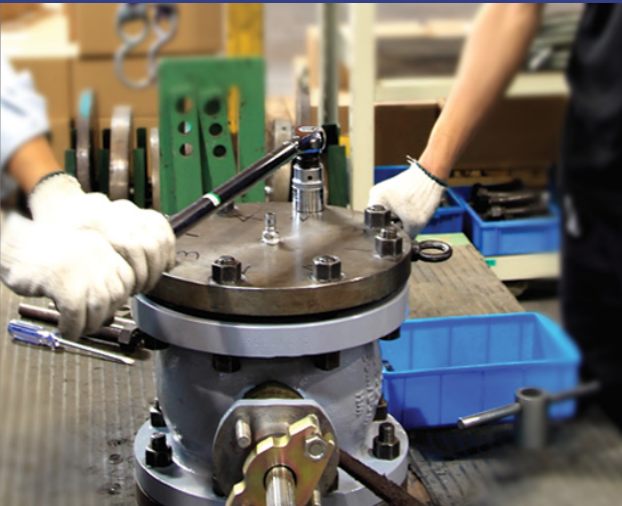




Company Profile

World class solutions to meet local engineering, procurement and maintenance needs

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Introduction to Eshteal Energy Engineering

Eshteal Energy Engineering Co. (3E Group) is an organization of almost 60 Engineers, Procurement specialists and Project managers providing world-class Engineering, Procurement and Maintenance services to owners across the engineering industries in multiple markets including Oil & Gas, Petrochemicals & Chemicals, Mining & Metals, Waste water and Power Generation.

The preferred engineering partner for major local companies, we work in partnership with leading international companies to bring cutting edge and cost effective engineering solutions to our customers' most complex challenges based on combining deep technical expertise with the ability to understand, anticipate and quickly respond to customers' needs.

We exclusively represent several prominent European,

American and Asian manufacturers to provide local sales, services and support for their industry leading brands. Key to Eshteal Procurement's success is the direct integration with Eshteal engineering operations. Our procurement specialists and engineers work closely and proactively together to ensure swift resolution of any technical queries and proper management of highly complex, long lead time and high-risk engineered equipment purchases.

Eshteal recognizes the fact that its long-term growth and success will be fuelled by the quality of its human resource in general and engineers in specific. We have recruited a talented workforce and invest heavily in the training development and retention of our employee base. The result is a self-driven and result oriented work force. We expect the best from our teams because our clients will accept nothing less.

One of our core fundamentals is continuous improvement. Our Procurement procedures and Engineering services are backed by ISO 9001:2008 Certification and a team of trained engineers and procurement professionals, focused on meeting the client's needs. The ISO 9001:2008 further emphasizes 3E Group's focus on doing work "right the first time" and continually improving.



Vision, Strategy and

Organization

Vision

We aim to provide world-class services and products that are recognized as market-leading. We will endeavor to exceed our customers' expectations and deliver superior returns. Our aspiration is to be recognized by our clients as a strategic and high value partner.

Strategy

Our strategy is to achieve long-term sustainable growth by adding value to our customers' operations with world-leading, highly differentiated products and services. We strive to be true partners with our customers, helping them achieve greater success through our innovation and create solutions to any challenge.

