

WELCOME TO CHEMIONIX



CHEMIONIX

OUTSOURCING ■ ENGINEERING ■ DRAFTING

ENGINEERING DESIGN & CAD DRAFTING OUTSOURCING COMPANY

CHEMIONIX: YOUR OUTSOURCING PARTNER

Companies have been outsourcing since time began. It is only recently that business processes can be outsourced across countries and continents.

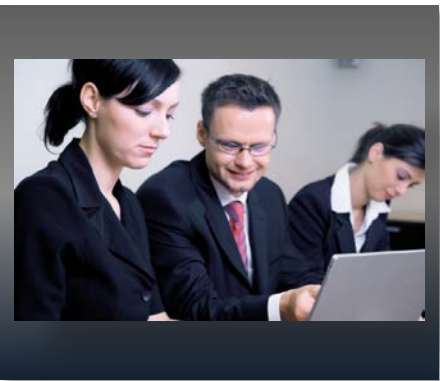
Technology has been instrumental in bridging the geographical gaps. It is now possible to work across continents and manage work force as if they are working from the same premise.

There are various benefits of outsourcing, some of these are:

- ✓ Technical Knowledge and access to experts and professionals globally.
- ✓ Focus on core business processes by outsourcing
- ✓ Acquire new capabilities by building outsourcing partnerships
- ✓ Save all direct and indirect investments in time, infrastructure, technology, training etc as these now are done by the outsourcing partner
- ✓ Faster project deliveries as you can now complete multiple tasks simultaneously by outsourcing non core processes.
- ✓ Reduce need for contract staffing.
- ✓ Higher profit margins

CHEMIONIX

WHO WE ARE???



A Multidiscipline-
Engineering Design
& CAD Drafting
Outsourcing
Company providing
world class Design
Services at Low
Cost!

At Chemionix, we provide Engineering Design & CAD Drafting services for various industries like:

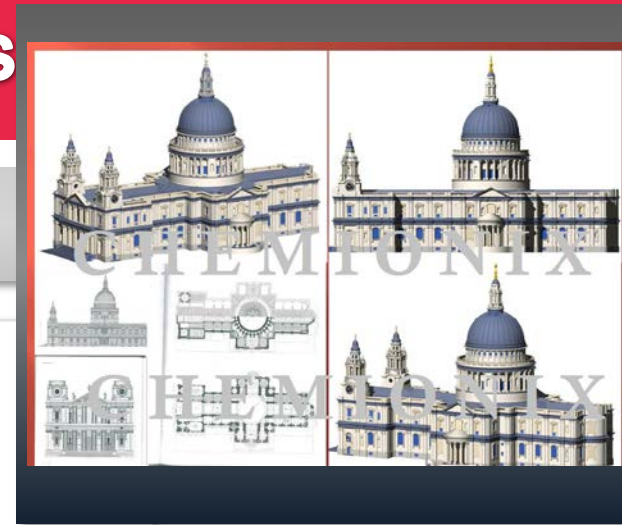
- ❑ *Architectural Design & Drafting for Residential & Commercial Projects.*
- ❑ *MEP Design Services.*
- ❑ *Industrial Design Services for Pharmaceutical, Agro & Chemical Based Project, Oil & Gas project, Auto Industries etc...*
- ❑ *Electrical & Instrumentation Design services.*
- ❑ *CAD Design, Drafting & Modeling Services.*
- ✓ Professional Team comprising of Civil, Mechanical, Chemical, Electrical, Instrumentation & Piping engineers.
- ✓ We offer comprehensive Engineering Design Services at low cost.
- ✓ We have a team of trained CAD designers, Engineers and draftsmen for various CAD/CAM applications.
- ✓ Our Outsourcing strength lies in providing complete outsourcing solutions for Engineering & Drafting services..

