



Dione Oil co.

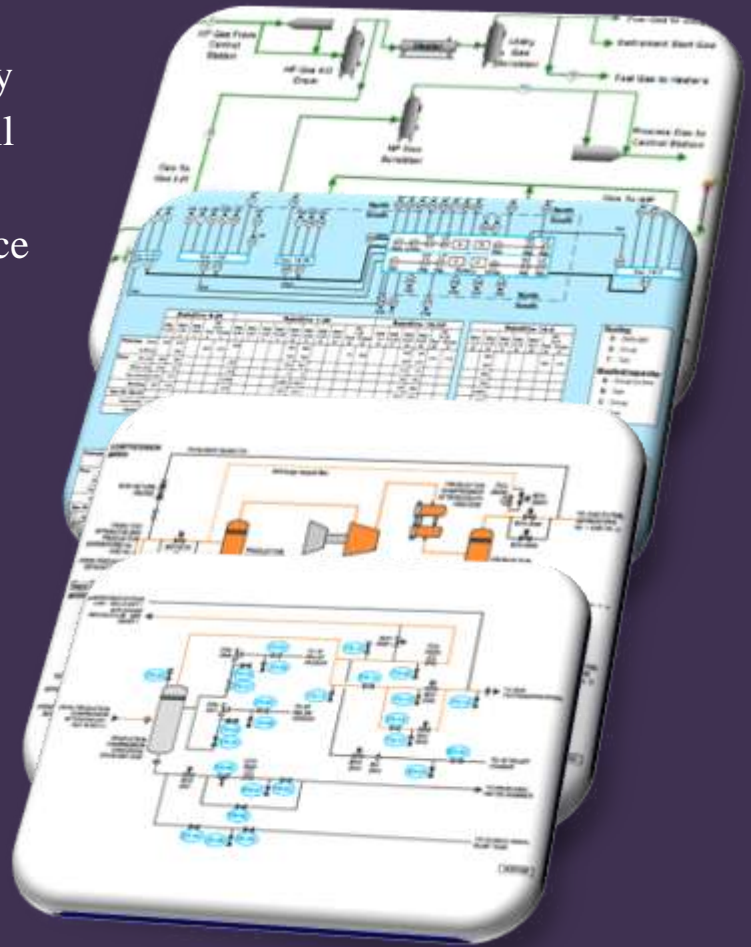


DIONE

OIL CONSULTANTS ENGINEERS

DIONE is a Knowledge Base Company registered in Cyprus and involved in Oil and Gas projects consists of engineers with about more than 20 years experience in Project Feasibility Study, Financial and Economic Analysis, Project Management, Materials and Equipment Procurement, facilities construction and certification.

Since 1980 Dione Engineers have been completing EPIC projects in many countries over the world. Our capacity allows us to offer incredible service depth, both on time and to schedule. With extensive technical expertise and years of experience on



projects in Middle East, we have a precise understanding of how our capabilities relate to your project's scope.

Now these engineers gathered into a flexible organization structure for effective mobilization and focusing the whole resources and facilities when and where necessary.



OFFSHORE AND ONSHORE OIL AND GAS FIELDS DEVELOPMENT:

- Economic and financial Analysis , Feasibility Analysis



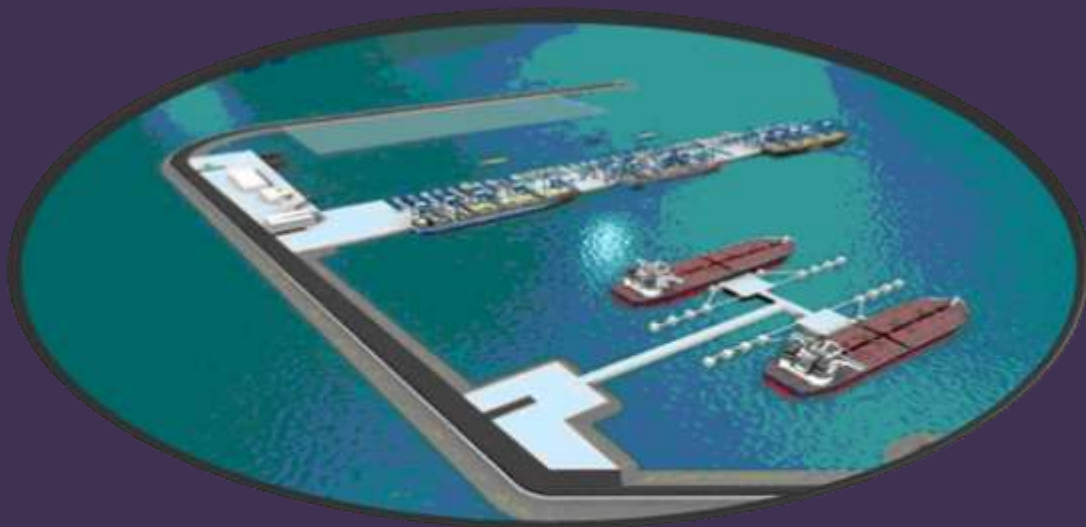
- Exploration, 2 & 3D Sismic, Wildcat and appraisal
- Economy of Oil & Gas for Various Technical options
- Drilling and production
- Welhead Facilities
- Manifolds
- Offshore Platforms (Jacket and Decks)
- Subsea pipelines
- Subsea Cable Laying
- Oil and gas treatment plants
- Pump stations
- Gas Stations
- Gas Pipeline
- Oil Pipeline
- Production Units
- Desalination Units
- Enhanced Recovery Units
- Refineries (Oil & Gas Processing Units)