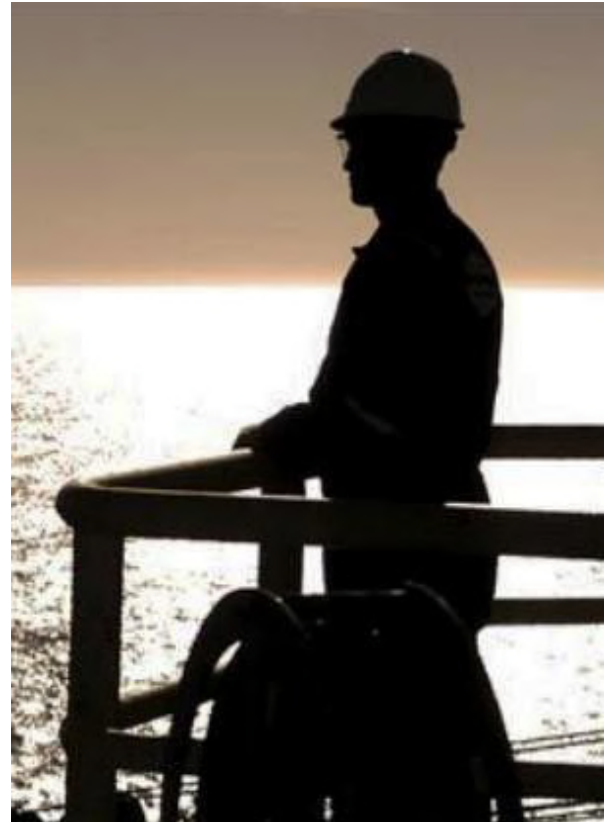
Organization

Whatever the task, organization is the keynote. We operate via a highly efficient, robust and cross-functional structure that allows for a progressive growth in size, skill and quality. The company is segregated into two primary Components. The first component is human resources and/or contractors which maintains the value and integrity of the enterprise by overseeing proper corporate governance of the enterprise and ensure that it is in compliance with all applicable laws and regulations. The second component comprises engineers, procurement specialists, field technicians and project managers offering clients a world-class engineering, procurement and field services.



Services

Being a valuable partner to our clients means having the resources to handle a variety of challenging projects. Whether it is a simple package or a Mega project, we have the experience and expertise to offer world class engineering, procurement, maintenance, field service, repair and part supply to serve a variety of clients in multiple industries including Oil & Gas, Petrochemicals & Chemicals, Mining & Metals, Waste water and Power Generation. Our team is composed by motivated engineers backed by experienced experts retired from successful career in large corporations in Iranian oil, gas and related industries, working with passion to develop best design and optimized solutions which can satisfy our customers from both capital investment and plant operation point of view.



Engineering and modification

Due to excellent partnership with some of the most prominent European and American partners, we receive unrivalled advice from experts putting us in a position to bring global engineering experience to local project requirements. We have been delivering engineering services to the Oil, gas, power and process industries for more than 15 years and have the expertise and the passion that our clients need when they're looking for technical solutions to help them meet their challenges. This means that significant insight, know-how, lessons-learned and industry understanding is available for your use and benefit.

Whether you have an engineering problem that can be taken away, or you need additional resource to integrate into your team, our expertise and capability is there whenever you need it. Because we are

passionate about engineering we employ professional engineers with extensive industry experience who enjoy what they do and care deeply about meeting your business objectives; so we are continually reinforcing your confidence in Eshteal as your engineering partner. Our capabilities include:

- Engineering Consultancy
- Process Engineering
- Mechanical Engineering
- Material science and Metallurgical Engineering
- Layout and Piping Design
- Electrical and instrumentation Engineering
- Control Systems Engineering

This experienced and skilled engineering team enables us to provide valuable technical services through the different stages, from design through fabrication, installation and operation in the shortest possible time and with the highest accuracy.

Procurement and Stocking

Procurement forms a vital function in the overall project management and execution of any EPC contract. This function not only affects the financial aspects of the project but also has a very strong influence on the overall schedule as well as the performance of the project installed and hence the guarantees furnished by the contractor. At Eshteal we understand the risks involved in your supply chain management. It is for that reason that we ensure that we are fully conversant with your requirements and time constraints when procuring equipment.

One of the key benefits of procurement activities to Eshteal is technical integrity and timely delivery. Our engineers and procurement specialists work closely and proactively together. This ensures swift resolution of any technical queries. Our scalable and flexible procurement set-up enables us to cater for diverse client needs. Close interaction between engineering team and procurement specialists keeps projects within budget and on schedule by securing the right equipment at the most favorable price and in due time.

