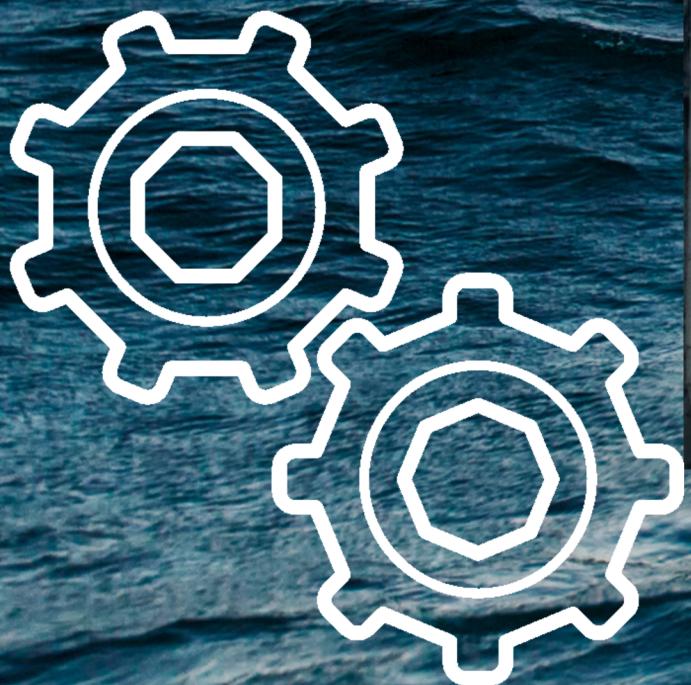


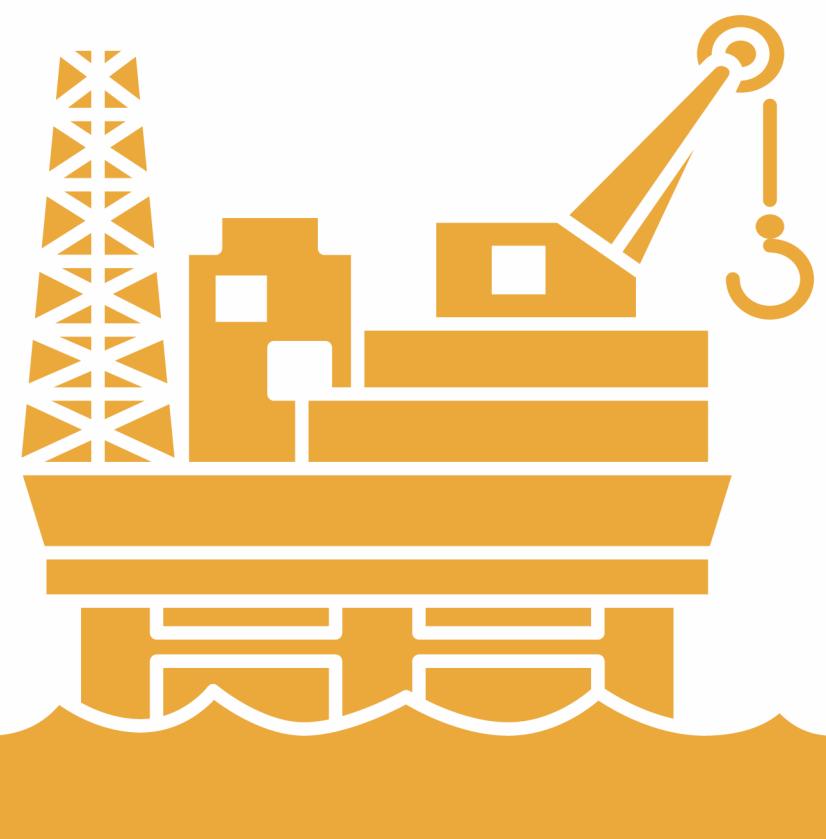
# PETROSYS ENGINEERING PVT LTD

## ELECTRICAL / INSTRUMENTATION / PIPING / PROCESS



# COMPANY OVERVIEW

Welcome to Petrosys your trusted partner for oil & gas EPC services. Petrosys is an engineering design consultant in oil & gas, petrochemicals, refinery, cement, power plant and fertilizers etc., Petrosys specialize in delivering high-quality solutions for the energy industry for various discipline like electrical, instrumentation, piping and process. Our team of experts has extensive experience in delivering projects on time and within budget. Petrosys are guided by our pioneering spirit to accelerate the pace of the energy transition and turn our client's vision into a sustainable reality. Petrosys have Experience in Electrical, Instrumentation, Piping and Process Design Engineering in Various EPC Companies. We also offer software training programs in E3D, AutoCAD, Microstation, SP3D, SPEL, SP(P&ID) and INTOOLS to enhance your skills and productivity.





# SOFTWARES

## **Auto CAD:-**

2D design software for drafting and documentation.

## **Microstation:-**

Micro Station is a CAD software used for 2D design software, drafting and design. It's commonly used in industries like all engineering and construction deliverables.

## **E3D:-**

E3D series is an electrical design software that helps users create, manage, and validate electrical projects. It offers tools for designing electrical and instrumentation equipments, tray, junction box and supports components.

## **SP3D:-**

SmartPlant 3D is a 3D design software used for plant design, engineering, and construction. It helps users create detailed 3D models of plants, including electrical and instrumentation equipments, tray, junction box and supports components.

## **SPEL:-**

Electrical design software for creating, managing, and validating electrical systems.

