



سازور سازه آذرستان

SAZVAR SAZEH AZARESTAN Co.



Committed and Competent



سازور سازه آذرستان
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Founder's message

It is a source of pride for us that Azarestan Business Development Group has contributed to the development of our beloved country Iran with more than 300 projects over the past three decades. We believe that honesty in work and a good relationship with employers guarantee the stability and progress of a company. Therefore, we strive to fully understand the needs of our employers and help them achieve their goals and succeed in their work. We also maintain our goal of creating value that exceeds employers' expectations through great efforts and an honest approach in line with our beliefs.

In most of our projects, we have taken on the role of a contractor. In my opinion, the most important thing after signing a contract is honesty and a commitment to doing the work. Experience has shown that with honesty and commitment, the contract remains stable, allowing all parties to move forward, even on the most difficult days. Our motto has always been:

“Either we find a way, or we create a way”

Another principle we have believed in our company is social responsibility. In our view, social commitment to the development and progress of society includes the education of the future generation. If the children who will turn the wheel of society in the future do not have the opportunity to grow and develop today, we cannot imagine a promising future for society. In order to build such a future, everyone must participate, everyone must do their share. We believe that lighting a candle is more effective than cursing the darkness!

In addition to participating in social and cultural activities, we primarily support two institutions, the “Children’s Foundation” and the “Children’s Literature History Research Institute”, which strive to develop and promote children’s education and culture.

Tohid Zourchang
Chairman of the Board of Azarestan Business Development Group

ABD
AZARESTAN BUSINESS DEVELOPMENT



Araz Zourchang
Vice Chairman of the Board of Azarestan
Business Development Group



Arian Zourchang
CEO of the Azarestan Business
Development Group

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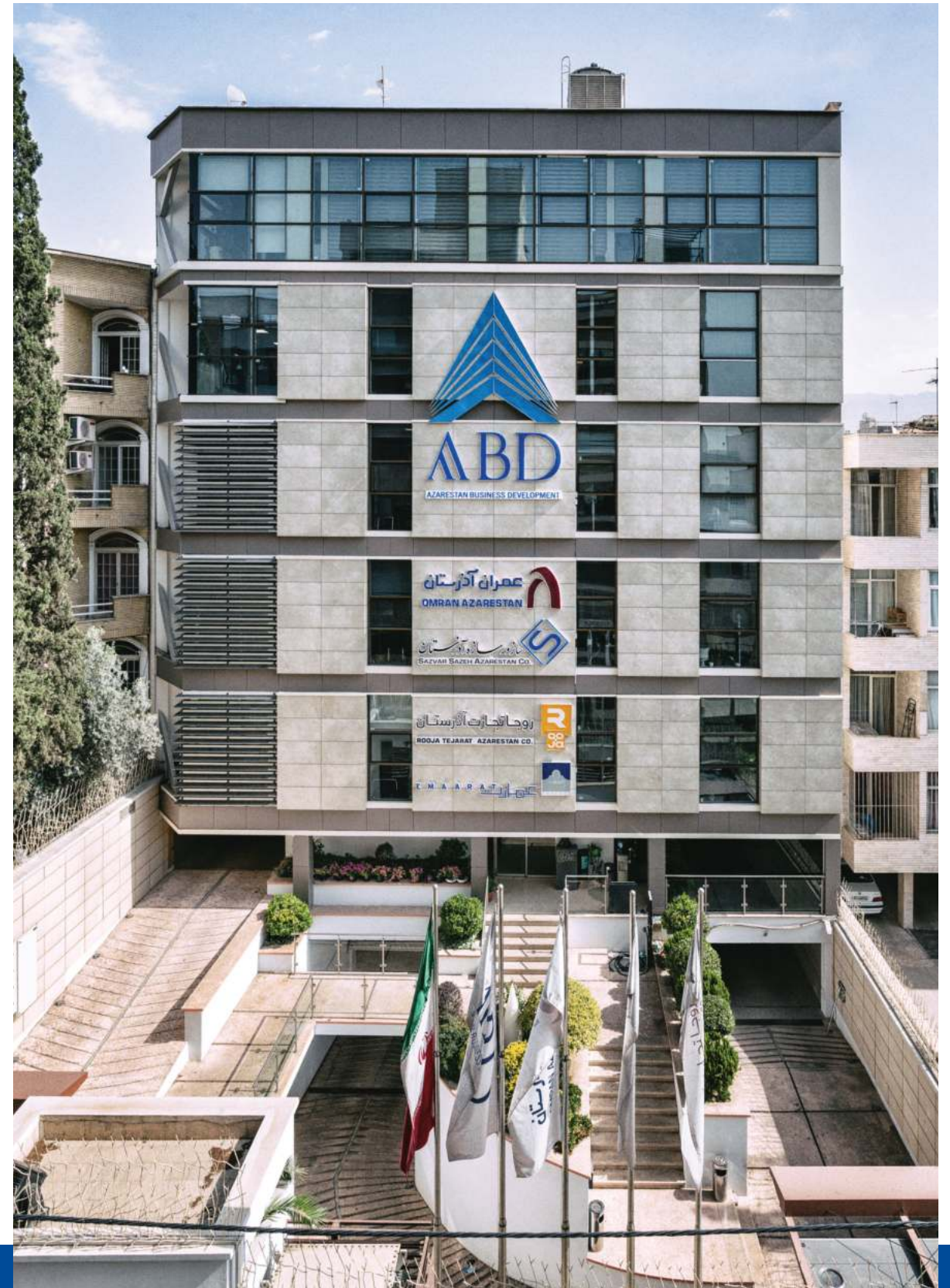


AZARESTAN BUSINESS DEVELOPMENT

After more than three decades of doing business and providing services to employers in the construction industry, the shareholders and managers of Omran Azarestan Group have decided to establish the Azarestan Business Development Group in order to organize, create management focus, and provide the opportunity for development in line with the strategic goals of the organization. The collection of companies in this group is in the form of privately held company with its headquarters is located in Tehran. This group has five subsidiaries including Omran Azarestan, Sazvar Sazeh Azarestan, Baspar Pey Iranian, Roja Tejarat Azarestan, and Emaarat Pishgam Azarestan.

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Azarestan Business Development Groups Headquarters



About us



After more than three decades of doing business and providing services to employers in the construction industry, We intend to become a reference group in the various industrial structures of the construction industry by engaging in the national economy, focusing on manufacturing, and offering a complete chain of services. By creating and continuously improving R&D infrastructure and processes, we will create sustainable and versatile added value for our

customers and increase the quantity and quality of our products, services, and solutions. Sazvar Sazeh Azarestan cares about the feedback and suggestions of its customers and considers this bilateral interaction a great opportunity to improve the knowledge-based spirit of the company and meet the basic requirements and needs of the customers.



