

Fahameh, Keep Care The Quality & Capital





Fahameh Engineering and Industrial Co. founded in 1993 aiming to provide engineering services and expertise in various industrial fields.

After a while and step by step Fahameh developed its activities in:

Various Types of Inspection Services Project Monitor and Control Investment Consulting in Oil, Gas, Food and... fields

Management Consulting Creating Management Information Systems Oil, Gas and Petrochemical Consultant

■ Outstanding Values & Visions

Honesty & dignity . Globalization . Commitment to Future Generations



■ Membership in Professional Associations and Societies:

- Iran Management Consultants Association
- Association of Quality Development & Improvement of Iran's Industries
- Iranian Institute of Welding and Non Distractive Testing
- Iran Electrical Industry Syndicate
- Engineering and Assembly design Association

- Audit and Inspection Society of Iran
- Association of Banking & Credit Investment Consultants
- Iran Project Management Association
- Association of Investment Consulting Supervision
- International Consultants & Contractors Association of Iran

Project Engineering and Management System





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In 1994 the activity of this section started with teasibility study for investment and development projects as well as other similar tasks associated with banking network.

☐ Feasibility study follows the below targets:

- By identifying and analyzing the economic and financial evaluations, determines the proper various technical and administrative choices
- By studying potential benefits of the project, supports decision-making process

The increase of the value and importance of investments as well as proper financing and this fact that nowadays such studies have become more specialized, led to banking network and investment organizations greater need for using experts in this section.

For many years Fahameh Engineering & Industrial Company has been in the list of banks and investors trusted companies.

Gradually and over the years, relying on the acquired knowledge and experience, in order to meet the other customers' needs, Fahameh added some other fields such as market research, preparation of business plans, problems diagnosis and... to its activities.

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We are your trusted and specialized advisor to study and analyze all types of your economic and commercial activities

- Opportunity Study
- Market Research
 - Business Plan
 - Feasibility study
 - Feasibility Study for construction of multifunctional urban and intercity complexes
 - Feasibility Study for tower construction, change in building use and possibility of increasing the floor area
 - Feasibility Study for civil projects (construction of bridges, roads, hotels, tourist attractions and the like)
 - Technology Identification and selection
 - Economic and financial analysis using Comfar III software
 - Credit Rating
 - Adaptation of Urban Land Use

Plan Supervision and Project Control Department

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Because of projects complication and resources constraint and business environment competency increasing, manager have decided to use project management knowledge, standards, tools and techniques in order to find solutions for them.

Projects management accuracy due to:

- Project management integrated infrastructure.
- Web based managerial dashboards and intelligent systems
- Professional project management office and organizational maturity roadmap
- Programs and projects planning and controlling effectiveness and efficient

It has enabled companies to many projects sustainable and effectiveness by specific time, determined budget and acceptable quality.

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Plan supervision and project control department have enabled customers to develop their project management abilities, this department which is created by specialist and experienced people and supported whit twenty years credit by superintendence activities such as oil, Gas, petrochemical and Power projects, Industrial unit construction, etc., is one of the most actives units in Fahameh engineering & industrial co. This department has supervised on projects which take loan. Also, offers training courses and specialized promotion in varied industries below:

- project planning and controlling
- Integrated project management systems designing and implementing
- Intelligent integrated project management systems implementing
 - Contract management
 - organizational processes design and implementing

Domestic, Imported and Exported Products Inspection





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- Pre shipment inspection (PSI) and issuance of inspection certificate (IC)
- Pre delivery inspection (PDI)
- Issuance of Verification of Conformity Certificate for products subject to mandatory standards (COI) in origin and destination
- Visual random inspection (quality and quantity) and issuance of inspection certificate (IC) in destination
- Inspection and audit of production process in origin and destination

In Europe, Asia, Africa, and Australia

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□ Some of our other inspection services in origin and destination include:

- Supervision of loading and discharge
- Packing and marking inspection
- Sampling
- Test witnessing
- During production inspection
- Equipment inspection after installation
- · And other inspection services according to clients' requests