- Petrochemicals Production Units

OFFSHORE TERMINALS FOR CRUDE OIL AND PETROCHEMICALS:

- **Offshore jetties with mooring facilities and loading arms**
- **Single point mooring systems for oil and petroleum products handling**
- **Main and process pipelines for oil, petroleum and gas**



OUR CONSULTANCY SERVICES

Oil and gas projects today are increasingly found within regions that can be challenging from the perspective of location and the

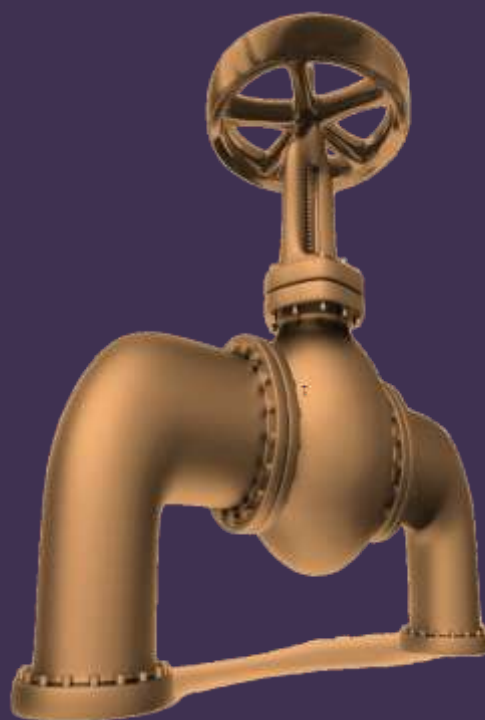


environment. Careful consideration of complex reservoirs, difficult fluids and mitigation of the environmental impact are often required.

When oil companies are planning these challenging projects, they often need access to local knowledge, and innovative engineering solutions from the very start. Consultancy services by **DIONE engineers** deliver such practical, forward-thinking solutions, which draw on the specialist expertise and resources available across our group.

Consultancy services provided by our company include, but are not limited with, the following:

- Environmental impact studies
- Field development planning
- Feasibility studies
- Conceptual design
- Cost estimating and planning
- Techno-commercial risk analysis
- Process and optimization studies
- Safety engineering

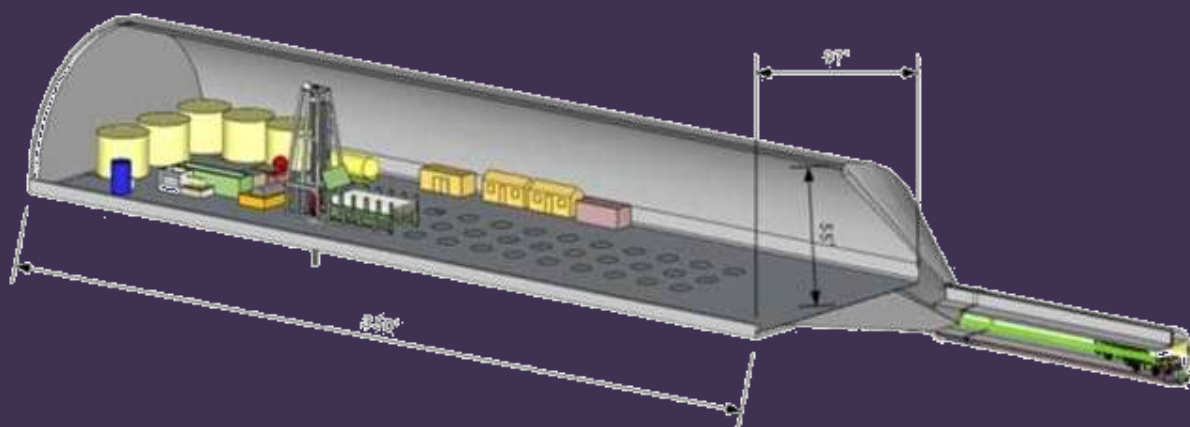


- Pipeline engineering: flow assurance and routing studies
- Upgrade and modification studies