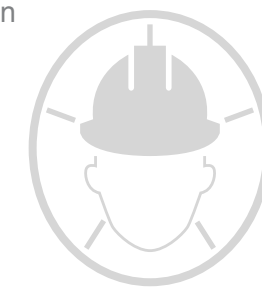
At a glance



Implementation of more than

200

industrial and construction projects



More than

500

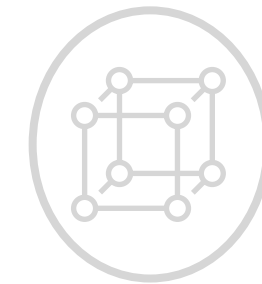
experts and experienced staff



The area of the factory is

5

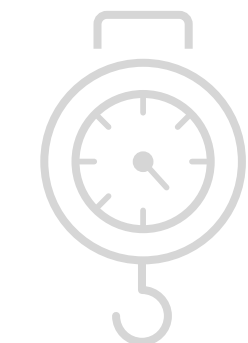
hectares in the industrial city



Nominal production capacity of

40

thousand tons of steel structures per year



Manufacturing more than

220

thousand tons of steel structures (to date)



Production line with

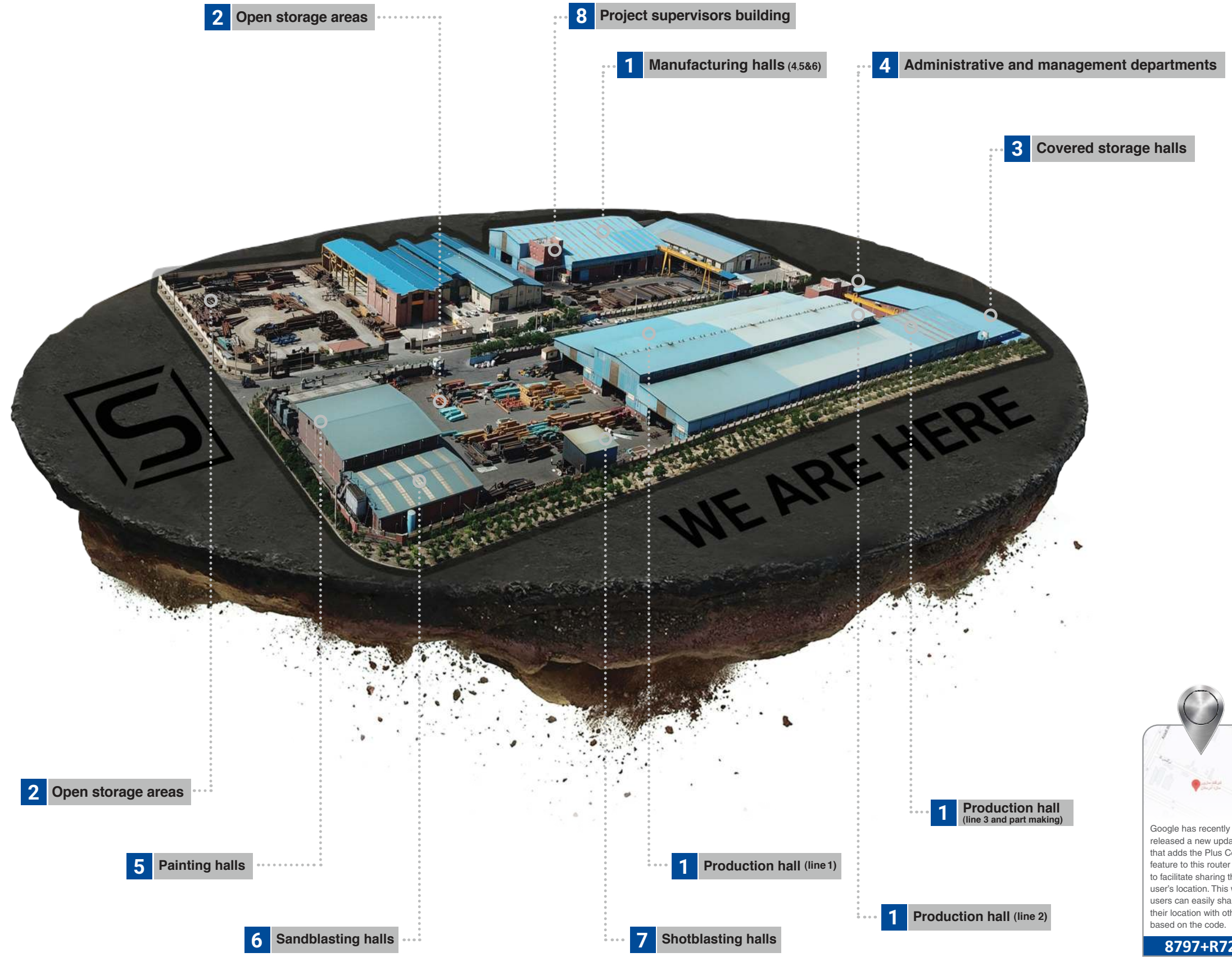
6

separate and equipped lines

Introduction of the factory



Thanks to the efforts and tact of our managers and staff and the provision of the best and most modern facilities, we were able to quickly obtain an operation license and establishment permit with an annual operating capacity of 40 thousand tons from the Ministry of Industry, Mine, and Trade. As a “manufacturing” company, Sazvar Sazeh Azarestan combined two types of management, namely maximum productivity and optimal use of resources. Since our establishment, we have succeeded in developing special services and solutions with a knowledge based and forward-looking strategy, winning the trust and satisfaction of domestic customers, and playing an influential role in the high-quality design and manufacture of steel megastructures with the solid construction of industrial facilities in various fields. At the same time, as a competent manufacturer, we are capable of executing all kinds of orders in the fields of steel, mining, power plants, oil, gas, petrochemical industries, water desalination, and high-rise buildings with various functions together with other knowledge-based manufacturers and Iranian and foreign engineering companies. Furthermore, we have and will continue to take steps to serve large national and international projects.



Row	Titles of industrial building	Area (m ²)
1	Manufacturing halls	18,000
2	Open storage areas	22,500
3	Covered storage halls	2,500
4	Administrative and management departments	1,000
5	Painting halls	4,000
6	Sandblasting halls	1,000
7	Shotblasting halls	100
8	Project supervisors building	300

The line number of the table corresponds to the numbering on the map.

Google has recently released a new update that adds the Plus Codes feature to this router to facilitate sharing the user's location. This way, users can easily share their location with others based on the code.

8797+R72



سازور سازه آذرستان

Certificates



Contractors Qualification Certificate



Safety Certificate for Contractors

The contractor qualification recognition certificate is proof and confirmation of compliance with the technical and engineering principles. The Planning and Budget Organization of Iran issues qualification certificates for contractors.



ISO 14001:2015



ISO 2:2021-3834



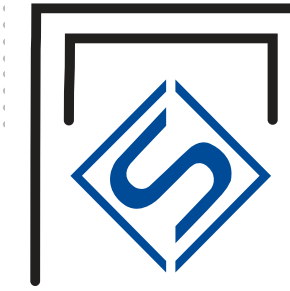
ISO 45001:2018



IMS Certification



ISO 9001:2015



سازور سازه آذرستان

Vendor lists

Human Resources



95%



5%

The main task of the managers of the Sazvar Sazeh Azarstan Company is to achieve higher productivity of human resources in line with the macro industrial and economic objectives of the Group. The managers' attention has always been focused on the dynamic management and engineering of the organization.

