05/2023

M/s. Jyoti Kothari  
Geometric Engineering Services  
217 - Vidya Kaveria  
Vidya Kaveri Road  
Vadodra - 390001  
Gujarat - India

To whom so ever it may concern

This is to certify that M/S Geometric Engineering Services has worked for Alembic research centre especially in the field of MEP design and consultation mainly HVAC, Electricals and other major Engineering aspects.

On behalf of our "Team Engineering" Vadodra, I appreciate for the excellent jobs have done over the past several months on our Engineering projects. It was an enormous undertaking but went smoothly and efficiently and timely.

Your team has some strong technical capabilities in MEP design. It was delightful experiences to work with the "Team Geometric".

Looking forward to working with your company in the upcoming years too.

Sincerely yours,

Francis Dabhi

Bt Manager/HOD.

For: Pharma Engineering service.

Alembic Research Centre.

A Division of Alembic Pharmaceuticals Ltd.

Vadodra.

**ALEMBIC RESEARCH CENTRE, ALEMBIC PHARMACEUTICALS LIMITED**

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An ISO 9001 & ISO 14001 Company





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Contact Us



**Geometric Engineering Services**  
Engineering & Consulting