ENGINEERING DESIGN

DIONE engineer's expertise provides for development of new construction projects as well as upgrade and modification of existing oil and gas facilities both onshore and offshore.

With an extensive pool of resources, we work closely with our clients to establish project teams with the most appropriate blend of skills and experience



to deliver world class services.

Thus, the company provides for development of design solutions for production and process oil and gas facilities including the following:

- Front-End Engineering Design
- Basic and Detail Design
- Preparation of ITT packages for EPC tenders
- Operability and operational enhancements SCADA design



- Forecasting)
- Reporting studies
- Demining and commissioning studies
- Complex working design
- Method statement and execution plans preparation
- Design verification
- Design adaptation



Engineering Specific Services

Design

- Transmission, Distribution & Generation
- Substations/Switchyards/Power plants
- Protection and control schemes
- Plant and utility distribution
- Lightning protection
- Computer aided drafting & design

Analysis

- Steel Structure (Offshore, Onshore)
- Piping and Pipeline
- Control Systems
- Systems Studies
- Energy Audits
- Ground Grid Studies
- Power Factor correction
- Short circuit studies
- Harmonic analysis and filter design
- Protective device co-ordination
- Dynamic stability studies
- Reliability analysis
- Power System Studies
 - Short Circuit
 - Coordination
 - Arc Flash
 - Power Quality
 - Motor Start-Up
- Ground Grid Design
- Soil Resistivity
- Power System Modeling
 - Dynamic Stability
 - WECC/NERC Testing & reporting

Engineering Site Services

- WECC/NERC testing & Reporting

Planning Specific Services

- Plant Maintenance Methodology – Routine and Shutdown
- Project Management and Operational Management
- Maintenance Work - Development and Planning
 - SAP PM/PS Modules for Maintenance Planning and Project Controls
 - Plant Routine Work Processing
 - Shutdown and Major Maintenance Planning
 - Predictive Maintenance Using Maintenance Plans
- Project Management
 - Project Scope Development
 - Creating and Managing Project Schedules
 - Procurement of Goods and Parts
 - Human Resources and Capacity Planning
 - Financial Analysis (Estimating, Budgeting, and
- Training, Coaching, and Mentoring on Maintenance Processes and Associated Tools in Industry

Training Specific Services

- Mechanical System Equipment maintenance and trouble shooting
- Power system equipment maintenance
- Safety and switching operations
- Equipment operation-electrical and

- Project management
 - Construction scheduling
 - Equipment evaluations
- Automation Specific Services
- HMI programming & design
 - PLC applications, programming & design
 - Plant automation design
 - Full functional checkout
 - Field calibration services
 - Loop and tuning checks
 - Equipment commissioning
 - Custom programming
 - Basic on-site training
- non-electrical perspective
 - Protection and control for generation and distribution systems
 - Substation safety
 - Grounding and bonding
 - Power transformers
 - Power cable terminating, splicing, and testing
 - Motor & generator testing
 - NETA Standards and Specifications



PROJECT MANAGEMENT FOR ENGINEERING, PROCUREMENT AND CONSTRUCTION, PMC

we provide individually tailored and integrated PMC project delivery solutions through adhering to strict principles of safety and quality in design.

Specializing in project implementation through a variety of contracting models, we are committed to fully understanding and meeting our customer's requirement.

Our PMC project implementation capabilities include, but are not limited with the following:

- Health, safety, security and environmental management in line with international and national regulations
- Comprehensive quality assurance and control
- Detailed design and engineering
- Procurement and logistics management of all project materials and equipment
- Supervision of Fabrication and onsite construction
- Supervision of Onsite mechanical, electrical and instrumentation works
- Supervision of Commissioning
- Training and start up.



For CONSTRUCTION phase our management and supervision cover:

- Fabrication and installation of steel structures
- Anti-corrosion protection
- mechanical installation and process equipment installation
- Electric installations
- Instrumentation systems installation

- Sub-water and diving operations
- Installation of piled foundations for offshore platforms
- Offshore installation activities with marine spreads and floating cranes
- Marine operations management
- Pre-commissioning and commissioning

It should be emphasized that DIONE provides qualified services for turn-key project completion. An independent certifying authority can be involved for the purposes of certification of such projects.