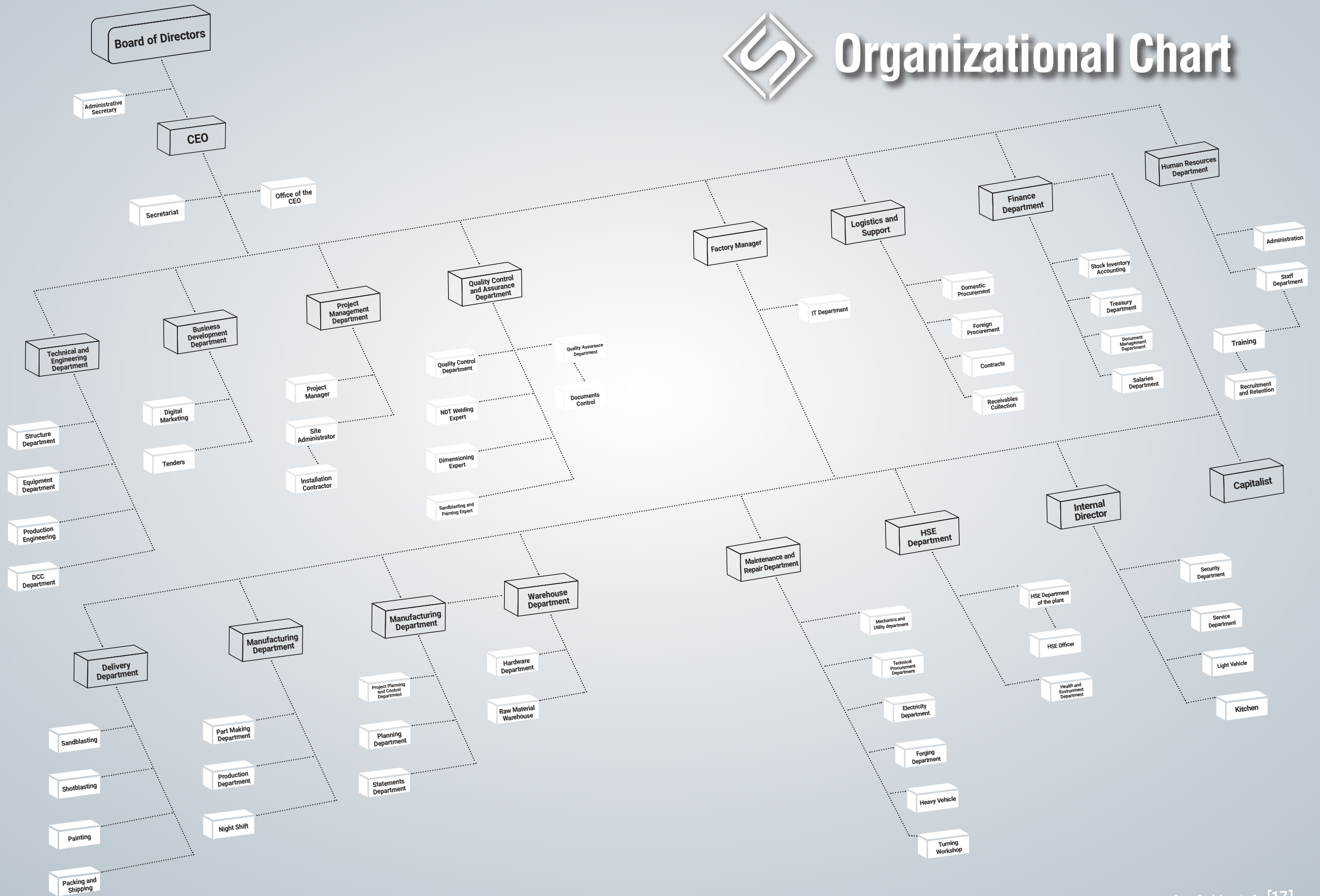
Today, there is no doubt that the main value of organizations, institutions, and companies is determined by the human components, in a word, it is the people who make the success of company. Furthermore, researchers and experts in economic development believe that trained and developed human resources are the most important factor influencing the economic social development process of enterprises.

Therefore, at Sazvar Sazeh Azarstan, we pay special attention to the broad and complex aspects of communicating with professionals. We always strive to cooperate with professionals from all over the country, focusing on investing in human resources development. Our goal in human resource management at Sazvar Sazeh Azarstan is to determine practical components based on corporate culture, environmental conditions, motivational factors, empowerment, and leadership style in a professional environment. We believe there is a significant and noticeable relationship between organizational culture and employee productivity.

Paying attention to developing an effective relationship between these two factors is considered one of the most important concerns of senior Human Resource managers at the Sazvar Sazeh Azarstan Company. Accordingly, our approach to human resource development is to promote individual and social productivity through professional training and development.



Organizational Chart





HSE Records

from December 2020
to October 2022

2,000,000 man/hour
without
a fatality
incident

The different levels of the workforce are considered the most valuable and vital assets. At Sazvar Sazeh Azarestan, we believe that economic and social development is only possible based on the three basic principles of health, safety, and environment. Therefore, from its inception, the management of Sazvar Sazeh Azarestan's HSE Department has made the protection of employees' health and the optimization of the working environment its daily focus to ensure and improve the level of employees' health in the various administrative, manufacturing, supervisory, service and management areas, achieving the following successes:

- 1- Ensuring, protecting, and improving the physical, mental, and social health of employees;
- 2- Preventing work-related diseases and injuries;
- 3- Protecting employees from factors harmful to their health;
- 4- Employing a person to work that they are physiologically and psychologically capable of doing;
- 5- Adapting the work to the person, and if that is not possible, adapting the person to the work.

By predicting, diagnosing, and evaluating health risks in industrial sites and factory environments, we continuously monitor the application and compliance with these laws by observing and updating the principles of occupational health through appropriate and regular analysis.

At Sazvar Sazeh Azarestan, we believe that workers have the right to be completely safe at work and return safely and healthily to their families. Based on this, our main goal is to standardize the work environment, prevent work related deaths and injuries, and ultimately ensure the complete safety of workers.

HSE is the modern solution to help employers and employees learn how to stay safe and healthy in their work and living environments and achieve these goals. The world of work is constantly changing. We can use science and awareness to understand and manage these changes. This knowledge will help us easily overcome inefficiencies and provide employers and employees with the safest and best places to work and do business.

Fabrication Process

Self-confidence is the precursor to pride, and we want Iran to be proud. Therefore, in the coming years, we want to become a reference company for heavy steel megastructures, especially for the construction of power plants, refineries, petrochemical plants, mines, industrial plants, high-rise buildings, towers, bridges, tanks, etc. at national and international levels. What lies ahead is a difficult road with many obstacles to overcome with will, diligence, and innovation. In the production of steel parts, the choice of the manufacturing process is very important. Most of the manufacturing processes are automated. We do the work in 14 steps, from signing the contract to the project handover, as follows.

- 01** Tender attendance, tender winning and contract signing
- 02** Preparation of Shop drawings and taking client approval
- 03** Project planning and fabrication engineering
- 04** Quality control of raw materials before delivery to production lines
- 05** Cutting, part preparation, drilling, and beveling
- 06** Edge preparation is a prerequisite for initial assembly
- 07** Assembling by H-Assembling machines
- 08** Initial welding and straightening
- 09** Final welding and final assembly
- 10** Cleaning of the welded product
- 11** Leaving from the production hall and surface preparation before painting
- 12** Painting the product
- 13** Packing, protecting of the produced parts
- 14** Shipping of the product, the last step in the manufacturing process

Step 1

- Checking the bids
- Modeling of the drawings
- Submitting the 3D model to the manufacturing engineering department to estimate the materials, including steel, nuts and bolts, paint, and the amount of waste
- Submitting the estimate to the commercial department to obtain price analysis
- Participation in the tender, agreement, and signing of the contract
- Preparation of evaluation documents and price proposals

Tender attendance, tender winning and contract signing

A Business Development department responsible for monitoring all tenders in the market has been established in Sazvar Sazeh Azarestan's organizational structure. The Business Development Department consists of two units, Digital Marketing and Tender Expert, and each unit performs its tasks based on the guidelines explained by the managers. In the Tender Expert unit, the drawings are fully modeled and the list of required materials such as steel, nuts and bolts, paint, etc. is extracted and detailed pricing is done. The evaluation documents as well as the engineering and technical documents are reviewed by the Business Development Department and the final results are summarized in the form of a price proposal.