We insist on high ethical, moral and fair practice standards when dealing with equipment vendors and other service providers. If issues arise with your

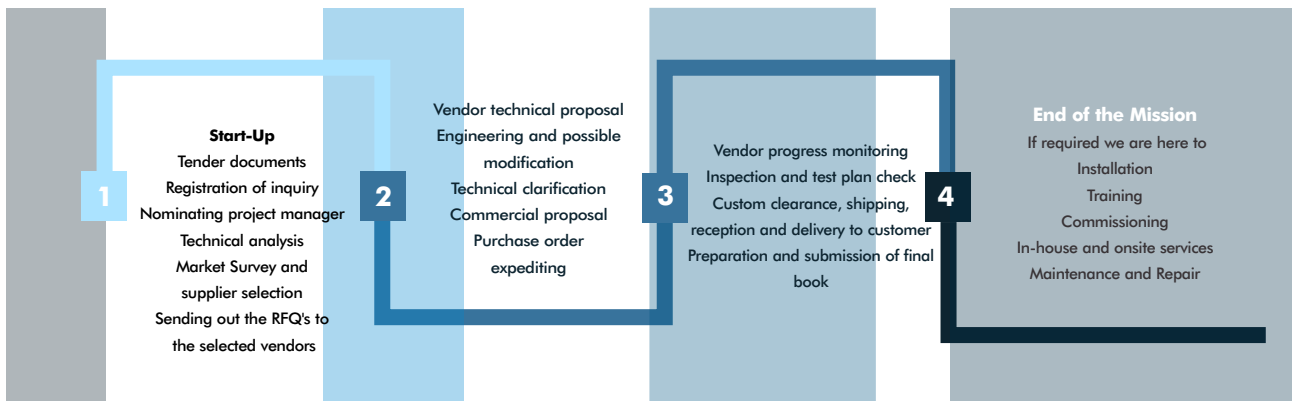
vendors, we help to identify alternative solutions and do everything possible to keep the project on track and on budget.

Our procurement strategy covers:

- Tender documents and bid analysis
- Market Survey, and supplier selection
- Engineering and possible modification
- Price inquiry and negotiation
- Purchase order
- Expediting and vendor progress monitoring
- Inspection and test plan check
- Shipment, reception and delivery to customer

Also, well aware of the time and cost pressures faced by our customers, at our warehousing complex, we carry a significant inventory of equipment ready for immediate delivery to get you back on-line fast.

Long after our projects are complete, we serve as a ready source of spare parts for Eshteal-supplied plants. We maintain engineering, design, and purchasing records on every facility and piece of equipment that we supply so we can quickly research, supply or locate, and ship parts.



Training

Eshteal's training center was formed to meet the exacting demands for specialist training in the oil and gas and energy sectors concentrating on assessing and verifying skills, enhancing performance and assuring clients of a safe workforce.

We work to the highest management standards acquired ISO 9001:2008 in a culture of continuous improvement. Professional, reliable, and efficient, we build long-term relationships with our clients.

Our training professionals – qualified practitioners in their areas of expertise – have many years of experience in the design and delivery of training. Our first class services remain focused, relevant and effective.

We deliver training across the country which means we're ready to meet your training requirements when and where it suits you, whether in our specialist facilities or at your business premises.



Maintenance, Repairs and Asset Management

Our clients invest in their facilities with the expectation that they function optimally for many years. As one of the largest Repairs, Maintenance and asset management contractors, our teams make that happen. Our world class knowledge based services are tailored to help our clients optimize performance by maintaining, repairing and modifying major assets in the Oil and Gas, Process and Power sectors.

We have the experience and expertise to support every aspect of maintaining and our repairs guarantee that the product fulfills its original

specifications. Our service technicians and engineers follow ISO 9001 certified processes, with the latest tools and equipment, so as to deliver the best possible high-quality service both in our shop and on-site.

