# Chemionix Solutions.

Outsourcing . Engineering . Drafting

# 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

# Who we are...Our Focus

- At Chemionix, we provide engineering and design services for various industries like:
  - Agrochemical, Pharmaceutical, Bulk drug, Petrochemical, Oil & Gas.
  - Architectural Design & Drafting.
  - MEP Design Services.
  - Electrical & Instrumentation Design services.
- Professional Team comprising of Civil, Mechanical, Chemical, Electrical, Instrumentation & Piping engineers.
- We offer basic and detailed engineering 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.

## Process & Mechanical

## Front End Engineering Design Services:

### **Pre-Basic Engineering:**

- Feasibility Study, Process Development & Optimization, Site Selection.
- Development of Permitted Documentation.
- Conversion of Paper drawing into editable AUTOCAD drawing.

### **Basic & Detailed Engineering:**

- Preparing Process Flow Diagram, Process & Instrumentation Diagram (P&ID)
- Material & Energy Balance Calculations.
- 2-D & 3-D Modeling of Plant Layout.

### **Piping Engineering:**

- Calculation of Pipe sizing.
- Preparing Piping Iso-Metric Drawing.
- Pipe stress analysis.
- Preparing Bill of material.

### **Equipment Design:**

- Design & Specification of static equipment like Pressure vessels, Tanks, Columns, Condensers, etc..
- Design & Specification of rotary equipment like Reactors, Pumps, etc..
- Designing as per standard code of vessel.

## Electrical & Instrumentation

Chemionix have build a reputation providing electrical design for industrial processing facility. We provide complete solutions from designing to commissioning. Chemionix offer value added consulting services for your projects.

## **Consulting:**

Pre-project planning.

- Project value engineering.
- Power & control system documentation.
- Electrical budget estimation.
- Electrical & Instrumentation system design.

## **Project Engineering:**

- Electrical load requirement, M.C.C Panel Design, Cable tray routing, Cable sizes & specification, etc..
- Detail Design Review.
- Electrical bill of material preparation.
- Site co-ordination & inspection.
- Commissioning & Trouble shooting.

### **Typical Design Includes:**

- P&ID diagrams.
- Instrumentation Loop Diagrams.
- Safety Systems.
- Electrical Panel Design.
- Wiring Plans.
- Motor controls.
- Designing of control valves.
- PLC design system.

# CAD Based Design

## CAD/CAM Services

#### **Chemical Industry**

- P&ID.
- 3D plant layout
- Equipment Specification sheet
- Piping Drawing & Details.
- Bill of material.

### Mechanical Industry

- Drafting & Detailing.
- · Component drawing.
- 3D Modeling & Assembly.
- · Part list & Bill of material.
- Mechanical Conversion.
- Product Development
- As built fabrication drawing.

#### **Civil & Architectural Industry**

- Building & System Layout.
- Site Development.
- Structural design services.
- Architectural drafting.
- Floor plant layout.
- 3-D Visualization

# CAD Based Design

Chemionix provides various technical & drafting services for your project. Inhouse team of skilled Engineers & Draftsman provides Outsourcing Services for:

## **CAD Conversion & Drafting Services:**

We undertake various task for CAD based design & drafting services like

- Paper to Cad Conversion.
- Mechanical drawings.
- Architectural design for residential models.
- 2-D & 3-D Floor plan layouts.
- Architectural Rendering.
- Electrical terminal or panel drawings.
- Instrumentation & Wiring Diagrams
- Product Development design using CAD or other software's.

# Paper To CAD Conversion

## Paper To Cad Conversion

We offer complete paper to cad conversion and Cad drafting services with exact precision at very competitive rates. We convert all type of drawings Mechanical, Electrical, Architectural, HVAC, Maps, Plumbing, etc

All we require is simple scanned image and we deliver accurate dimension cad drawing at the end. We have state of art technology and infrastructure to be key reason for our success in this sector of service. Our technology expertise in this area have lead us to provide highest quality of paper to cad conversion at very competitive rates.

### **Our method For Paper to Cad Conversion:**

- Maintain the actual dimension of the drawing
- Layer specification as per client
- Appropriate scale size as per client
- Maintain International Standard.
- Template design as per client
- Cad files are plotted and checked before sending it to our client for approval.

#### There are numerous advantage for converting paper to cad based drawings:

- Helps to store drawings in more organized manner.
- Eliminates misplaced drawings.
- Reproducibility and modification of drawings are easier.
- Easier to flow information via email.
- Immediate availability of required information.