Price Verification

- Purchase documents review (technical and financial)
- Vendor evaluation (technical and commercial)
- Issuance of the price verification report based on reviewing the purchase documents for obtaining bank facilities, and/or ensuring the operation accuracy of the investors' technical-commercial team

Various Types of Domestic Inspections

- Performance of inspections and issuance of inspection certificates for the purchased domestic products (the complementary documents for variety of loans and participation loans) or performance of all kinds of inspection as per clients' requests
 - Cooperation with standard offices across the country in different inspection plans such as:
 - Inspection and sampling of products subject to standards from the market (TAHA Plan)
 - Periodic inspection and sampling of production lines of factories manufacturing products subject to standards (Routine Sampling)
 - Surveying the imported and exported goods purchase documents and issuing COC in customs.





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Vehicle and Parts Inspection

All vehicles that are first manufactured in or imported into the country and also all the vehicles that have been already manufactured in the country and have not received the Vehicle Type Approval yet must receive this certificate; otherwise, will not receive the traffic licenses (license plate).

■ Vehicle type approval means:

Approval of production samples of a model based on the requirements and the specified related standards

Vehicle type approval certificate is a need for releasing the imported and exported vehicles from customs.

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For over 20 years, FAHAMEH has been cooperating with vehicle manufactures and their parts suppliers as the principals' representative and inspector to supervise the domestic car parts production process.

FAHAMEH Engineering and Industrial Co. the Eyes of Automakers in Process and Product Audits

Due to its long history in technical inspection of vehicle parts, Fahameh **has been accredited by standard organization for** Vehicle and Motorcycle Type Approval and issuance of COP (Conformity of Production).

In the wake of signing a Contract with **CSI Company**; a member of **IMQ group** which is one of seven laboratories accredited by E-NCAP and one of two laboratories approved by FORMULA 1, a variety of tests such as the followings can be performed:

- Passive Safety
- Active Safety
 - NVH
 - Endurance & Fatigue
 - Environmental Testing
 - System & Component Testing
 - Vehicle Validation, Durability & Reliability Growth
 - Homologations & Technical Support
 - With regard to the above mentioned MOU, other services including the below ones can be offered too:
 - Consulting and construction of Full Crash Test and Passive Test equipment according to E-NCAP standard
 - Consulting for purchasing and equipping vehicle laboratories
 - Issuance of E-Mark for vehicle parts
 - Validation and verification of available testing equipment and its operation for issuing E-Mark certificate by CSI
 - Special consulting services and engineering projects
 needed by principals
 - Recording the vehicle functional status and how the electric and electronic parts and engine are connected and dispatch of the online reports to the central server

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All models of motorcycles, before the start of the production stage, must fulfill the requirements of the related national standards mandated by Iranian National Standards organization and receive the Type Approval certificate.

☐ Motorcycle type approval means:

Study of a motorcycle type documents as per 21,17 and 27 mandatory standards Various Iranian National Standards that include all imported and domestic motorcycle products are as follows:

- 17 mandatory standards: related to the motorcycles with internal chassis
- 23 mandatory standards: related to the electric motorcycles
- 27 mandatory standards: related to motorcycles with external chassis

Fahameh Engineering and Industrial Company is accredited by Iranian National Standard Organization for issuance of Motor Cycle Type Approval as per the above mentioned standards. In addition to the above mentioned services, relying on its brilliant experience in the field of "Vehicle & Driving Force", Fahameh is ready to render the below services to its clients:

- Physical inspection of imported motorcycles based on their approved types
- Issuance of the Motorcycle Type Approval for imported motorcycles based on European standards (E-Mark)
 - COP audits and preparation of monthly list of approved motorcycles for Iranian
 National Standards Organization for issuance of license plates

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During Production Inspection Process and Product Audit





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FAHAMEH Engineering and Industrial Co. the Eyes of Automakers in Process and Product Audits

Due to its long history in technical inspection of vehicle parts, Fahameh has been accredited by standard organization for auditing and approving the COP of the parts production.