We constantly work with our clients to assess programs and develop strategies to maximize the value of their assets throughout their entire life cycles. Our service gives you easy and quick access to expert advice and support, providing you the essential knowledge to help our clients to reduce costs and optimize the performance of their assets.



Markets

Helping our clients succeed drives our business. To meet their challenges, we have to understand their industry and their objectives. Over the past decade, we have developed a wide range of technical expertise to better serve a variety of clients in multiple industries including:

Oil, Gas and Petrochemicals

Globally, two-thirds of the world's energy supply is derived from oil and gas. Standing tall amongst other major players in this business, Eshtéal has been and continues to be an active and vital participant in its contribution to oil and gas industry.

Offshore: We harness our offshore expertise from around the world to support client production projects in Persian Gulf and Caspian sea region. We are able to offer new techniques to develop tailored solutions for our clients. Our teams have a long history of finding better solutions to the complex challenges associated with offshore developments.

Onshore: When it comes to oil & gas production onshore, we offer the experience and expertise that can make all the difference in planning, execution and management of your capital programs, assets and operations. Our service offerings leverage the extensive knowledge and capabilities of our team and our international partners to support challenges you may encounter.

Pipelines and Terminals: We support the engineering, procurement and maintenance of offshore and onshore pipelines, including pipes, valves and associated facilities such as compressor, pump and metering/regulator stations.

Petrochemical and Refineries: Eshtéal fully understands the intricate details of refineries and petrochemical plants. Our teams have extensive experience in Engineering, Procurement and maintenance of all petrochemical and refinery facilities, including distillation, hydro-processing, fluid catalytic cracking, coking, octane enhancement, hydrogen production and sulfur removal units.





Process & Industrial

Our experienced managers and technical staff know process and manufacturing plant design and construction. They understand the requirements and challenges that are unique to the industries we serve. This experience enables us to help you get your products to market faster and at a lower cost. Our extensive experience ensures the selection of high performance equipment that meet the demands of a wide range of applications including:

- Mining
- Steel
- Cement
- Food processing
- Pharmaceutical and Fine Chemicals
- Chemical & Specialty Chemicals
- Pulp and Paper
- Water and Waste Water
- Fertilizer and Urea



Power Generation

As official representative of well-known names, we receive unrivalled advice from experts putting us in a position to offer tailored solutions to meet the challenges common in power plants. Whether it is a new or an existing facility, we offer world class engineering, procurement, maintenance, field service, repair & overhaul and part supply to power plants in cogeneration, combined cycle and simple cycle gas turbine configurations.



Products

In the Oil and gas, power and process industries Eshteal has experience for more than a decade. With a huge variety of equipment, packages and brands we serve both large and small customers.

Eshteal distinguishes itself by a personal approach and knowledge of products. Through continuous innovation we are able to think along with our customers and we always offer a solution. The strength is that we dare to think 'outside the box'. This often results in custom-made solutions.

The following is a brief introduction to our products.

I) MECHANICAL

1-1) Process Machinery

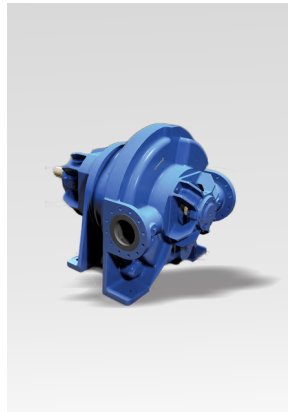
At Eshteal, we have the necessary expertise to provide a complete range of products in Compressors, Turbines and Pumps providing safe, reliable and cost effective solutions to your process. This includes but is not limited to:

- **Pumps**
 - Centrifugal Pumps
 - Slurry Pumps
 - Vertical Pumps
 - Dosing Pumps
 - Cryogenic Submerged Pumps
 - Liquid Ring Vacuum Pumps
 - Sealless Pumps
- **Compressors**
 - Centrifugal / Axial Compressors
 - Reciprocating Compressors
 - Screw Compressors
 - Liquid Ring Type Compressors
 - Lobe Compressor
- **Turbines**
 - Steam Turbines
 - Gas Combustion Turbines
 - Turbo Expanders
- **Fan and Blowers**
- **Couplings**
- **Mechanical Seals**