## CAD Based Services

## **Architectural Plans**

- Chemionix team comprise of civil engineer's and skilled technical draftsman for design and drafting industrial and residential projects. Chemionix team offer architectural design services from designing small residential home to multi-store commercial complex.
- Design your house 2-D floor-plans, 3-D View for the architectural model, plot and site plan for residential & Industrial complex etc.. Using our latest software and skilled resources.
- It also offer structural design for small industrial pilot plant project to large petrochemical or pharmaceutical industrial complex. Our layout's drawing are efficiently design & drafted for space analysis, proper planning and optimized for custom requirement.
- Our team works closely with client to understand the exact project requirement and implement ideas into reality. We understand the value to customers constrains, needs & goal to make a successful project

## 2-D Drawings:

Chemionix team posses extensive experience for drafting of 2-drawings for industrial and residential projects. Numerous drawings are required to be generated at various stages of project's like process flow diagram, process & instrumentation diagram, equipment specification sheet, plant layout, general assembly diagram, piping isometric diagram, equipment fabrication drawing, structural drawing etc..

Chemionix engineering team understand the client's technical requirement and deliver technical drawing as per requirement.

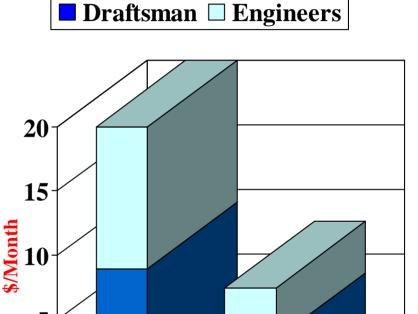
# Why Chemionix??

- Technical knowledge.
- Low Cost.
- International Quality.
- Infrastructure.
- Availability (Phone, IM and E-mail).
- Experienced and Professional Team.

# Cost Advantage

**Graphical Representation of Cost Reduction achieved by Utilizing Chemionix Services:** 

- Manpower Requirement for Desired Project:
  - 2 Engineers.
  - 4 Draftsman
- Minimum Man-power cost for completion of project in USA/Europe: USD 20,000/- Per Month.
- Total cost for Completion of project by Chemionix: USD 7500/- Per Month.
- Total Saving achieved: 200%.



**Chemionix** 

**USA/Europe** 

# Business and Pricing Model

## 2 models of our Pricing

Our pricing model basically differs for each project undertaken; depending on your requirement. However, the general basis of pricing is common and is as follows.

## Fixed Hourly Price.

- The typical Features of this model are:
- Fixed Price per hour (depending on the type of project).
- We give you a daily report and time sheet for the number of hours we spent on the job.
- This works well for project with fixed requirements.
- Ideal for low volume design work.
- Low cost for small projects is the key benefit of this price model.

## Fixed Monthly Price.

We give a monthly rate card for different skill sets.

#### Advantages:

- Fixed Monthly Cost Works like your own staff, just offshore.
- Can deliver upto 180 hours of work per seat per month.
- Individual service components can be offered.
- Dedicated team Knowledge management.
- Lowest cost.

# **CHEMIONIX**

# RESOURCES

## **Professional team consisting of Engineers & CAD designers:**

**Total Team Strength: 22 Nos.** 

- Chemical, Mechanical, Civil, Electrical & Instrumentation Engineers with more than 7 years of experience: Total 6 Nos
- CAD Designers working on various outsourcing project for 2D & 3D drafting with more than 6 years of experience: Total 8 Nos.
- CAD Designers working on various outsourcing project for 2D & 3D drafting with 2-6 years of experience: Total 8 Nos.

## **Designing Software's:**

- AutoCAD 2010 LT
- AutoCAD 2010 Complete.
- AutoCAD Revit
- Solidworks.
- Bentley Smartplant P&ID.
- 3D Piping software on CAD engine

## Hardware Resources:

- High End Processing Computers.
- A0 Size Plotters.
- A3 & A4 Printers.
- Lan connections, antivirus softwares.
- ftp servers

