



Oil and gas plants require safe and reliable systems that run as long as possible without interruption and maximum uptime. We offer integrated, flexible solutions based on industry-leading patented technologies that are proven and durable.

Process control systems are the backbone of any modern oil & gas plant. They allow plant operators to achieve highest levels of efficiency while ensuring a safe and compliant plant operation.

Safety is also the most critical concern in Oil and Gas industry. Oil & gas operators spend a major amount of CAPEX and OPEX budgets insuring plant, personal and equipment safety. The key element of any successful Safety Instrumented system (SIS) is a direct function of its availability, reliability and integration with the plant's central control system. SIS if not integrated seamlessly can result in reduced operator efficiency leading to increased downtime and operational risk.

A Process Control System components

There is so many different systems and methods to control a big process especially in Oil and Gas field like petrochemical or refinery plant.



- DCS System to managing normal operation of process. Monitoring and control of the system manually or automatically to have available process flow is the main role of this system. For some plants like pump station maybe PLC systems be applicable to control all the process but in most cases DCS system can cover process requirements better than PLCs.
- ESD system which manage the process in emergency situations to force the system to a safe status.
- PLC Systems usually used to control small packages installed for different units and then integrated in DCS system for totally management system.
- Control network which connects all distributed control systems together. Through this network all control messages will be transported with highest reliability:
 - Local area network to connects different sub-systems to DCS system
 - I/O Bus networks that connects control system elements to plant instruments and also system packages. These network can help us for high performance, low cost and high reliable instrument networks
- Asset Management System to manage field instruments remotely like change parameter setting, maintenance programs and so on. Asset management requirement is dependent the plant scale.
- Analytical software to Analyze system status, predict the future to make the best decision



Medium Size Plants

Our special offer

Our experience in engineering, procurement and construction of similar project is our main benefit that satisfy the clients to do the projects.

Developing Control software by local engineers make it possible to make special security system and cyber security issues, to make more secure PCS applications.

FaSCADA which has been developed completely with FASBA's innovative and expert software and automation engineers is a windows-based process control data visualization system which is Now the leader in the substation automation and process automation software markets, developed and improving continuously by our engineering team.

It is containing standard tools like graphic design interfaces and tools, predefined libraries, Alarm, Trends and reporting facilities, Power systems special tools like load shedding and load sharing, High secured architecture and configuration for high secure platforms and Built-in especial tools for power grid and substation control and monitoring

FASBA's team experience in this field and special tools developed by FASBA can make an important added value facility in conjunction with other control applications.

Using FASBA's special platforms, it is possible to integrate usual process control facilities with control and analytical method and tools for power distribution and grids used in Oil and Gas industry. Like:



- **DOIS** (Dispatching Online Interface for SCADA) to be connected to both SCADA system software and also analytical software to get the data, analyze, study and generate the results.
- **DPAT** (DigSILENT Protection Analysis Tools) to simulate relays and protection analysis; whereas in similar software there is no tool for the automatic calculation of the relay settings and now only it could be calculated manually and evaluates the settings coordination. DPAT-Grid, DPAT-Industrial, DPAT-Power Plant and DPAT-Distribution are different software each suitable for one platforms
- **CCSR** (Calculator of Compatible Settings for Relays) to calculate settings for a wide range of different relay types, prepared and used for power transformation/sub-transmission substations, power plants, Industrial networks and distribution networks