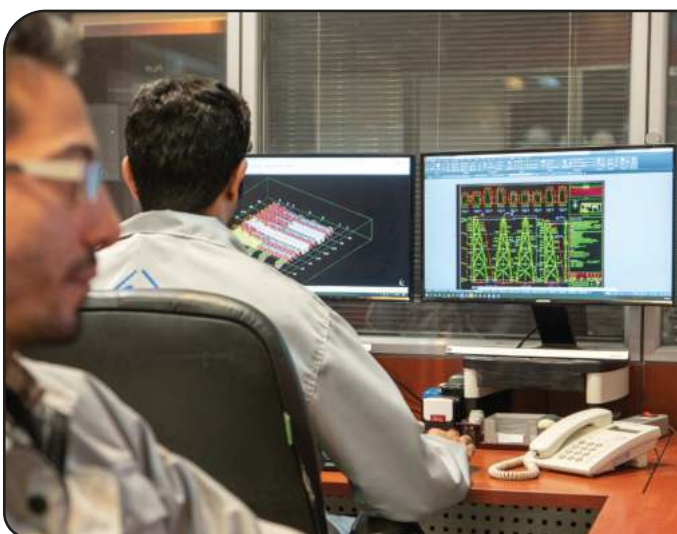


Step 2

- Preparation of 3D models and work-shop drawings

Preparation of Shop drawings and taking client approval

Preparation of the manufacturing drawing is a crucial step in the product manufacturing process, which begins with the review of the structural single-line diagrams. These diagrams are converted into manufacturing drawings using specialized software such as TEKLA, BOCAD, AUTOCAD (manufacturing drawing creation), SAP, and ETBAS (structural design). These drawings are submitted to the employer for final approval. After the final approval of the manufacturing drawing, the documents are forwarded to the Manufacturing Engineering Department to calculate the raw materials.



Software

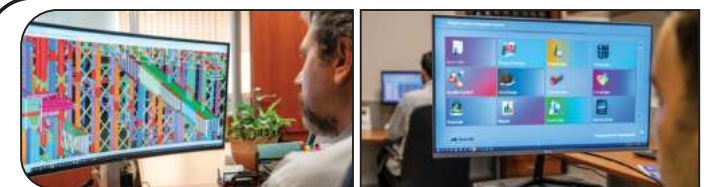
- 1- ETABS
 - 2- TEKLA Structures
 - 3- AUTOCAD
 - 4- SAP
-

Step 3

- Manufacturing Engineering
- Software
 - 1- Pro nest
 - 2- TEKLA Structures
 - 3- AUTOCAD
 - 4- Plus 2D

Project planning and fabrication engineering

After receiving the approved drawing from the employer and preparing the manufacturing drawing in the Engineering Department, estimation and procurement of raw materials are carried out in parallel. Factors such as material characteristics and properties, shape, size, and thickness of the part, dimensional tolerances and required surface smoothness, functional requirements of the part, manufacturing volume (quantity), level of automation required to meet the manufacturing volume and pace, unit cost and a combination of aspects of manufacturing operations are mandatorily reviewed by the Manufacturing Engineering Department. In this department, special attention is paid to optimal consumption and maximum reduction of material waste. One of the most fundamental departments in any factory is undoubtedly Project Planning and Control (PPC), which is carefully carried out in Sazvar Sazeh Azarestan Company from both project and manufacturing perspectives to meet the needs of employers and improve the level of employer service. The Manufacturing Planning Department considers two levels, capacity measurement (tactical) and manufacturing planning (operational), when reviewing the capacities for parts preparation, manufacturing, and coating. All necessary activities are carried out based on the priority of parts assembly and following the project plan and resource management. Project Control Integrated System software has been developed by professional programmers exclusively for Sazvar Sazeh Azarestan company. In this software, all project information from the beginning of the contract to the end of the installation is recorded by the units in different modules. It also records the production lines' daily, weekly, monthly, and annual capacity and allocates the work according to the available capacity of each line.

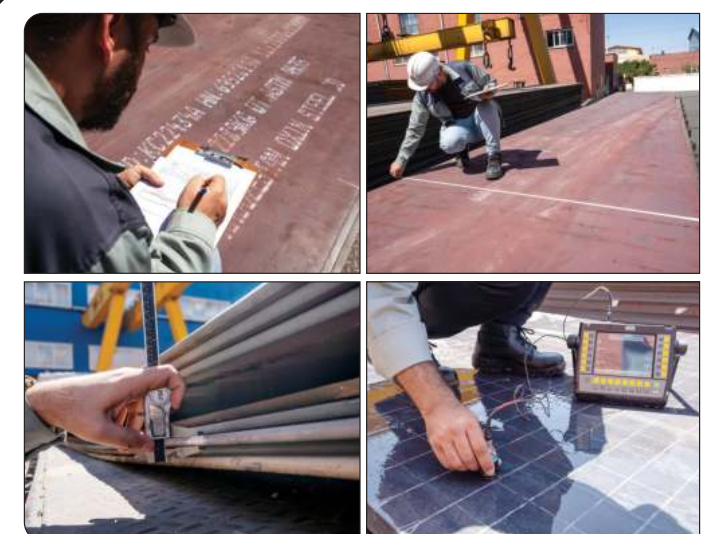


Step 4

- Quality Control
- Tools
 - 1- Ultrasonic device
 - 2- Magnetic yoke
 - 3- Laser thermometer
 - 4- Digital temperature and hygrometer
 - 5- Tachometer
 - 6- Digital rod thermometer
 - 7- Digital roughness tester
 - 8- Digital coating thickness gauge
 - 9- Calibration film
 - 10- Sag tester
 - 11- Coating thickness gauge
 - 12- Laboratory oven
 - 13- Digital clamp meter
 - 14- Digital lux meter
 - 15- Welding gauge
 - 16- Torque meter
 - 17- Digital caliper gauge

Quality control of raw materials before delivery to production lines

At Sazvar Sazeh Azarestan Company, no product is manufactured without performing various quality control checks on the raw materials. The quality control specialists perform destructive and non-destructive tests to measure the quality of raw materials before they are delivered to the production lines. Quality control experts start quality control based on recognized technical criteria following international standards. They use advanced instruments before the raw materials enter the production lines and follow them up to the final stage, i.e., delivery of the product.



Country of origin



Step 5

Start of manufacturing

..... Cutting, drilling and beveling

In the fifth step, we forward the manufacturing drawings approved by the employer to the supervisors of manufacturing, planning, project control, and quality control. According to the instructions and after coordination with the supervisors, we send the procured steel to the Cutting and Parts Preparation unit after quality control. At Sazvar Sazeh Azarestan we cut stiffeners and supplementary parts with modern machines, including fully automatic CNC cutting machines, CNC hot and cold cutting machines, CNC plasma cutting machines. In this unit, two methods of punching and drilling are used, for which the factory is equipped with CNC punching and drilling machines.