1-2) Process Equipment

We cater a broad portfolio of process equipment for power generation, industrial, petrochemical and refinery markets such as:

- **Heat exchangers**
- **Reactors**
- **Heaters (direct and Indirect) and Reformers**
- **Process Gas Coolers**
-



1-3) Piping

• Valves

Eshteal supplies the broadest portfolio of valves for the upstream drilling and production, midstream, and downstream markets. Our high quality valves are trusted for reliable service in some of the most demanding applications including: gas processing, drilling, production, transmission and storage, large-bore completions, HPHT/ ultra-HPHT, wellhead, Christmas tree and steam service in sizes from 1/2" to 80" and in materials such as carbon steel, stainless steel, fluoropolymer lined, duplex, Bronze, NiAlBr and exotic alloys like Titanium, Monel and Hastelloy. We offer the most diverse range of valves by type including:

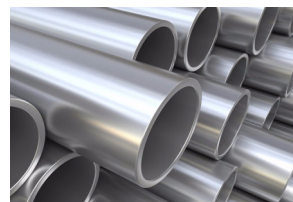
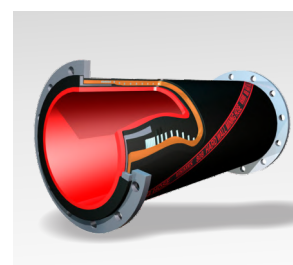
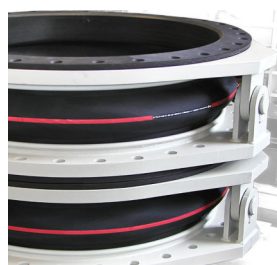
- Ball Valves
- Gate, Globe and Check Valves
- Plug Valves
- Butterfly Valves
- Triple Offset Valves
- Knife Gate Valves
- API 6A Valves

Also, we supply custom and critical process valves for severe service conditions that control, isolate, divert, and sample liquids, gases, powders, and slurries. Our product range of customized valves includes:

- Tank Bottom Valves
- Injection Valves
- Sampling Valves
- Multiways (diverter) Valves
- Lined Blinds
- Spray Rinse Valves
- Slurry Valves

• Pipes, Piping Accessories and Pipeline Equipment

Together with our strategic partners across the globe, we provide a complete package of piping equipment, services & solutions. We are specialized in providing the most reliable materials management solution on every project, regardless of size. With our extensive knowledge, we can support our clients from maintenance to construction of new projects. We stock and distribute a large and diverse inventory of pipes, piping accessories and pipeline equipment in different materials such as Stainless Steel, Alloy Steel, Aluminum, Carbon Steel, Duplex &



Super Duplex, High Alloys, High Yield, Low Temperature, Nickel Alloys, Bronze Titanium, etc. from industry-leading and widely accepted manufacturers. Our portfolio includes but is not limited to:

- Seamless & Welded Pipes (sizes: 3/8" to 60")
- Olets & Special pieces (sizes: 1/2" to 36")
- Flanges (sizes: 1/2" to 52")
- Buttweld Fittings (Sizes: 1/2" to 60" / Welded & Seamless)
- Forged Fittings (Sizes: 3/8" to 4")
- Gaskets & Bolts
- Steam Traps

• **Safety Valves and Pressure Protection Equipment**

Protecting vital equipment and material from the risks caused by pressure changes is a fundamental requirement for many industries. Eshteal offers spring-loaded and pilot-operated safety valves for all industrial applications according to PED, ASME Sec. VIII and ASME Sec. I as well as application-based solutions for special requirements. Our pressure protection safety systems portfolio includes:

Safety valves

- Spring Loaded
- Pilot Operated
- Non API pressure safety Relief valves

Pressure Reducing and Regulating Valves

- Pilot Pressure Reducing Valves
- Direct Acting Pressure Reducing Valves
- Changeover Valves

Rupture discs and Explosion vent panels

Pressure & Flame Protection Valves



2) INSTRUMENTATION

2-1) Main System

We offer integrated systems at all automation levels, for the entire production chain, catering for both new installation and revamping and expansion of existing installation. Our solutions include but not limited to:

- Distributed Control System (DCS)
- Field bus Control System (FCS)
- Emergency Shutdown System (ESD)
- Programmable Logic Controlled (PLC)
- Supervisory Control and Data Acquisition system (SCADA)
- Human Machine Interface (HMI)
- High Integrity Process Protection System(HIPPS)
- Wellhead Control Panel (WHCP)



2-2) Field Devices and Analyzers

• Control Valves

Eshtreal is an accredited agent for some of the most reputable brands in flow control. We offer high-performance, durable severe service valve solutions for every type of problematic application, from high pressure, high-temperature environments to sub-zero temperatures. We offer systems designed for cavitation, flashing, erosion, contaminated fluids, corrosion, high velocity, low shear, quick closing, anti-surge, vibration, low noise, energy dissipation and where crystallization can be an issue. Our product range includes the following:

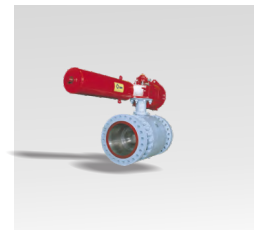
- Globe Control Valves
- Ball Control Valves
- Butterfly Control Valves
- Axial Flow Control Valves
- Automatic Recirculation Valve (ARV)
- Multistage Control Valves
- Cage Control Valves



• Actuators

Eshtreal operates as a supplier of a comprehensive range of valve actuators for valve sizes up to 60" Serving a wide range of industries. Our extensive portfolio of actuators includes:

- Hydraulic and Pneumatic Quarter Turn (Scotch-yoke)
- Hydraulic And Pneumatic Linear (Piston)
- Gas Over Oil
- Direct Gas
- Electric
- Subsea
- Electro Hydraulic



• Measurement Equipment and Analyzers

Eshtreal provides a variety of measurement equipment that ensures outstanding performance, precision, and long-term stability. With our proven project experience, we are able to provide high quality and innovative solutions tailored to all your application in a range of different environments and mediums. Our extensive range of switches, indicators, transmitters and analyzers includes but is not limited to:

- Pressure measurement
- Level measurement
- Temperature measurement
- Flow measurement
- Tank Gauging
- Gas Analysis
- Liquid Analysis

- Data Loggers/Recorders

2-3) HSE Equipment

We offer a broad range of HSE equipment engineered not only to meet the critical guidelines of the regulatory agencies but to exceed the expectations of the customer in the areas of installation, operation, and maintenance. This includes:

- F&G
- Gas And Vapor Detector
- Smoke Detector
- Heat Detector
- Flame Detector
- Manual Call Point
- Emission Monitoring System (EMS)



3) Package Units

Due to excellent partnership with some of the most prominent European and American partners, we are able to provide package units for the oil, gas and petrochemical industries, ranging from oil and gas field production facilities to treatment and refining activities. Advanced systems for petrochemical, pharmaceutical and energy generation plants are also part of our capabilities. Our packages include the following:

Process and treatment packages

- Gas Process Packages
- Oil Treatment
- *Chemical Injection Packages*
- Boilers (Fire Tube/Water Tube)
- Heat Recovery Steam Generation
- Refrigeration Packages
- Dryer Packages
- Waste Water Treatment

Onshore packaged systems

- Production Equipment (Production, injection & test manifolds)
- Pipeline Terminal Equipment (Metering, Analyzer, Launching/receiving pig traps)
- Utility Skids
- Chemical & Additive Skids

- Wellheads and Xmas-trees
 - HIPPS (High Integrity Pressure Protection Systems)
- Offshore packaged systems
- SSIV Systems
 - PipeLine End Manifolds (PLEMs)
 - Top Side Equipment (Manifolds, Injection packages, Metering systems)
 - Wellheads and Xmas-trees
 - HIPPS (High Integrity Pressure Protection Systems)

4) SPARE PARTS

Using genuine OEM parts is the best maintenance practice to protect and improve availability and reliability of equipment over the entire life cycle.