Engineering Design Capabilities

ARCHITECTURAL DESIGN SERVICE OFFERED:

Chemionix team offer architectural CAD design & Drafting services from designing small residential home to multi-store commercial complex:

- ❑ 2D Floorplan & Sectional Drawings Generations.
- ❑ Construction & detailing drawings
- ❑ Drawing up-dation & modifications for existing Projects.
- ❑ Landscaping & exterior designs for New/Existing Projects
- ❑ Interior Design & Rendering Services
- ❑ 3D Modeling Services.
- ❑ 2-D to 3D Architectural Conversion Services
- ❑ Photo-realistic Image generations.
- ❑ Animation & walkthrough
- ❑ As-built drawing generations
- ❑ Revit Experience using BIM
- ❑ Space planning and design



Design Inputs:

- Hand Sketches.
- Defined work scope
- 2D Drawings.
- Redline Mark-ups.
- Daily Communications

Engineering Design Capabilities

BUILDING DESIGN SERVICES:

Chemionix offers an Integrated Building Design Services for your project, with experienced Civil, Structural, Mechanical, Electrical & Revit Design Professional working on your project:

- ❑ Revit Architectural & Structural Design
- ❑ Revit MEP Design Services.
- ❑ HVAC Design Services
- ❑ Integrated 3D Building Modeling Design
- ❑ BOQ Generation & Cost estimations.
- ❑ Revit Family Creation.
- ❑ 3D Rendering & Animation
- ❑ Shop-floor & Construction Drawings
- ❑ Structural Drafting & Modeling
- ❑ **Integrated Project Design for Architectural, Structural, Mechanical & Electrical Services**

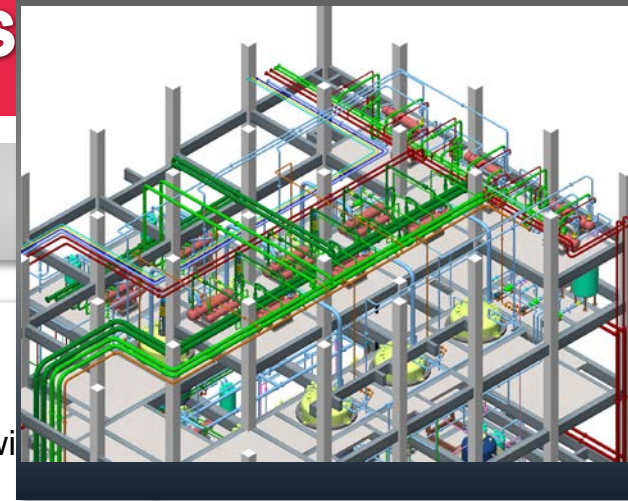


Tools:

- AutoCAD.
- REVIT ARCHITECTURAL.
- REVIT MEP
- AutoCAD Structural
- AutoCAD Plant Suite.
- 3D MAX
- AutoCAD Electrical

Engineering Design Capabilities

MEP DESIGN SERVICE OFFERED:



HVAC DESIGN:

- ❑ Design and drafting services for HVAC system construction plan drawings
- ❑ Thermal load calculations, AHU Sizing's.
- ❑ Duct size calculations & design layout routings
- ❑ 3D Ducting Drawing models, 2D Generated drawings
- ❑ Construction drawings & designs.
- ❑ Utility Design.

MECHANICAL & PLUMBING DESIGN:

- ❑ Fire fighting Design as per NFPA standards.
- ❑ 3D Fire fighting layout drawings, sprinkler drawings, utility piping
- ❑ 2D layout drawings for Utilities and fire fighting piping
- ❑ Plant room layout drawings.
- ❑ Heating & Cooling equipment selections.
- ❑ 3D Plumbing drawings
- ❑ Shop floor and fabrication drawings.

Tools:

- AutoCAD.
- AutoCAD MEP.
- Revit MEP.
- Revit Architecture.
- AutoCAD Electrical

Engineering Design Capabilities

MEP DESIGN SERVICE OFFERED:

ELECTRICAL DESIGN & DRAFTING SERVICES:

- ❑ Electrical Single Line Diagrams , Load list.
- ❑ Design and Drafting of Lighting Systems & Lux level calculations.
- ❑ Design and Drafting of Power Distribution Systems.
- ❑ Design and Drafting of Fire Protection Systems
- ❑ Electrical Site Plans.
- ❑ Electrical Panel Schedules.
- ❑ Access Control/ CCTV/ Telecommunication/ System Integration/ PA Systems

PROVIDING ARCHITECTURAL & MEP DESIGN SERVICES FOR:

- ✓ Residential Homes/Buildings
- ✓ Residential Outfits
- ✓ Offices/Commercial Buildings
- ✓ Industrial Plants / Refineries / Power Stations
- ✓ Commercial Spaces/Shopping Malls