The system of project management developed and implemented within the company is based on the certified purpose-made company standards and provisions, as well as special software with the multi-level integrated system. Project teams are equipped with modern technical control and coordination devices enabling them to join the activities of the field offices and other departments of the company located in the Head Office.

DIONE Project Management structure provides our clients with highly cost effective construction projects based on control and management of completion processes, procurement, construction, installation, compliance with the HSE requirements and other goals to be achieved in the course of the project completion.

With our project management approach we meet one of the key targets, i.e. compliance with the Project Key Dates while performing certain activities on a fast track schedule in parallel, e.g. detailed design and construction. In such a way we achieve considerable optimization of a project schedule.

Special requirements as applied to the oil and gas facilities by the investors, as well as investment cycle conditions for turn-key construction revealed the specific criteria which served as a basis for formation of **Engineering Design Department** which ensures development of all design phases including pre-investment studies, feasibility studies, issue of working documentation, etc.

Discipline fields of activities include the following:

- 🏗️ offshore platforms, wellhead & Production (including ice resistant structures)
- 🏗️ accommodation and production topsides for offshore platforms
- 🏗️ life supporting and safety systems (i.e. power supply, automation, alarms, communication, life saving equipment)
- 🏗️ process systems for oil and gas preparation and preliminary purification
- 🏗️ offshore and onshore main pipelines
- 🏗️ Corrosion and cathodic protection.

Oil Storage Facilities Construction and Operation Management

- 🏗️ Storage tanks for crude oil, petroleum products and feedstock
- 🏗️ railway and truck loading facilities
- 🏗️ pump stations
- 🏗️ storage tanks for oil, petroleum products and feed-stock
- 🏗️ water supply and fire fighting systems
- 🏗️ power supply, lighting, cathodic protection systems
- 🏗️ automation control systems
- 🏗️ civil works (foundations, fencing, roads, land improvement)

- 🚧 pipelines
- 🚧 Corrosion protection, thermal insulation.

Terminals for Handling of Oil, Petroleum Products and Feedstock:

- 🚧 steel jetties and mooring systems
- 🚧 sub-water pipelines
- 🚧 arm-loading facilities
- 🚧 roadstead Single Point Mooring systems (SPM)
- 🚧 roadstead Conventional Point Mooring systems (CPM)
- 🚧 automatic control and monitoring systems
- 🚧 Environment protection systems.

DIONE has implemented and maintains efficient and proven quality system conforming to the requirements of **ISO 9001:2000** which is covering the following activities:

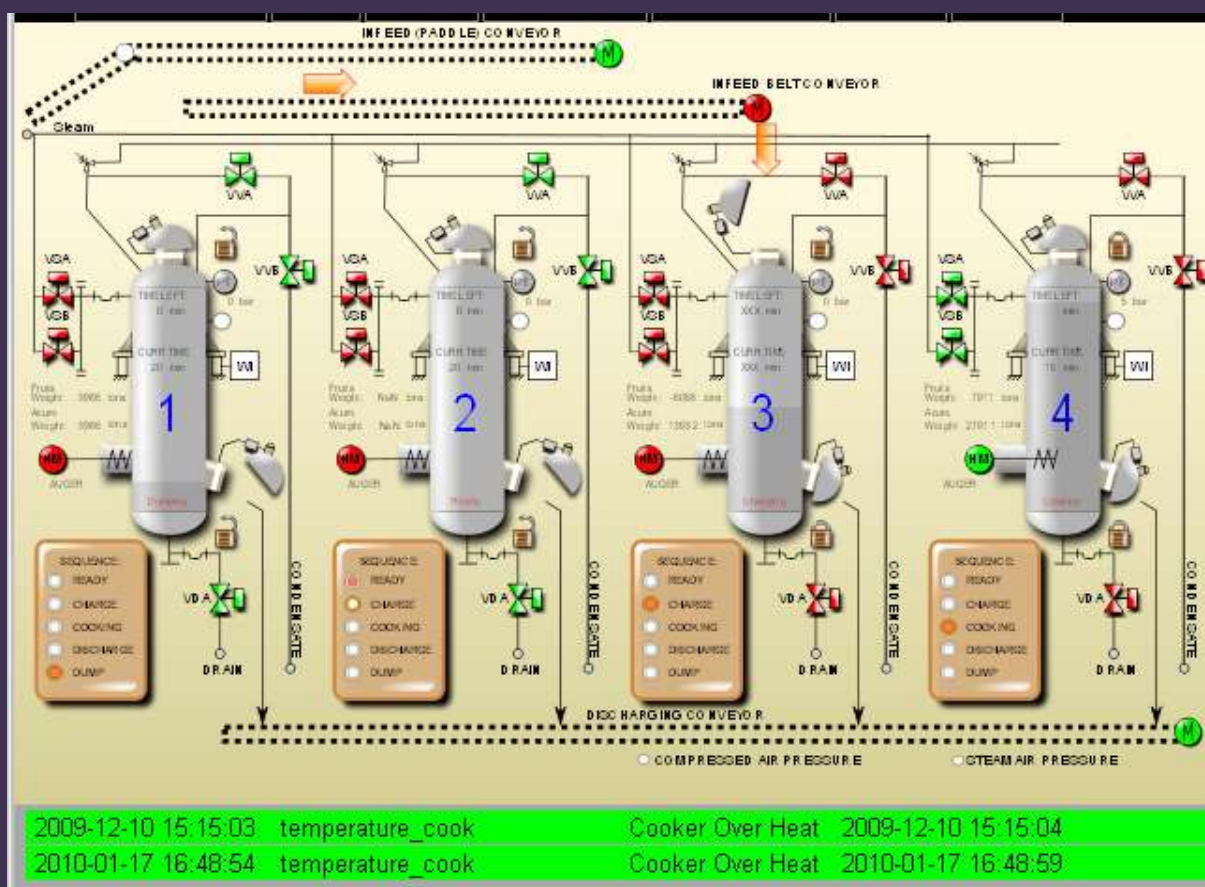
- 🚧 Design and preparation of project specifications
- 🚧 Procurement of equipment, materials, consumables, etc.
- 🚧 Supervision of Fabrication, installation, testing, all plant, equipment and materials
- 🚧 Supervision of Construction, pre-commissioning and commissioning
- 🚧 Contractor, Sub-Contractor and Supplier services

Field Services

- **Experienced Employees.** DIONE draws from a deep pool of talent, and has the people-power to satisfy your job's technical needs.

- **Remote Expertise.** The DIONE team has worked on multiple remote and restricted job sites, nationally and internationally. We're capable of quickly understanding and adapting to your unique needs.

Minimal Downtime. The DIONE team consists of skilled technicians who consistently outperform within prescribed time frames, resulting in quality work with minimal downtime.

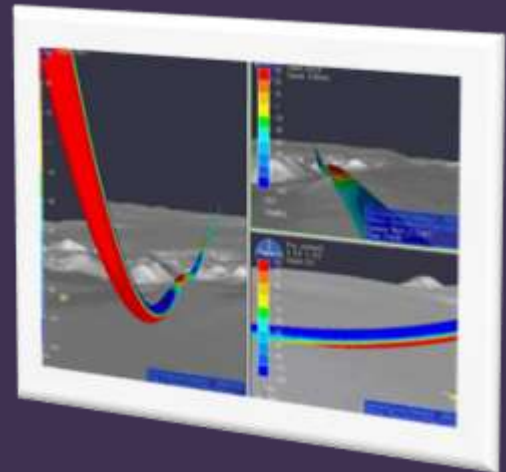


SUPERVISION OF ELECTRICAL INSTALLATION, INSTRUMENTATION INSTALLATION, COMMISSIONING

Specialized department (directorate) on executing the above mentioned works is based in the central office in Simferopol. The department basic tasks are:

- Design engineering
- Completing of equipment

- Supervision of Electrical installation, pre-commissioning and commissioning activities
- Training of the Client's personnel