We are specialized in sourcing and supplying spare parts to the Oil, Gas, Petrochemical and power industry. Due to our excellent relation to very many Original Equipment Maker (OEM), we are in the position to supply the majority of spare parts in very short time.

At Eshtéal we assure you that the spare part is supplied for your specific process, certification will be maintained and maximum equipment lifetime achieved. Our OEM spare parts ensure that wear and maintenance costs are kept to a minimum.



Main Clients

We are honored to have worked both directly and indirectly for the following major clients to provide our services which has helped us to have a strong customer loyalty and profile.



National Iranian Oil Company (NIOC)

- Pars Oil & Gas Company (POGC)
- Petroleum Engineering & Development Company (PEDEC)
- National Iranian South Oilfields Company (NISOC)
- Iranian Offshore Oil Company (IOOC)
- Iranian Central Oil Fields Company (ICOFC)
- National Iranian Drilling Company (NIDC)
- North Drilling Company (NDCO)



National Iranian Gas Company (NIGC)

- South Pars Gas Complex (SPGC)
- Iranian Gas Transmission Company (IGTC)
- Iranian Gas Engineering & Development Company
- Iranian Gas Commercial Co (IGCC)
- Bidboland 1 & 2 Refining Companies
- Persian Gas Refining Company
- All Province Gas Companies



National Iranian Petrochemical Company (NIPC)

- Petrochemical Industry Development Management Company (PIDMCO)
- Supplying Parts, Equipment & Chemical Eng Company (SPEC)
- Bandar Imam Petrochemical Company
- Arvand Petrochemical Company
- Shahid Tondgoyan Petrochemical Company



National Iranian Oil Refining and distribution Company (NIORDC)

- Arak Oil Refining Company
- Esfahan Oil Refining Company
- Bandar Abbas Oil Refining Company
- Tehran Oil Refining Company
- Persian Gulf Star Oil Company
- Abadan Oil Refining Company



Shell



TOTAL

DAELIM



HANIL



EIED

Energy Industries Engineering & Design (EIED)



OIEC

Oil Industries Engineering and Construction (OIEC)



FARAB Energy & Water Projects



Industrial Projects Management of Iran (IPMI)



Jondi Shapour Company



Mapna Special Projects Construction & Development Company (MD-3)



Jahan Pars Company



Nargan Engineers & Constructors



Petro Pars



Sazeh Consultants



Machihre Sazi Arak Company



SAHEL CONSULTING ENGINEERS Company



Esfahan's Mobarakeh Steel Company



سازمان توسعه و نوسازی معادن و صنایع معدنی ایران



Head Office:

Our Head office is located in Tehran and our Senior Management, Engineering, Procurement and Commercial teams are located here.

Facilities:

Eshtéal has a facility covering an area of almost 6,500 square meters that is home to our warehouse, paintshop, training center and our state-of-the-art integration, assembly and fabrication facilities equipped with the latest European equipment such as digital full automated test benches, Manual and CNC Machines, Grinders and Drilling Machines, Lapping and Polishing Machines, Air compressors up to 700 bar, Test benches, overhead Cranes up to 25 Ton, Trucks and Forklifts.

ESHTEAL Energy Engineering Co. (p.j.s.)

Head Office:

No. 7, 7th Alley, Iran zamin Ave.,

Shahrak Ghods

Tehran, 1465884544, IRAN.

Tel.: +98(21)88371524 - 31

Fax: +98(21)88371532

www.eshteal.com

info@eshteal.com