**WE ALSO PROVIDE MEP
CONVERSION SERVICES FOR
HAND DRAWN SKETCHES,
MECHANICAL DRAWINGS AND
MEP CONCEPT DRAWINGS. WE
CONVERT THEM INTO
ACCURATE AND PRECISE 2D
AND 3D CAD DESIGNS**

Engineering Design & Drafting Capabilities

DETAIL ENGINEERING DESIGN

OFFERING ENGINEERING DESIGN OUTSOURCING SERVICE FOR:

- ✓ *Pharmaceutical, API's Projects*
- ✓ *Food, Beverages & Dairy Industries*
- ✓ *Chemical based plants for Specialty molecule projects*
- ✓ *Oil & Gas based Projects.*
- ✓ *Industrial projects like Auto, Textile Industries.*



PROCESS DESIGN

- ❑ Preparing Process Flow Diagram,
- ❑ Mass & Energy Balance
- ❑ Preparing Intelligent & Non-Intelligent P&ID's.
- ❑ Utility Design & Specifications.
- ❑ Technology Evaluations, Equipment lists
- ❑ Preparing Plant Layouts, Material Flow, Site layouts



PIPING DESIGN

- ❑ Pipe sizing and pressure drop calculations.
- ❑ Generating 3-D plant layout drawing showing details of structural design & process equipments.
- ❑ Piping G.A drawings, 3-D Piping routing produced on the plant model.
- ❑ Clash detection test performed on the model
- ❑ Piping Stress Analysis.

MECHANICAL DESIGN

- ❑ Mechanical Design & Specifications for static and rotary equipments
- ❑ Line List, Valve List, Inline Process equipment covers pressure vessels, heat exchangers, distillation columns, storage tanks, silos etc.
- ❑ Design is carried out using international and local codes & Standards
- ❑ Preparing 2D Layouts & Piping specifications, Piping BOQ
- ❑ Reverse Engineering Solutions.
- ❑ As-built and Construction documents

Engineering Design & Drafting Capabilities

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ELECTRICAL DESIGN

- ❑ Electrical Load List, Single Line Diagrams, MCC Specification Design.
- ❑ H.T Design for Transformers, PCC, Switch yards, Cable Sizes & Schedule Calculations, Cable tray sizing & routing.
- ❑ Emergency & back-up system design
- ❑ Lighting Layouts, Lux calculations, Conduit & Looping drawings.
- ❑ Electrical layouts and terminal drawings.
- ❑ Estimations & BOQ for Electrical Design.



DESIGN SERVICES OFFERED

- ❑ *Basic Engineering Design Stage*
- ❑ *Conceptual Engineering Design Stage*
- ❑ *Detail Engineering Design Stage*
- ❑ *Plant Design as Integrated Services*
- ❑ *Process, Mechanical, Piping, E&I Design*
- ❑ *Procurement assistance Services*

INSTRUMENTATION DESIGN

- ❑ P&ID Study
- ❑ Logic & Control Drawings.
- ❑ Field Instrument Datasheets, JB specifications, Block Diagrams.
- ❑ Instruments Loop Diagrams
- ❑ PLC / DCS Design
- ❑ BOQ & Estimations for Instrumentation Design.

CAD Design & Drafting Capabilities

CHEMIONIX OFFER WIDE RANGE OF CAD DESIGN & DRAFTING SERVICES

1

ARCHITECTURAL DESIGN , DRAFTING, 3D MODELING & BIM SERVICES

2

SOFTWARE MIGRATION SERVICES LIKE: PAPER TO CAD CONVERSION, CAD TO REVIT CONVERSION, DGN TO DWG CONVERSION, SOLIDWORKS CONVERSION

3

GENERATION OF 2D & 3D FLOORPLANS DESIGNS FROM SKETCHES & SCAN COPIES

4

MECHANICAL SERVICES FOR 3D PRODUCT DESIGN, SHEETMETAL DESIGN, PRODUCT DESIGN, REVERSE ENGINEERING, AS-BUILT DRAWINGS

5

BUILDING DESIGN SERVICES DRAWING, ENGINEERING & DRAFTING SERVICES FOR RESIDENTIAL & COMMERCIAL PROPERTIES

6

ELECTRICAL CAD DRAFTING SERVICES FOR TERMINAL DRAWINGS, MARKUP CONVERSIONS, SKETCH DRAWINGS, ETC.....