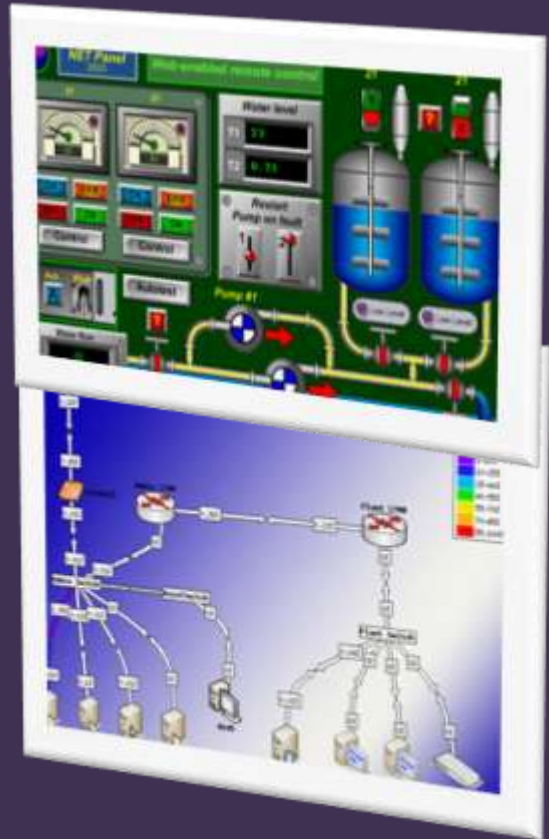


The company has all required knowledge and experience and software for electrical, Instrumentation, SCADA systems, HSE, and communication and ICT solutions for designing and management of the projects in the following fields:



- process control and automation systems
 - control and alarm systems
 - fire-fighting automation systems
 - electric power supply and standby systems
 - hydraulic and pneumatic control systems
 - navigation aids
 - Process fluid heating of pipelines, equipment and instruments

- wellhead control systems and hydraulic systems of shutdown valves control
- engineering communication systems
- guard and video monitoring systems
- SCADA systems

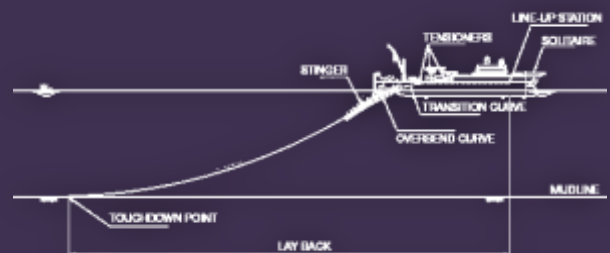
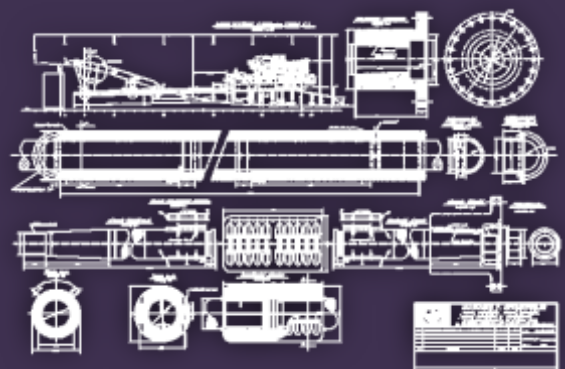


Experts possess high professionalism and unique experience of execution of works on EPC project in the region countries and abroad.

MANAGEMENT OF MARINE OPERATIONS

DIONE has a specialized department (Directorate on marine operations) the tasks of which include the following:

- Management and operation of own vessels
- Management and coordination of works of engaged vessels and positioning means
- Development and agreement with Marine Warranty Surveyor (MWS) of



installation procedures and marine operations

- 🚧 Positioning of support jackets and marine spread during the installation of fixed offshore platform
- 🚧 Management and coordination of marine spread and transportation barges work during offshore installation operations
- 🚧 Mobilization of marine spread and cargo barges to the installation site
- 🚧 Arrangement of offshore safety during execution of marine installation operations.

DIVING AND UNDERWATER ENGINEERING WORKS

DIONE has a specialized enterprise with on provision of diving and underwater engineering works required for construction of fixed

offshore platforms, subsea pipelines and marine terminals.

There are 3 completely equipped diving stations manned with diving experts, and a group which provides engineering survey works execution and preparation of corresponding reports.

The diving team is widely experienced in offshore works and is properly equipped for performance of the following operations:

- 🚧 survey of pipeline routings
- 🚧 survey of steel structures





The equipment and accessories comply with current worldwide requirements, provide possibility for high efficiency and quality of works execution, and correspond to international safety standards requirements.

Data Providing Services

Data Provision having various designations is the one of the major directions of the company's activity.