Machinery

- 1- 6-meter guillotine
- 2- 3-meter guillotine
- 3- 1-meter guillotine
- 4- CNC flame-cutting machine with 11 nozzles
- 5- CNC plasma cutting-machine
- 6- Rail cutter with 2 nozzles
- 7- 1-axis CNC drilling machine
- 8- 1-axis CNC punching machine
- 9- Radial drilling machine

Country of origin



Step 6

Strip forming and sheet steel working

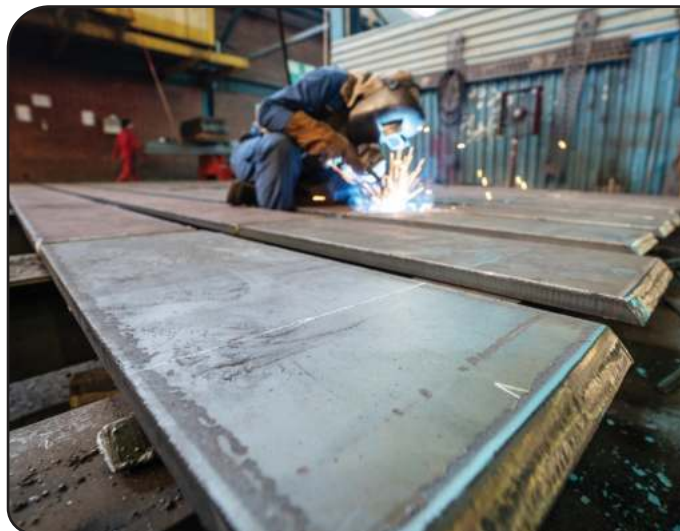
..... Edge preparation is a prerequisite for initial assembly

In the strip forming and sheet steel working step, the strips are placed side by side and the beveling process is performed. In the beveling process, the desired edges must be processed before the initial assembly of the product, so that the initial welding can be performed without any problems. Beveling plays an important role in the quality of the joints of the parts. After performing the above steps and quality control of the manufactured parts, the initial assembly of the product begins.

Machinery

- 1- Rail cutter with 2 nozzles
- 2- Manual flame-cutting machine
- 3- Single jaw rail cutter
- 4- Welding machines
- 5- Gantry, semi-gantry, and overhead cranes
- 6- Automatic beveling machine
- 7- General tools

Country of origin



Step 7

Initial assembly of parts

..... Assembling by H-Assembling machines

After cutting and preparing the parts, the initial part assembly process begins with H-forming machines. Steel parts manufacturing uses mechanical and machine methods, the two basic components of the initial assembly process. When manufacturing steel parts, it is best to assemble multiple parts using fasteners or techniques such as welding.

To avoid significant assembly costs, it may also be more cost effective to manufacture the steel part in one piece without welding.

Machinery

- 1- Automatic H-forming machine
- 2- Assembly workbenches
- 3- General tools
- 4- Welding tools
- 5- Fixtures
- 6- Gantry cranes, semi-gantry cranes, and overhead cranes

Country of origin



Step 8

Initial welding of the parts

..... Initial welding and straightening

After the initial assembly of the parts, this step of the manufacturing process is about joining the parts together. The initial welding of the parts is an assembly process. One of the advantages of initial welding is the possibility of producing very complex parts. The strength of the pre-welded parts facilitates the manufacturing process and allows the next steps to be carried out. After the initial welding, deformations may occur due to the heat effect on the parts.

Thus, the parts are passed through the straightening machine to achieve standard tolerance. At this step, the parts are certified and provided with a nameplate.

Machinery

- 1- General tools
- 2- Welding machines
- 3- Fixtures
- 4- Gantry, semi-gantry, and bridge cranes
- 5- Straightening machine
- 6- Submerged arc welding machine

Country of origin



Step 9

Final welding

Final welding and final assembly

In the manufacturing management system, quantity and pace are very important in determining the part's manufacturing processes in the factory.

In the final assembly and welding phase, the parts that complete the elements are connected to the main body and the structural elements are completed. Most of the welding operations are manual and require very high precision and adherence to welding procedures. Since this is the last step of part production, strict quality control of the produced parts is required. In this context, various non-destructive tests (NDT) are performed on the produced parts.

Machinery

- 1- General tools
- 2- Gantry, semi-gantry, and overhead cranes
- 3- Welding machines
- 4- Angle grinders
- 5- Magnet millings

Country of origin



Step 10

Cleaning

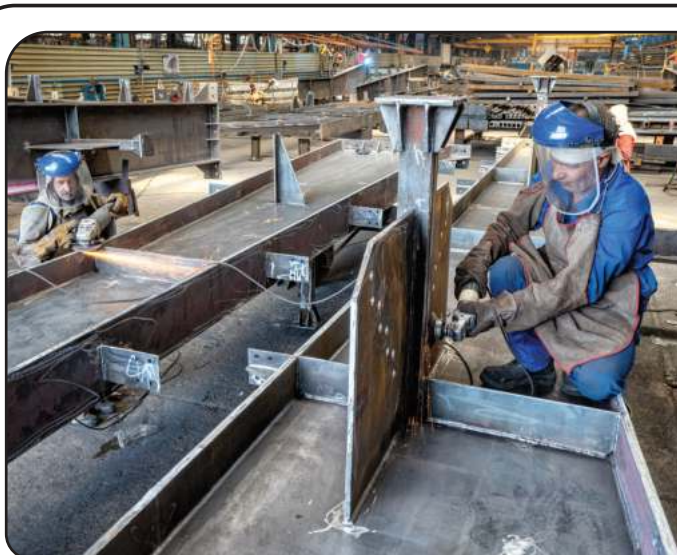
Cleaning of the welded product

In this step, the appropriate tools and machines, such as angle grinders, slag removers, cutting blades to remove weld spatter, etc., are used. After cleaning the parts, final dimensional checks and nondestructive tests are performed on the entire part. After approval by the quality control team, the parts are delivered to the supervisors' representatives and the employer's inspectors. After the parts are approved and delivered, the product is loaded onto special trucks and leave the production halls.

Machinery

- 1- General tools
- 2- Gantry cranes, semi-gantry cranes, and overhead cranes
- 3- Welding machines
- 4- Angle grinders
- 5- Cutting blades
- 6- Drilling machines

Country of origin



Step 11

Leaving the product from the production hall

Preparation of surfaces before painting

Sandblasting and shot blasting are two different methods of sanding, decontaminating, removing stains, and polishing surfaces. In sandblasting, the surface is abraded with sand particles, while in shot blasting, the same process is performed with steel balls that are forced with pressure through a centrifugal system on to surface of the part. This method is one of the most common and ideal surface cleaning methods where a high-pressure jet of abrasive materials is directed at the desired surface. This clears the surface of dust, oil, stains, and dirt. In the surface preparation department at Sazvar Sazeh Azarestan company, it is possible to achieve all degrees of surface roughness to international standards.

Machinery

- 1- Compressors for compressed air generation
- 2- Sandblasting tank
- 3- Automatic blasting machine
- 4- Overhead cranes
- 5- Forklift truck

Country of origin



Step 12

Painting

The result of the production after finishing the painting

Since the result of manufacturing can be objectively seen after this step is completed, it is considered one of the most important steps. The painting room's humidity and temperature are measured with a thermometer and a hygrometer during the painting process. After painting, the structures are checked for the desired thickness, the accuracy of paint adhesion, and finally the flatness of the paint surface according to international standards. A coating thickness gauge is used to determine the paint's dry film thickness (DFT), and the cross-cut and X-cut methods are used for paint adhesion accuracy. Airless machines are also used for painting.