7

GIS SERVICES, MAPPING, POINTCLOUD CONVERSION & MODELING

CAD CONVERSION SERVICES

Chemionix has good understanding and is one of pioneer Company in providing CAD conversion / Software migration services for many years.

Our method for CAD Conversion is 100% manual generation of new drawings with right templates, layering system, standard fonts and colors, model space & viewport scales, & maintaining your Company drafting standard.

CAD Conversion Projects are Checked by our Engineering team before delivering to our client.

Utilizing latest and licensed software's for conversion process.

Offering CAD Conversion services for wide sector of Industries

OFFERING WIDE RANGE OF CAD CONVERSION / SOFTWARE MIGRATION SERVICES

- ✓ PAPER TO CAD CONVERSION SERVICES
- ✓ IMAGE TO CAD CONVERSION SERVICES
- ✓ CAD TO REVIT CONVERSION SERVICES
- ✓ PAPER TO REVIT CONVERSION SERVICES
- ✓ 2-D CAD TO 3-D CAD CONVERSION
- ✓ CAD TO SOLIDWORKS CONVERSION
- ✓ POINTCLOUD TO CAD CONVERSION
- ✓ SCAN TO CAD CONVERSION
- ✓ SURFACE MODELING SERVICES

PRICING MODEL

Flexible Pricing Options

FIXED PRICING MODEL

1

The typical Features of this model are:

Fixed Price per project (depending on the type of project).

Coordination & Communication with dedicated Project Manager

Invoicing as per fixed term of project progress

This works well for project with fixed requirements

1. Ideal where scope of work is clearly defined.
2. Project can be easily monitored & progress achieved.

HOURLY/ MONTHLY PRICING MODEL

2

The typical Features of this model are:

Fixed Hourly / monthly pricing for a dedicated resource

We give you a daily report and time sheet for the number of hours we spent on the job.

Monthly Invoicing as per approved Manhours

This works well for project with fixed requirements

1. Work not defined at start of project.
2. Flexible working as per workload without approval all the times.
3. **Hire staff on Monthly basis – cost benefits – Contract staffing**
4. Dedicated resource only working on your project on Monthly basis.

WHY CHEMIONIX..??



TECHNICAL KNOWLEDGE



EXPERIENCED MUTLI-DICIPLINE TEAM



WIDE RANGE OF SERVICES



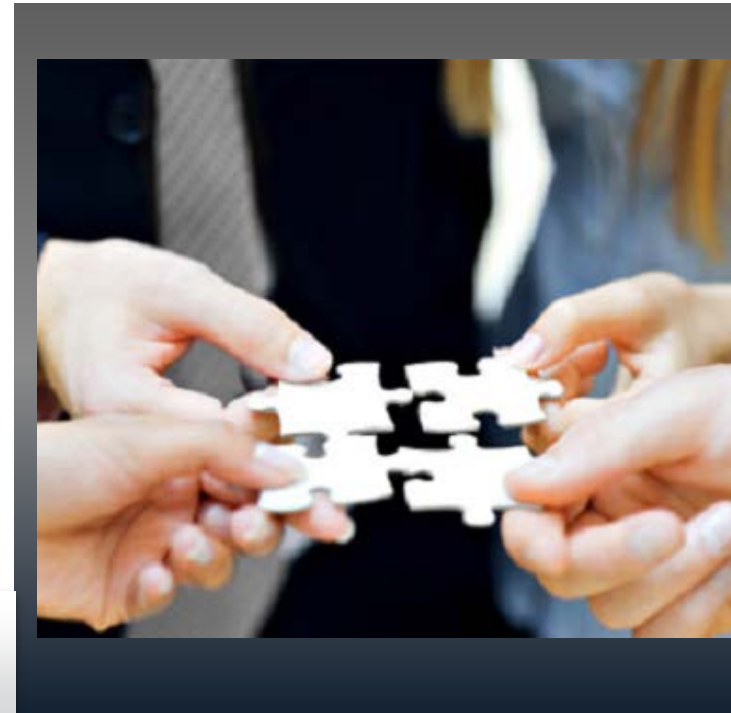
100+ INTERNATIONAL CLIENTS



**WORLD CLASS INFRASTRUCTURE
– LATEST SOFTWARE**



LOW COST!! HIGH QUALITY DESIGN



Client List.....to name a few!!!