□ COP (Conformity of Production) Certificate or Confirmation

is a procedure that can ensure the conformity of the product with the approved sample.

With implementation of new COP plan, we hope that the quality of production lines promotes day by day.

Relying on above experience, the process and product audit section of Fahameh Engineering and Industrial Co. has been launched in all branches of production and industry.

Process and product audit is a gauge in the hands of management to figure out the process and product:

- Relation with the standard requirements
- Relation with the customers' expectations

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Process and product audit identifies the costly, vulnerable and high risk points in production line.

The manufacturing plants with long history of production are the valuable assets of each country, and nowadays their experience is one of the most significant parts of the growth and development of industry history in each country. Deficiencies of old processes, outdated methods, changes in customers' expectations and ultimately a variety of products with minor changes can eliminate these massive investments from manufacturing and commercial competition cycle and as a result impose enormous costs to the national economy. The industrial development and growth speed are in a way that this group of industries needs more revision and modification of processes and products according to the latest national and international standards. For many years automotive industries have been using these important and essential necessities in addition to the during production inspection besides quality assurance systems in their own plants and their parts suppliers' plants. The Household Appliances producers, Machine Manufacturers, Gas and Petrochemical Industries as well as Cleaning and Detergent producers, with respect to their long history of production, are in need of these kinds of services more than the other industries. Fahameh Engineering and Industrial Co. in the wake of signing a Contract with the Italian group IMQ, as their official representative is able to assess your product and production process and provides the arrangements from audit performance to obtainment of the E-Mark and CE certificates from this group.

We will be with you all along this route.

Technical Inspection of Electric Elevators, Escalators, Cranes...





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With the increase in the use of elevators in the building industry and consequently the high risk of incorrect and non-standard installation, the necessity to ensure the individual and public safety factors of installed and in installation process electric elevators, as per Iranian National Standard Organization requirements, has become mandatory.

In the line with the development of elevators standards, Fahameh Engineering and Industrial Co. was one of the first accredited companies that started its activities throughout the country in this regard.

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In addition to elevators annual obligatory control and maintenance contracts with the active companies in this field, considering the large number of more than 20 year old available working elevators,

periodic Inspection of elevators performances in the country by accredited companies is a mandated requirement that readily can be done by Fahameh specialists.

The professional group of Fahameh specialists relying on their technical knowledge and valuable experience in inspection of the other similar products such as:

- Escalator
 - Conveyers (walk way) used in passenger terminals
 - Tower cranes
 - Mobile cranes
 - Lift trucks

are ready to render services to the esteemed clients.

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Weld Inspection Non-Distractive Testing in Metal Building & Industrial Structures





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Welding is a fabrication process that joins engineering materials (metal, ceramic, polymer, composite) to each other in a way that the binding properties would be similar to base material properties. **The quality control of metal welding** is the control of permanent binding processes of metal parts that fusion or non-fusion methods with or without the use of filler material are applied to.

This company performs Non Distractive Tests (NDT) on welded parts and reports the quality of welds. The tested parts will be neither altered nor destroyed. Each NDT method has some benefits and some losses, thus, some of them are better than the others for a special purpose.

Here are some of the NDT:

- 1. Liquid Penetrant Testing (PT)
- 2. Magnetic Particle Testing (MT)
- 3. Eddy Current Testing (ECT)
- 4. Ultrasonic Testing (UT)
- 5. Neutron Radiographic Testing (NR)
- 6. Radiographic Testing (RT)
- 7. Acoustic Emission Testing (AE)
- 8. Visual Testing (VT)

Such as other engineering parts, in various stages of welded structures fabrication and also in the end of process, there is a great need for control and inspection.

According to the agreed procedures between principal and contractors, the weld inspector controls the operation in different stages and inspects the welded structures to ensure the quality of the job.