Machinery

- 1- Airless painting machines
- 2- Paint mixing machines
- 3- Overhead cranes
- 4- Forklift trucks

Country of origin





Welding Process

Shielded Metal Arc Welding (SMAW)

Shielded steel arc welding uses a steel electrode and a non-metallic slag-maker cover to generate an arc and feed a filler steel. The heat generated melts the electrode tip and cover and bonds them to the edges. After the arc moves away, a molten pool forms (a mixture of the materials in the electrode cover, the molten steel of the electrode tip, and base metal) that eventually form the weld zone.



Gas-Shielded Arc Welding processes (TIG/MIG/MAG)

In the MIG/MAG process, the weld zone is supplied by injecting shielding gas from an external source. The advantages of this method include a high welding speed, suitable changeover options, ease of operation, and economy. According to experts, the efficiency of this method is at least twice that of manual steel arc welding, and in addition, automatic and robotic systems can also be used to facilitate the work. Therefore, gas-shielded welding is considered a suitable alternative to traditional methods such as SMAW.



Submerged Arc Welding (SAW)

In submerged arc welding, the arc is covered with flux powder so that it is practically invisible. This process is usually recommended for thicknesses greater than 6 mm because the high deposition rate reduces cycle time and manufacturing costs. The welding performance and resulting weld profile are of high quality and the finished weld exhibits good toughness and ductility.



Electroslag Welding (ESW)

In this process, two parts are placed side by side at a specified distance. The welding process begins at the bottom of the joint and continues upward. Melting of the electrode and the edges of the workpiece creates the weld steel and fills the joint between the two parts in one pass. This method is used to join thick parts without the need for beveling. It can be used to weld inaccessible areas that are difficult or impossible to weld using conventional arc welding methods.



Step 13

Packing

..... Packing; protection of manufactured parts

Packing and arrangements for long-term storage are made to avoid damage to parts due to transport vibrations and possible impacts and to keep surfaces clean until installation. For this purpose, Sazvar Sazeh Azarestan Company especially packs all its products. The main points of packing include holding resistant elements, placing temporary wooden bases, covering shock-prone parts, wrapping them with nylon, and placing warning labels and a packing list. Foam wrapped timber and wood are used to avoid damage to surfaces during packing. In addition, to avoid damage to the edges of the product, resistant rubber blocks are placed between the parts. At this step, a touch-up is also carried out at the same time.

Machinery

- 1- Overhead cranes
- 2- Forklift trucks
- 3- General packing tools



Country of origin



Step 14

Product shipping

..... Shipping of the product, the last step in the manufacturing process

Product shipping is the last step in the manufacturing process. In this step, based on the designations of the parts and the priorities announced by the installation unit, the packing lists are prepared, and, depending on the dimensions and tonnage of the parts, suitable trailers are selected to transport the cargo as best as possible. After the loading is completed, the strength of the parts is checked and the final steps of quality control of the manufactured products are carried out. Then, the trailer is driven to the 80-ton digital scale in the factory and the cargo is weighed. The scale at the Sazvar Sazeh Azarestan factory is calibrated every 3 months.