- WSP Group – U.K
- Rio Tinto India Pvt Ltd
- Almendra – Singapore
- Ashok Leyand Ltd – India
- National Textile Corporation – India
- Abner Abengoa – India
- Hutteneus - Albertus – Germany
- The Associate Consulting Engineers – U.K
- IOR Energy Pty Ltd – Australia
- SAS System Engineering – KSA
- WB Engineers – USA
- Twister Gas Solutions – Netherlands
- Bionomic Industries – USA
- DYCE Engineering Services - UK.
- TAQA - UK
- Queensland Nitrate – Australia
- RVS Industries – Australia.
- Greystone Energy System INC.
- SACO Research - USA
- TCM Offshore LLC – UAE
- Barspec Speciality – UK
- Worldwide Water Works – USA
- Archon INC – USA
- Carbis INC – USA

Office



Office Building



Staff Working

CONTACT US

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S.V.ROAD, NEAR GOREGOAN FLYOVER,
GOREGOAN – WEST
MUMBAI-400062
INDIA

EMAIL US:

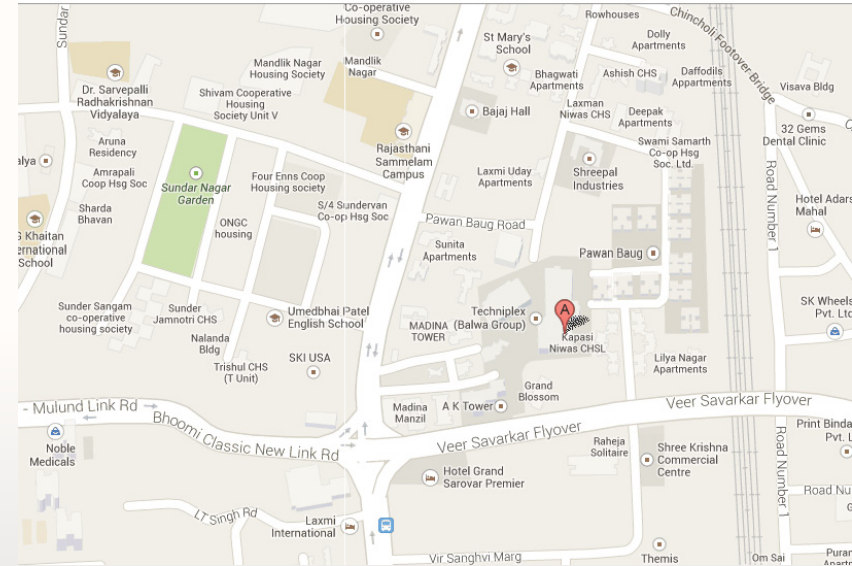
EMAIL US AT:
info@chemionix.com

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WEBSITE:

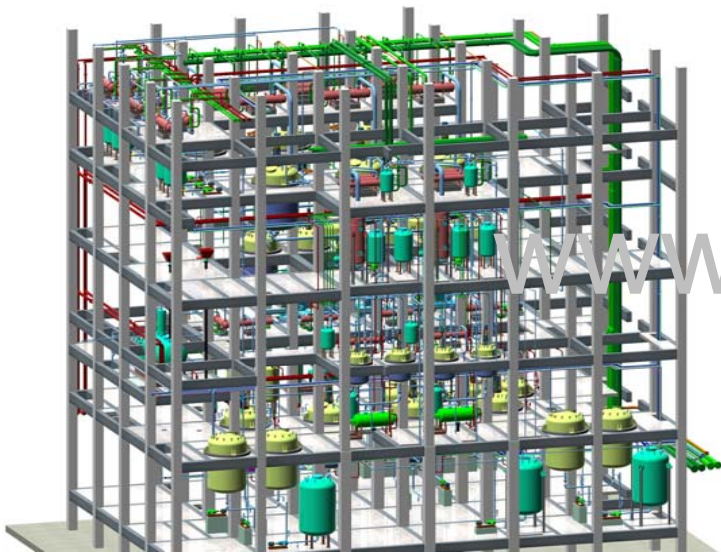
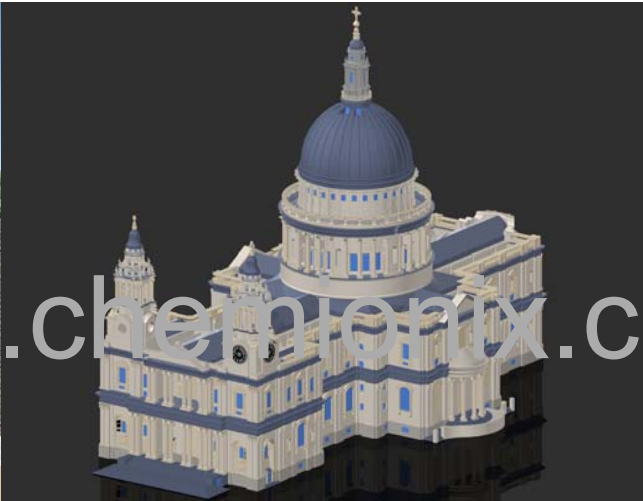
WWW.CHEMIONIX.COM