The company Data providing facilities allow to provide Oil & Gas Technical, Economical, Resources Cost, Market Survey and Statistical data for clients to be the first for getting knowledge and latest technologies for the followings:

-  Fabrication of steel structures of 3D modules
-  Corrosion protection of structures



- 🚧 Load-out and sea-fastening on vessels
- 🚧 Positioning and offshore installation of fixed offshore platform
- 🚧 Piling arrangement
- 🚧 Process equipment and piping installation
- 🚧 Installation of instrumentation systems
- 🚧 Electrical installation works
- 🚧 Commissioning

In order to execute the above complex of works, **DIONE** has the required Resources, Procedures and including:

- 🚧 The company experts possess the international experience and international certificates
- 🚧 Skilled Personnel
- 🚧 Knowledge and Experience
- 🚧 Advanced hardware and software for planning, cost estimation and management of exploration , drilling, production and distribution of Oil & Gas products

To provide engineering support, the company has specialized departments that carry out planning, execution, approval by independent surveyor of complex installation operations, as well as risks analysis, design and fabrication of ad-hoc rigging for execution of offshore installation operations during the fixed offshore platform erection.

The company engineering personnel has long-term experience of work in Middle East and CIS countries and abroad, including Iran, Qatar, Kuwait, Saudi Arabia, Ukraine, and Russia.

Dione Oil Latest Cost Models

| Item No | Assemblies/Cost Models: | Item No. | Assemblies/Cost Models: |
|---------|---|----------|--|
| 1 | OIL / GAS EXPLORATION PACKAGE | 73 | MERCURY REMOVAL |
| 2 | OFFSHORE JACKETS (FIXED, EPCI) | 74 | NITROGEN REJECTION |
| 3 | OFFSHORE WELLHAED DECKS (STRUCTURAL, EPCI) | 75 | NGL RECOVERY |
| 4 | OFFSHORE PRODUCTION DECKS (STRUCTURAL, EPCI) | 76 | FRACTIONATION |
| 5 | OFFSHORE LIVING QUARTER (STRUCTURAL, EPCI) | 77 | GAS SWEETENING |
| 6 | ONSHORE FABRICATION OF JACKETS | 78 | TAIL GAS TREATING |
| 7 | ONSHORE FABRICATION OF DECKS | 79 | WELL LOGING |
| 8 | OFFSHORE BRIDGES (EPCI) | 80 | WELL STIMULATION |
| 9 | OFFSHORE FLARE (STRUCTURAL, EPCI) | 81 | ONSHORE DRILLING RIGS |
| 10 | OFFSHORE DRILLING RIGS | 82 | ONSHORE DRILLING EQUIPMENT |
| 11 | OFFSHORE DRILLING EQUIPMENT | 83 | ONSHORE DRILLING TOOLS & ACCESSORIES |
| 12 | OFFSHORE DRILLING TOOLS & ACCESSORIES | 84 | ONSHORE DRILLING CHEMICALS |
| 13 | OFFSHORE DRILLING CHEMICALS | 85 | ONSHORE DRILLING SERVICES |
| 14 | OFFSHORE DRILLING SERVICES | 86 | ONSHORE DRILLING CASING |
| 15 | OFFSHORE DRILLING CASING | 87 | ONSHORE DRILLING TUBING |
| 16 | OFFSHORE DRILLING TUBING | 88 | ONSHORE WATER INJECTION |
| 17 | OFFSHORE WATER INJECTION | 89 | ONSHORE CHEMICAL METHODS FOR ENHANCED RECOVERY |
| 18 | OFFSHORE CHEMICAL METHODS FOR ENHANCED RECOVERY | 90 | ONSHORE GAS INJECTION |
| 19 | OFFSHORE GAS INJECTION | 91 | ONSHORE ESP FOR ENHANCED RECOVERY |
| 20 | OFFSHORE ESP FOR ENHANCED RECOVERY | 92 | CENTRAL PROCESSING UNIT |
| 21 | OFFSHORE PIPELAYING (EPCI) | 93 | GAS GATHERING UNIT |
| 22 | OFFSHORE CABLE LAYING (EPCI) | 94 | LNG |
| 23 | OFFSHORE VESSELS | 95 | CNG SYSTEM |
| 24 | FABRICATION YARD CONSTRUCTION | 96 | LPG |
| 25 | PIPE COATING | 97 | GAS LIQUID STORAGE |
| 26 | AUTOMATIC CODING SYSTEM | 98 | GAS LIQUID TRANSFER |
| 27 | COMPRESSORS | 99 | GAS DISTRIBUTION SYSTEM |
| 28 | PUMPS | 100 | GAS METERING SYSTEM |