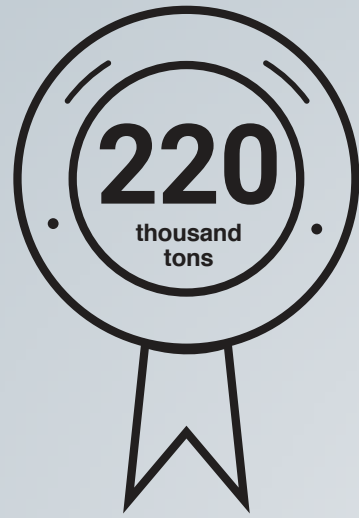
Machinery

- 1- Scale
- 2- Forklift truck
- 3- Cranes



Country of origin

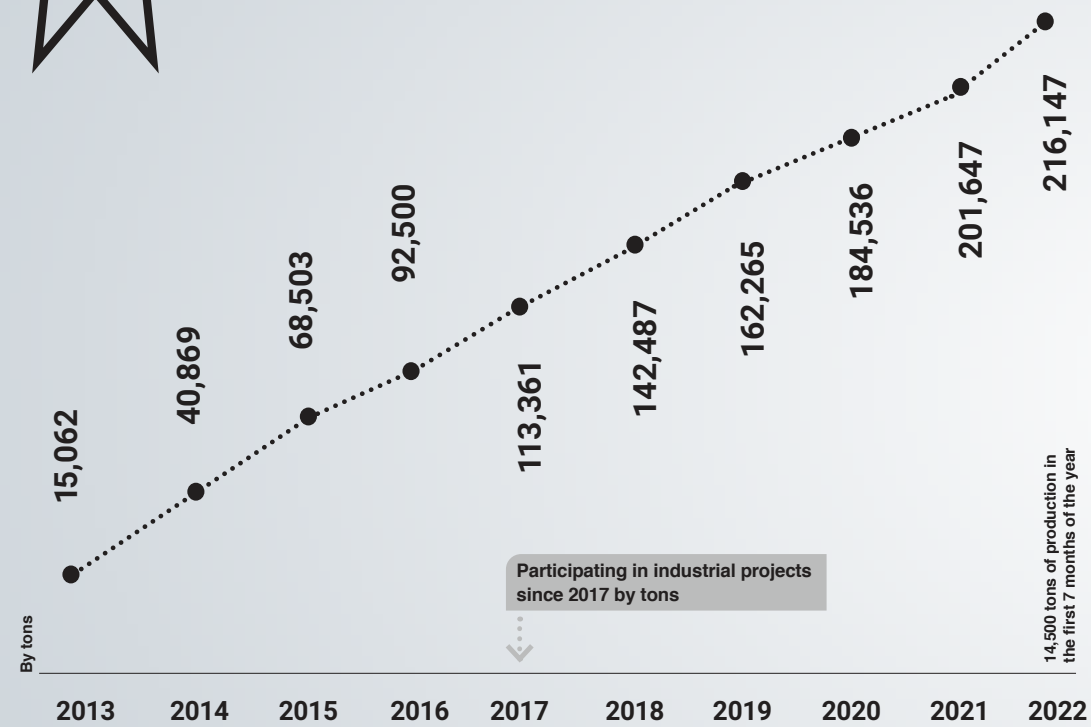




Production volume of Sazvar Sazeh Azarestan

From 2013 to 2022

Cumulatively 220 thousand tons year by year

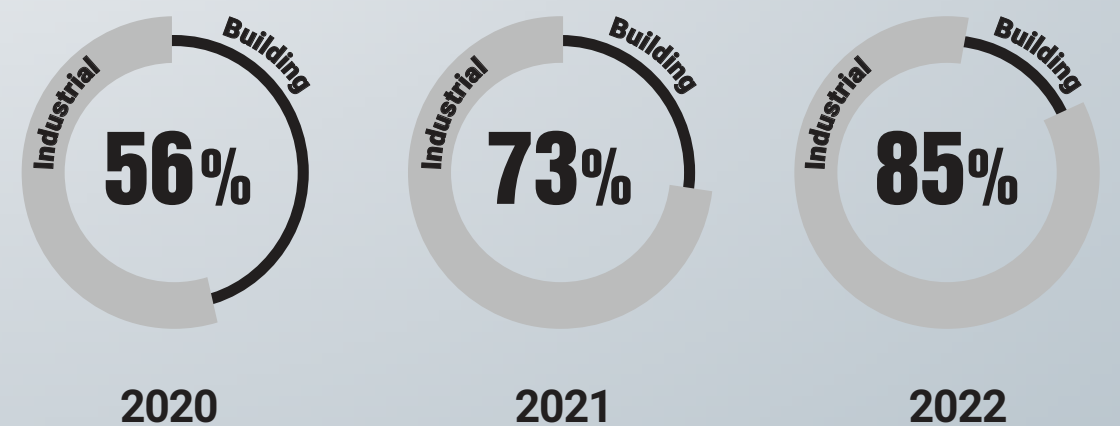
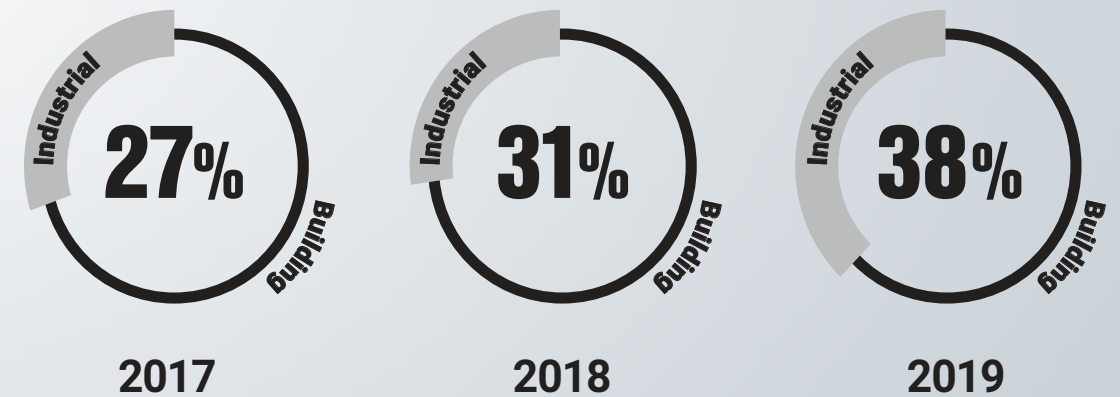


The number of completed projects

From 2013 to 2022

Details of the share of industrial projects in the manufacturing and installation portfolio since 2017

We are proud of the fact that since we entered the field of industrial and equipment projects (manufacturing, equipping, and installing steel parts and megastructures), our share of the target market in this industry has been growing, and we intend to increase this share in the future.



Details of all projects implemented so far

According to experts, participating in industrial projects means entering the complexities of manufacturing various products, delivering, and installing according to international standards. The Sazvar Sazeh Azarestan Company entered this field in 2016 to meet the expectations of employers, and to date has completed numerous projects in the fields of oil, gas, industrial petrochemical, factories, steel, automotive, equipment, and hospitals.





Equipment and machinery

In general, the engineering process can transform technological laws and their empirical generalization into operational rules. Sazvar Sazeh Azarestan Company provides these rules in the form of instructions, diagrams, charts, etc. to all manufacturing units so that the operational rules can be utilized as instructions. In addition, Sazvar Sazeh Azarestan pays special attention to reducing direct human intervention and, accordingly, mechanizing all production lines. This helps to achieve HSE standards as much as possible and further reduces the number of occupational accidents. Some automatic machines and equipment are as follows:

- 1- Automatic CNC cutting machines;
- 2- Automatic CNC drilling machines;
- 3- Automatic beveling machines;
- 4- Automatic assembly machines;
- 5- Automatic welding machines;
- 6- Automatic diagnostic and repair equipment

Sazvar Sazeh Azarestan Company is interested in optimizing the manufacturing process by using the latest technical knowledge and mechanization of machines and automatic equipment in the production lines. Unlike traditional and semi-traditional manufacturers, Sazvar Sazeh Azarestan has achieved the following by applying the “unified manufacturing method”:

- 1- Quality in manufacturing;
- 2- Accuracy in manufacturing;
- 3- Drastic reduction of manufacturing errors that can cause serious problems during the installation phase;
- 4- Very high flexibility of the manufacturing process in the production of all types of complex steel structures;
- 5- Production of structural profiles from sheet steel and achieving a quality close to that of hot-rolled profiles;
- 6- Operational maneuverability in production lines for the manufacture of large complex parts;
- 7- Uniformity of the monthly production volume.



سازور سازه آذرستان

Machines

Press

Types of Machine	Quantity	Manufacturer	Country
Impact press machine	1	Iranian Company	
Hydraulic Press (50 tons)	1	Iranian Company	
Hydraulic Press (1200 tons)	1	Biatlo Machinery Co.	

Lathe

Lathe (1 meter)	1	Tabriz Machinery Co.	
Lathe (3 meters)	1	German Company	

Forklift truck

Forklift truck (3 tons)	4	Komatsu Co.	
Forklift truck (5 tons)	1	Komatsu Co.	
Forklift truck (6 tons)	1	Komatsu Co.	
Forklift truck (11.5 tons)	1	Komatsu Co.	
Forklift truck (16 tons)	2	Heister Co.	

Milling

Industrial milling machine	2	German Company	
Industrial angle grinder (2800 watt)	150	Bosch, Makita Co.	
Industrial mini milling machine	120	Tucson Co.	
Finger milling machine	30	Tucson Co.	

Blasting

Lathe (1 meter)	7	Shen Pash Co.	
Lathe (3 meters)	1	Ray Mehr Co.	

Cutting



Types of Machine	Quantity	Manufacturer	Country
6-meter guillotine	1	Abdi-Sehat Co.	
3-meter guillotine	1	Abdi-Sehat Co.	
meter guillotine-1	1	Abdi-Sehat Co.	
CNC flame-cutting machine (10 nozzles)	2	Kotec Co.Ltd	
CNC plasma cutting machine	1	Kotec Co.Ltd	
Straight-cutting machine (11 nozzles)	1	Kara Co.	
Rail cutter (2 nozzles)	13	Kara Co., Gam Co	
Manual flame-cutting machine	20	Bootan Co.	
Pipe flame-cutting machine	10	Gam Electric Co.	
Trapezoidal cutting of a steel beam	1	Mobtaker machinery	
Single jaw rail cutter	4	Joosha Co.	

Assembly



Assembly machine for sheet steel beams (H-forming)	4	Kotec Co.Ltd	
Machine for straightening sheet steel beams	3	Kotec Co.Ltd	
Machine for beveling the edges of steel sheets	2	Kotec Co.Ltd	
Machine for beveling steel sheets	1	Promotek Co.	
Machine for engraving and punching numbers	2	Iranian Company	
Thread rolling machine	1	Iranian Company	
Roll forming machine	2	Iranian Company	
Fully automatic beam and column turning machine	4	Iranian Company	
Fully automatic 80-ton tank turning machine	2	Iranian Company	
Fully automatic 20-ton tank turning machine	2	Iranian Company	



سازور سازه آذرستان

Crane

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Crane



Types of Machine	Quantity	Manufacturer	Country
Overhead crane (20 tons)	3	Telfer Co.	
Overhead crane (10 tons)	17	Telfer Co.	
Overhead crane (5 tons)	3	Telfer Co.	
Arm crane (3 tons)	5	Stahl Co.	
Semi-gantry crane (5 tons)	2	Demag Co.	
Workshop half gantry crane (3 tons)	11	Demag Co.	
Gantry crane (20 tons)	2	Turan Co.	
Magnetic crane (10 tons)	18	Demag Co.	
Magnetic crane (1 ton)	2	Iranian Company	
Magnetic crane (600 kg)	1	Arab Co.	
Vertical sheet steel lifting crane (2 tons)	2	Arab Co.	
Vertical sheet steel picker (1 ton)	2	Arab Co.	
Tirfor wire rope hoist (10 tons)	1	Brothers Co.	
Conveyor belt	20	Kotec Co.Ltd	
Digital scale (80 tons - 81 meters)	1	Tuzin Electric Co.	
Toyota	1	Toyota Co.	
Elantra	1	Hyundai Co.	
L90	4	Renault Co.	
Mazda pickup	1	Bahman Motor Co.	