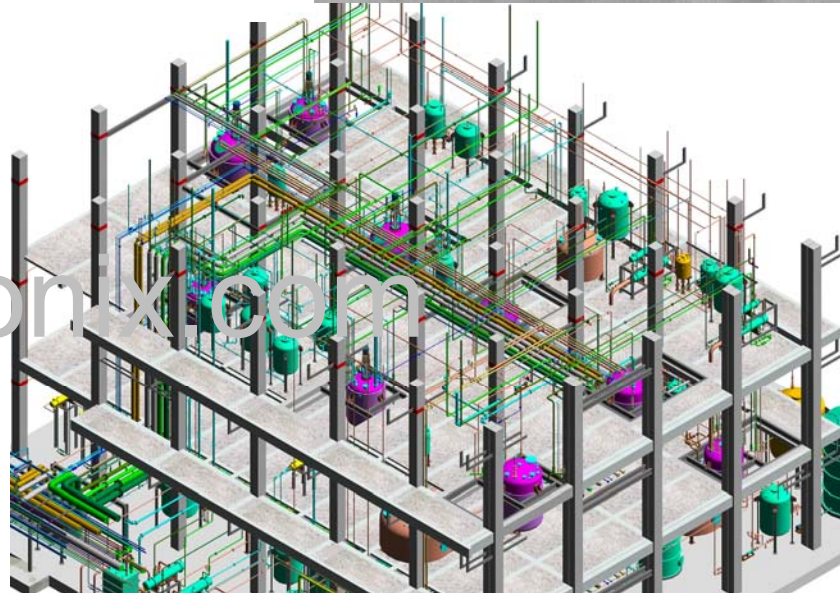
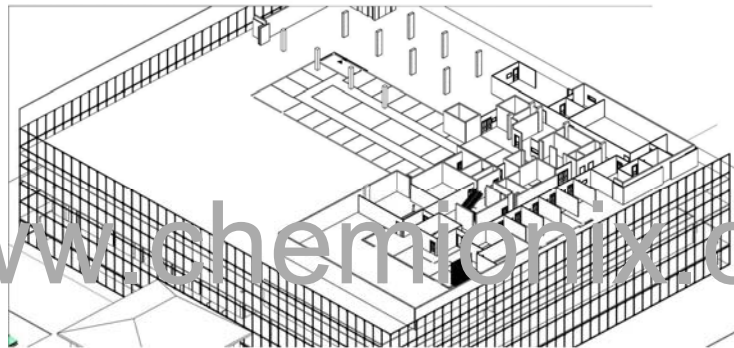
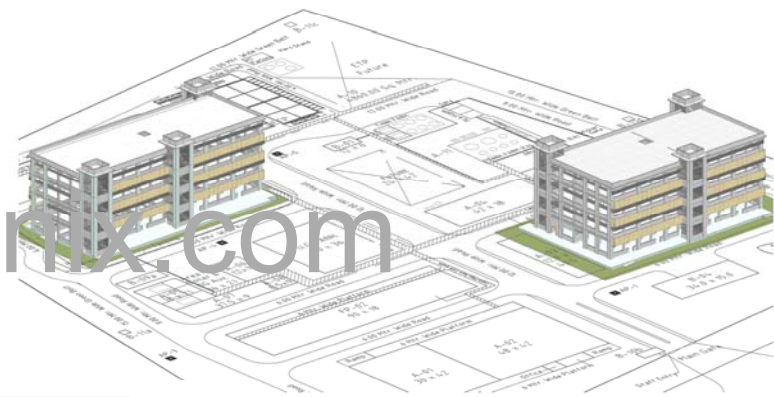


