



# PETROLCOMET Services Co.

## Oil Engineering

PETROLCOMET Services Co. Oil Engineering is a diversified group of engineering and oil services integrated sectors, offering both products and services to the Oil & Gas, Water, Petrochemical and other related industries.

PETROLCOMET provides its clients, primarily Oil Operation Companies, with a wide range of services, from Technical Assistance to Engineering, Procurement & Construction – EPC Projects, including Operation & Maintenance Support for: a) **Downstream projects** - oil and gas operations after the production phase and through the point of sale, and b) **Upstream projects** - grass roots of oil business, upstream refers to the exploration and production of oil and gas.

### **PETROLCOMET Areas of Competence:**

- A) Electronics, Instrumentation and Control Systems
- B) Electrical Power Engineering
- C) Mechanical Engineering
- D) Fire Protection & Safety Systems
- E) Civil Engineering
- F) Cathodic Protection & Corrosion Monitoring Systems for Oil & Gas Applications
- G) Information Technologies

### **Project Capabilities:**

- Project Management
- Development Strategies
- Studies & Detail Design
- Process Engineering
- Project Planning & Cost Control
- Consulting & Supervision
- Logistic & Procurement Services
- Fabrication & Pre-Fabrication for site construction
- Construction, Installation and Upgrade of Existing facilities
- Commissioning and Start-ups
- Maintenance
- Training and Technical Documentation





## COMPANY COMPETENCE

### A) Electronics, Instrumentation and Control Systems

- . SCADA – Supervisory Control and Data Acquisition Systems
- . DCS & PLC – Distributed Control Systems & Programmable Logic Controllers
- . Field Instrumentation
- . Flow Measurement and Management Systems (for Fiscal & Custody Transfer applications of oil & gas including multi-phase flow of fluids and various metering PROVERS integrated installations)
- . Tank Gauging and Management Systems
- . Integrated Crude Oil Sampling units



### B) Electrical Power Engineering

- . MV Switchgears and Distribution Systems for Industrial Applications in the Oil & Gas Sector
- . Highline to feed production wells and Oil & Gas Facilities
- . Underground MV cable distribution systems for Terminals, Tank Farms and Oil Fields
- . Specialized LV Distributions Systems and MCC's and substations
- . Airport Runway Lighting Systems for Oil Fields and Terminal
- . Transformers and substations
- . Power Studies and Relay Protection and Control Systems

### C) Mechanical Engineering

- . Crude Oil / Natural Gas / Water Pipelines and Transportation Systems including Launchers and Receiver Stations, Pumps Stations for liquid pipelines or Compressors Stations for gas pipelines [based on Stainless Steel, Carbon Steel, Ductile Iron, Glass Reinforced Fibers (GRE & GRP)] in underground and aboveground installations. Installation of large diameter API 6D Gate and Block Valves or Regulator stations were successfully accomplished.
- . Oil Fields Process Equipment and Oil Production Facilities (starting from Wellhead Manifold, Production Separators, Degassers, Heat Exchangers, Heaters, Electrostatic Desalters, Launchers & Receivers and Flare Gas Recovery systems.
- . Oil & Gas and FF Water Storage Tanks - Design, Fabrication and Reconstructions.
- . Fire Extinguishing Systems based on Sprinklers and Foam Substations and Chambers & FF Water Pump Stations.
- . Vibration Monitoring and Machine Protection Systems.



#### **D) Fire Protection & Safety Systems**

- . Integrated Fire Detection and Protection systems for numerous applications within oil & gas sector ranging from tank farms, terminals, electrical power station and substations, gas plants and other production facilities, buildings etc.
- . CCTV surveillance systems and Intrusion Detection for oil fields, terminals, tank farms, warehouses, workshops and company headquarters.
- . Entrance and Access Control, perimeter fence and pipeline surveillance systems.
- . Gases monitoring and detection systems.

#### **E) Civil Engineering**

Selected civil engineering activities, from the design to construction and maintenance services for oil & gas, water and related industries as a support to all EPC projects in the fields of Petrolcomet competence.

These services includes, earth works (excavations and trenching for pipelines and underground cables), concrete foundations for mechanical and electrical equipment and stations, steel structures design, fabrication and installation, specific harbor works on crude oil terminals and building of workshops, warehousing and camp facilities. Civil engineering group provides all the support required for Mechanical, Electrical and Instrumentation based projects for oil & gas related systems.

#### **F) Cathodic Protection & Corrosion Monitoring Systems for Oil & Gas Applications**

- . ICCP -Impressed Current Cathodic Protection Systems
- . Galvanic or Sacrificial Anodes CP based systems
- . Corrosion Monitoring of pipelines and tanks

#### **G) Information Technologies**

- . Computer Added Engineering & Design in Petrolcomet areas of competence.
- . Computer Added Project Management and Cost Control.
- . Microsoft Dynamics SL based business management solutions specialized to help project driven organizations obtain reports and business analysis, while helping increase efficiency, accuracy, and customer satisfaction. By enabling oil & gas operators and engineering companies to automate and streamline projects across company divisions and locations, Petrolcomet based Microsoft Dynamics SL platform, provides efficient tools to manage people, projects, recourses and profitability successfully.
- . Petrolcomet is a solution provider using CISCO Networking equipment (unified wired and wireless) and knowledge base as the Platform to Connect, Collaborate & Compete with Data, Voice and Video services in Oil & Gas Enterprise Communication Infrastructure from the First Mile up to the HQ & Operations Centers.