| Item No | Assemblies/Cost Models: | Item No. | Assemblies/Cost Models: |
|---------|-----------------------------|----------|--|
| 29 | SEPARATORS | 101 | SLUG CACTHER SYSTEM |
| 30 | RACTORS | 102 | ETHANE RECOVERY UNIT |
| 31 | TOWERS | 103 | PROPONAE RECOVERY UNIT |
| 32 | HEATERS | 104 | NITROGEN RECOVERY UNIT |
| 33 | BOILERS | 105 | PACKAGE OF BURNER & MIXING VALVES FOR SRU |
| 34 | STORAGE TANKS | 106 | CONDENSATE DE-OILING UNIT PACKAGE |
| 35 | PRESSURE VESSELS | 107 | REMINERALIZATION &CONDITIONING |
| 36 | VALVES | 108 | CONDENSATE DE-OILING UNIT PACKAGE FOR UNIT |
| 37 | FITTINGS | 109 | CO2 TOTAL FLOODING SYSTEM |
| 38 | PIPES | 110 | HOSE REEL |
| 39 | CHEMICAL INJECTION PACKAGES | 111 | FIRE FIGHTING EQUIPMENT(OUTSIDE BUILDING) |
| 40 | DEHYDRATION PACKAGES | 112 | FIRE EXTINGUISHERS |
| 41 | DESALINATION PACKAGES | 113 | DELUGE VALVE |
| 42 | NITROGEN PCKAGES | 114 | FOAM PACKAGE |
| 43 | OXYGEN PACKGES | 115 | FIRE FIGHTING VEHICLE |
| 44 | MEG PACKAGE | 116 | PERSONNEL SAFETY EQUIPMENT |
| 45 | TEG PACKAGE | 117 | WATER SPRAY NOZZLES |
| 46 | COMPRESSED AIR PACKAGES | 118 | OXYGEN ENRICHMENT PACKAGE |
| 47 | WATER TREATMENT PACKAGES | 119 | CONDENSATE DEOILING UNIT PACKAGE |
| 48 | DEMIN WATER PACKAGE | 120 | POLISHING WATER PACKAGE |
| 49 | GAS COMPRESSION STATION | 121 | POTABLE WATER PACKAGE |
| 50 | GAS TRANSFER PIPELINE | 122 | STEAM BOILER PACKAGE |
| 51 | OIL TRANSFER PIPELINE | 123 | SULFUR RECOVERY UNIT PACKAGES |
| 52 | GAS STORAGE SYSTEM | 124 | SULPHUR SOLIDIFICATION PACKAGE |
| 53 | OIL STORAGE SYSTEM | 125 | WASTE EFFLUENT DISPOSAL AND NETWORK |
| 54 | MANIFOLDS | 126 | DEAERATOR |
| 55 | FLOWLINES | 127 | CONDENSATE DESALTER |
| 56 | OIL WELLHEAD FACILITIES | 128 | MEG REGENERATION PACKAGE |
| 57 | GAS WELLHEAD FACILITIES | 129 | MEG RECLAIMER PACKAGE |

| Item No | Assemblies/Cost Models: | Item No. | Assemblies/Cost Models: |
|---------|------------------------------|----------|--|
| 58 | OIL WELL COMPLETION | 130 | FLARE PACKAGES & WET LIQUID BURNER PACKAGE |
| 59 | GAS WELL COMPLETION | 131 | COLD BOX |
| 60 | TRANSFORMERS | 132 | LEAN AMINE FILTRATION PACKAGE |
| 61 | ELECTRIC GENERATORS | 133 | INTEGRALLY GEARED COMPRESSOR |
| 62 | ELECTRIC MOTORS | 134 | DRYER REGENERATION COMPRESSOR |
| 63 | ELECTRIC MCV | 135 | TURBO EXPANDER & CENTRIFUGAL COMPRESSOR |
| 64 | ELECTRICAL ACCESSORIES | 136 | PROPANE REFRIGERANT COMPRESSOR |
| 65 | OIL REFINERIES | 137 | PROPANE VAPOR RECOVERY COMPRESSOR |
| 66 | GAS REFINERIES | 138 | BUTANE VAPOR RECOVERY COMPRESSOR |
| 67 | TOPPING UNIT | 139 | HORIZONTAL CENTRIFUGAL PUMPS |
| 68 | HYDROSKIMMING UNIT | 140 | VERTICAL CENTRIFUGAL PUMPS |
| 69 | CRACKING UNIT | 141 | HEAVY DUTY CENTRIFUGAL PUMPS |
| 70 | COCKING UNIT | 142 | HIGH SPEED CENTRIFUGAL PUMPS |
| 71 | CONDENSATE AND WATER ROMOVAL | 143 | CENTRIFUGAL SULFUR PUMPS |
| 72 | ACID GAS REMOVAL | 144 | ROTARY LUBE AIR BLOWERS |
| 73 | CENTRIFUGAL AIR BOWERS | | |