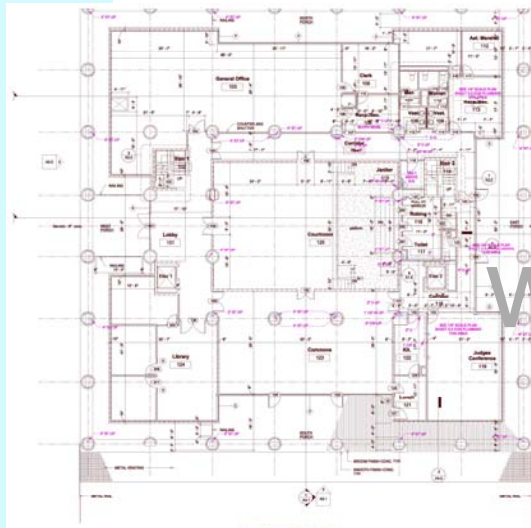


THANK YOU!





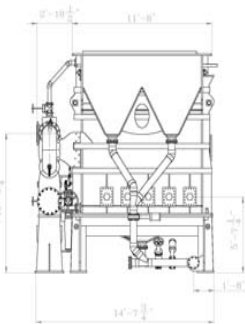
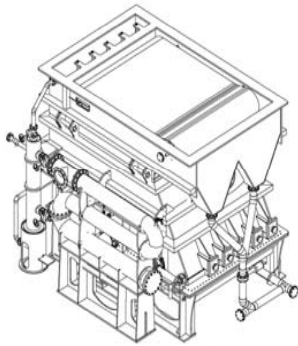




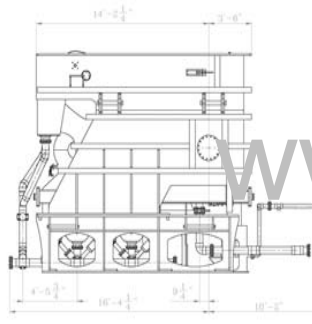
FIRST FLOOR PLAN - PLUMBING



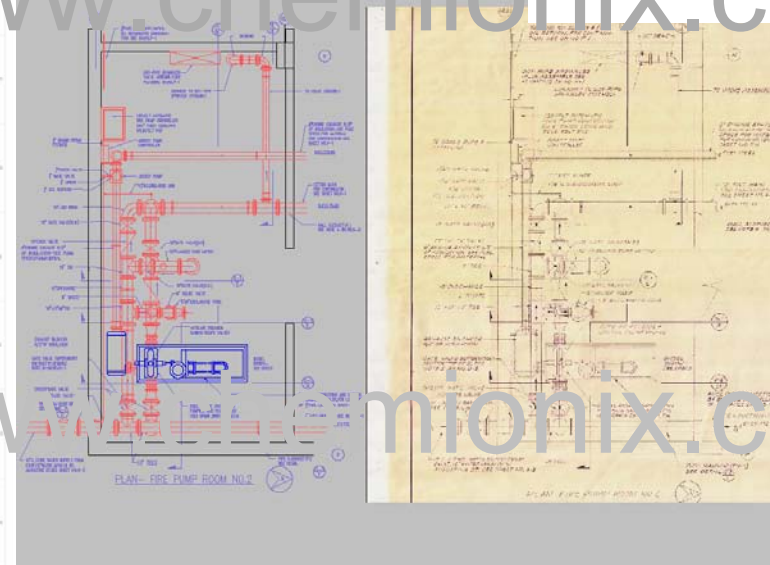
BASMENT FLOOR PLAN - PLUMBING & FINISHED DUCTWORK



RIGHT VIEW



BACK VIEW



PLAN - FIRE PUMP ROOM NO. 2