Fahameh Engineering and Industrial Co. has been accredited for inspection of different types of metal welding in various industries such as Oil, Gas, Petrochemical, Building and also a variety of structures including:

- Piping in Oil, Gas, and Petrochemical and ... industries
 - Different types of tanks in all industries
 - Different types of welded metal joints

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Technical Inspection of CNG Tanks & Fueling Stations





Increase the safety and ensure the high quality of fuel supply

respect the consumer rights

all fuel distribution stations (gasoline, CNG, etc.) are required to comply with obligatory technical standards in relation with:

- Technical specification of location
- Distribution equipment
- Calibration of fuel pumps

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FAHAMEH as the second or third party inspector is ready to provide the below services:

- Conformity assessment of tanks and pumps
- · Assessment of the safety conditions and standards (wiring, fire-fighting equipment, etc.) of the fuel distribution location
 - Conformity assessment of equipment as per the specified standards
 - Inspection and calibration of distribution pumps

to all fuel stations owners including public or private sectors.

With regard to inspection of CNG Fueling Stations, Fahameh Engineering and industrial Company is proud that since 2014 as the technical inspection company partner, has been cooperating with Standard Offices across the country (Tehran, Yazd, Qom...) and contributed its share in promoting the safety level of consumers and station owners.

Oil, Gas and Petrochemical Industries services





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Oil, gas and petrochemical department of Fahameh Eng. & Ind. Company has developed its activities to provide services in Supply chain, Inspection and Training.

A brief scope of services to Oil, Gas and Petrochemical industries is as follows:

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☐ Procurement and Supply chain

In procurement field, the aim is general supply of material and equipments to Oil, Gas and Petrochemical industries from most reliable international sources and suppliers. To fulfill the mentioned target, Fahameh Co. has signed contracts with most reputed manufacturers and suppliers from North America, Europe and Asia and acting as a direct agent from them to supply most of equipments, Instruments, Packages and Pipes. In this regard, Fahameh Co. is committed to support his clients with the best quality, time and price.

□ Inspection

Fahameh Co. has more than 20 years of inspection experience in various industries. However, to fulfill our clients increasing expectations and to update the quality services, Fahameh Co. has signed agreements with the leading international Inspection authorities and is able to provide specialized, advanced and hi-tech inspection services in Upstream or downstream to his esteemed clients all over the country. It is also worth to emphasis that some of our services are unique and is not provided by any other local institute or company.

Training

To support the domestic Industries and developing the knowledge of our genius specialists, Fahameh Company has tried hardly to transfer the international knowledge with new methodologies to Iran. In this issue, Fahameh Co. has signed some contracts with most reputed and well-known international institutes and companies to provide a high quality and certified training courses to domestic industries and individuals. In support of this, we are able to plan and conduct tailor made courses in Process, Maintenance, Inspection and Quality at our places or at any places provided by our esteemed clients all over the country.

Energy Consumption Criteria Inspection





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For continuation of economic and social survival as well as growth and development of welfare, energy is needed.

Our planet has limited energy resources that with the increase in consumption are rapidly ending. In modern life even the smallest daily activities need energy consumption. Thus, supplying the required energy involves finding new solutions.

Finding new resources, identifying solutions for optimal consumption and also reviewing the feasibility of the renewable energy resources are the necessities for each country.

The results of study concerning energy resources, consumption, and prospect of future energy supply and consumption in Iran show that the waste of energy resources is about %20 to %30. Supply of cheaper, cleaner, and reproducible energy guarantees better and healthier future for our children.

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In two sections:

■ Energy in Industry

- Consulting for optimization and reduction of energy consumption in industrial fields
 - Suggesting necessary solutions for solving problems and increasing system and production process efficiencies
 - Measuring and characterizing performance and the amount of consumption of energy in industrial units
 - Technical and economic evaluations for investment and reduction of energy consumption in industrial units
 - Preparing economic feasibility plan for increasing the energy efficiency in industrial units

☐ Energy in Building

- Consulting for optimization and reduction of energy consumption in building industry (office and residential)
 - Determining the quality of energy performance of buildings
 - Suggesting necessary solutions for solving problems in energy consumption of buildings
 - Determining the saving potential in energy consumption in industrial units of building sector
 - Determining the amount of investment for reduction of building energy consumption and investment return period

Fahameh provides services.

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