## **INTOOLS (SPI):-**

Intools, officially known as Smart Plant Instrumentation (SPI), is specialized software used for instrumentation engineering, particularly in large engineering, procurement, and construction (EPC) projects.

## **SP (P&ID):-**

SmartPlant P&ID, a software for creating and managing intelligent Piping and Instrumentation Diagrams (P&IDs) for process plants.



## ► DESIGN DELIVERABLES

- Single Line Diagrams (SLDs).
- Electrical Equipment Layouts.
- Cable Tray and Cable Routing Layouts.
- Lighting Layouts and Small Power Layouts.
- Hazardous Area Classification Drawings.
- Electrical Load Schedule.
- Wiring Drawings and Terminal Connections.
- Schematics and Substation Layouts.
- Cable Schedule.
- Grounding and Lighting Protection Layouts.
- Electrical Installation Drawings.
- Area Classification Plans and Key Plans.
- As built drawings.





## ► ENGINEERING DELIVERABLES

- Electrical Design Basis, Specification, Philosophies.
- Power system Studies.
- Equipment Sizing Calculation & Cable/Tray/Trench Sizing Calculations.
- Electrical Equipment Data Sheet & Pre-order.
- Installation Details / Bulk MTO.
- Lighting Calculation / Lighting & SP Layouts / DB Schedule.
- Lighting Protection Calculation / Layouts.
- Grounding Calculations / Layouts.
- Material Requisitions and Specifications.
- Vendor Data Review (VDR).



## ELECTRICAL ENGINEERING

## ➤ DESIGN DELIVERABLES

- Cable block Diagram(CBDs).
- I/O List.
- Junction Box Schedule
- Instrument index.
- JB & MR Termination drawings.
- Interconnection block diagram
- Hook-up's Diagram.
- Installation drawings.
- Instrument Equipment and location Layouts.
- Cable Tray and Cable Routing Layouts.
- Nameplate Drawings.
- Cable and conduit schedule.
- Loop Diagrams.
- Fire & Gas Layout.
- Control room Layout.
- As built drawings.



## ➤ ENGINEERING DELIVERABLES

- Cable block Diagram(CBDs)
- I/O List
- Junction Box Schedule
- Instrument index.
- JB & MR Termination drawings
- Interconnection block diagram
- Hook-up's Diagram
- Installation drawings
- Instrument Equipment and location Layouts
- Cable Tray and Cable Routing Layouts
- Nameplate Drawings
- Cable and conduit schedule
- Loop Diagrams
- Fire & Gas Layout
- Control room Layout
- As built drawings



## PROCESS STUDIES

- Introduction to process engineering design.
- Process design basis and envelope.
- Simulation understanding, Heat and material balance, Process flow diagram.
- Process controls and safeguarding.
- Hydraulic & line sizing calculations.
- P&ID development.
- Equipment Sizing.
- Instrument sizing (Relieve valves, control valves).
- Cause & effect matrix.
- Miscellaneous design deliverables.



## ➤ ENGINEERING DELIVERABLES

- BFD/PFD/UFD drawing preparation, drafting.
- PSFS (Safeguarding) drawing preparation and drafting.
- P&ID drawings preparation and drafting.
- Equipment list, fluid list, line list, utility consumption summary preparation.
- Equipment Sizing(vessel, pumps).
- Hydraulic calculations and line sizing.
- Equipment datasheet preparations.
- Instrument datasheet preparation.
- Cause & Effect matrix/diagram preparation.
- Operating and control philosophy preparation.
- Process control narrative preparation.
- Review support.
- P&ID reviews, HAZOP & SIL review.

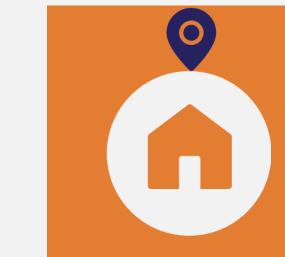


## OUR STEPS FORWARD

Petrosys Engineering Pvt Ltd - Chennai. We have more than 25 years experience in Electrical, Instrumentation, Piping and Process Design engineering in various EPC companies. Are you an engineering professional looking for a Change in Career? If yes, We can help you. We can train you in Electrical/Instrumentation/Piping/Process design software that can fetch you jobs in detail engineering. You can get trained in AutoCad, Microstation,E3D,SP3D,SPEL,SP(P&ID),Intoo;s(SPI) etc You can come out of construction/maintenance industry and get into high salaried design engineering career.



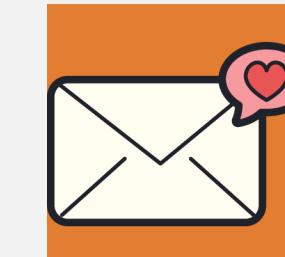
## GET MORE INFORMATION



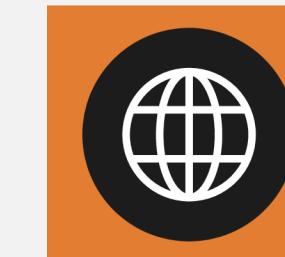
**ADDRESS :**  
NO 39, 2<sup>ND</sup> FLOOR, POTTERS STREET,  
SAIDAPET, CHENNAI - 600015



**CONTACT US :**  
+91 9894039561



**EMAIL :**  
HR@PETROSYS.AI



**VISIT US :**  
WWW.PETROSYS.AI



# THANK YOU