# Contact Us

# Chemionix Solutions.

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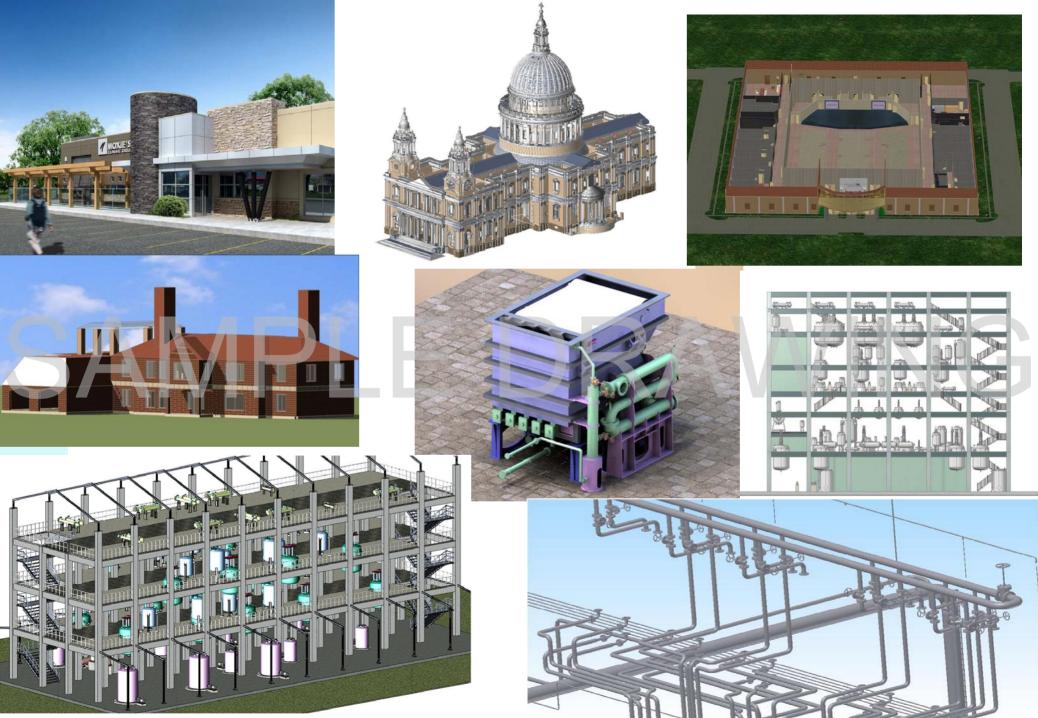
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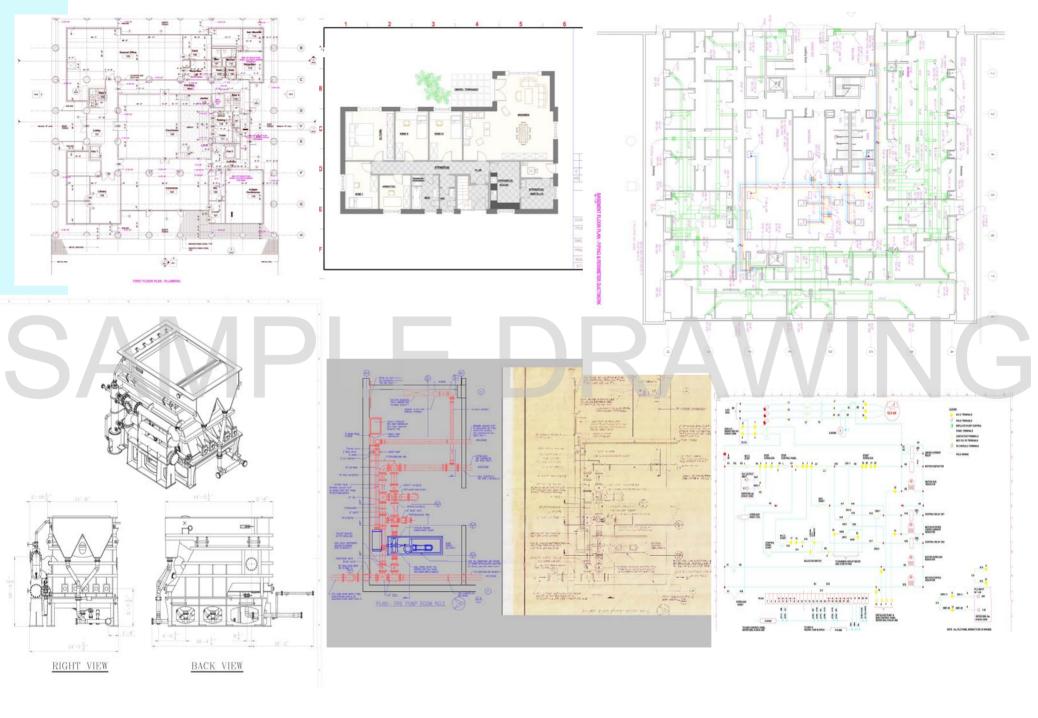
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# Chemionix Solutions.

# Thank you