Scale

Vehicle

Sawing



Drilling



Welding



Types of Machine	Quantity	Manufacturer	Country
Band saw machine (1000 tons)	2	Kotec Co.Ltd	
Fully hydraulic hacksaw machine	1	Kheiry Machinery Co	
Table saw machine	1	Iranian Company	
Circular saw machine	4	Iranian Company	
Band saw machine (7000 tons)	1	Kotec Co.Ltd	
Band saw machine (1300 tons)	1	Khodaverdian Machinery	
CNC punching machine	2	Kotec Co.Ltd	
CNC 1-axis drilling machine	3	Kotec Co.Ltd	
5-function punching machine	2	Shahinler Co.	
3-axis drilling machine	1	Kotec Co.Ltd	
Magnetic drilling machine with conical drill	6	Bosch Co.	
Magnetic drilling machine with round drill	15	Bosch Co.	
Radial drilling machine (arm 1.6 meters)	14	ZG CO.	
Column drilling machine	2	Tabriz Machinery Co.	
Drill sharpening machine	2	Kotec Co.Ltd	
Drill sharpening machine	1	Da Hong Co.	
Electroslag welding machine	2	Persian Josh Co.	
Submerged arc welding machine	6	Da Hong Co.	
Submerged arc welding machine	18	Gam Electric Co.	
Rectifier welding machine (3-phase)	80	Gam Electric Co.	
Rectifier welding machine (1-phase, portable)	10	Gam Electric Co.	
CO2 welding machine (MIG)	110	Gam Electric Co.	
Electrode heater (1000 kg)	1	Da Hong Co.	
Welding jack stand	2	Kotec Co.Ltd	
Single electrode heater	10	Gam Electric Co.	
Submerged arc welding flux recovery unit	4	Da Hong Co.	



سازور سازه آذرستان

Tanks

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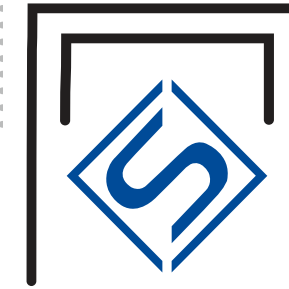
Tanks



Types of Machine	Quantity	Manufacturer	Country
Oxygen tank (30 tons)	1	Telfer Co.	
Oxygen tank (30 tons)	1	Telfer Co.	
Oxygen tank (6 tons)	1	Telfer Co.	
CO2 tank (12 tons)	1	Stahl Co.	
CO2 tank (12 and 6 tons)	2	Demag Co.	
Argon tank (15 tons)	1	Demag Co.	
Air cylinder	71 cylinders	Turan Co.	
CO2 cylinder	29 cylinders	Demag Co.	
Tank 16 bar	1	Iranian Company	
Piston compressor 750 liters 3-phase	2	Comsan Co.	
Piston compressor 250 liters	3	Comsan Co.	
Industrial air compressor (CST-GH250)	2	Volvo Co.	
Air compressor (1200 CFM)	1	Ingersoll Rand Co.	
Air compressor (900 CFM)	6	Ingersoll Rand Co.	
Industrial air compressor (CST-GH132)	15	Machine Saz Tabriz Co.	
Water trap 1 meter	14	Comsan Co.	
Absorption dryer 1 meter 8 bar	2	Comsan Co.	
Microfilter 8 bar	2	Comsan Co.	
Airless sprayer	7	Graco Co.	
Airless sprayer	4	Wagner Co.	

Compressed air

Painting



سازور سازه آذرستان

Test and control

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Test and control

Types of Machine	Quantity	Manufacturer	Country
Ultrasonic nozzle D+10	1	SONATEST Co.	
Ultrasonic nozzle DO1000	1	STARMAN Co.	
Ultrasonic test calibration block - V1	3	TBE Co.	
Ultrasonic test calibration block - V2	1	TBE Co.	
Ultrasonic Test Calibration Block - ASME	1	ASME Co.	
Magnetic yoke	1	HANDY MAGAN Co.	
Laser thermometer	1	LUTRON Co.	
Digital temperature and hygrometer	1	TENMARS Co.	
Tachometer	1	GPS Co.	
Digital rod thermometer	1	Elcometer Co.	
Digital Roughness Meter	1	TQC Co.	
Digital coating thickness gauge	2	Elcometer Co.	
Coating thickness gauge calibration film	10	Elcometer Co.	
Sag tester	1	Elcometer Co.	
Wet film thickness gauge	1	TQC Co.	
Laboratory oven	1	MEMMERT Co.	
Digital clamp meter	1	HIOKI Co.	
Digital lux meter	1	TENMARS Co.	
Welding gauge	5	TWI Co.	
Torque meter	5	TOPTUL Co.	
Digital caliper gauge	5	MITUTUYO Co.	

Technical data of some special tools



H Beam Assembling Machine, KTA-7010

Vertical method in H beam assembly: since the relevant part is located in H vertical form and then is welded, the safety of H beam assembly with spot welding is guaranteed. Ability to make wide H: this equipment may assemble and weld H beams in different sizes including standard sizes. High speed of assembly of H beams: we need less than 30 minutes to make an H beam with a length of 10 m

- Wing width limits, 200-1000 mm
- Body width limits, 200-2500 mm



H Beam Straighten Machine, KTS-6080

This machine has been designed to straighten H falnges that have fallen due to post-welding contraction; the H falnges is straightened using horizontal and vertical distortion hydraulic jacks.

This machine with 8 m/min function increases production output.

- Wing width limits, 150-800 mm
- Wing thickness limits, 10-70 mm
- Body width limits more than 200 mm
- Body thickness limits, 6-50 mm
- Straightening speed, 8 m/min



Hot CNC Cutting Machine, KTG-420

- Up and down torch movement, separately and jointly
- Automatic Ignition System
- Beveling ability
- Water cooling system
- CNC Sentrol 300 Control System
- Cutting Thickness Limits, 6-100 mm
- Cutting Speed 100-1000 mm/min
- Machine movement speed, 12000-18000 mm/min
- Longitudinal cutting up to 18000 mm
- Machine Rail Width, 5050 mm
- Machine Width, 6030 mm
- Machine Height, 2400 mm



Hot CNC Cutting Machine, KTG-320

- Up and down movement ability of torches separately and jointly
- Automatic Ignition System
- Beveling ability
- Water cooling system
- CNC Sentrol 300 Control System
- Cutting Thickness Limits, 100-6 mm
- Cutting Speed 1000-100 mm/min
- Machine movement speed, 12000-18000 mm/min
- Transverse cutting up to 3200 mm
- Longitudinal cutting up to 16000 mm
- Machine Rail Width, 4050 mm
- Machine Width, 5030 mm
- Machine Height, 2400 mm



CNC PLASMA Cutting Machine, KTP-320

- Increasing production because of high cutting speed and no need for preheating
- Less thermal deformation in proportion with gas cutting
- Ability to cut steel and non-iron steel such as aluminum, copper, and anti-rust steel
- Precision cutting
- Sentrol 300 Control System
- Machine movement speed, 12000-18000 mm/min
- Transverse cutting up to 3200 mm
- Machine Rail Width, 4050 mm
- Machine Width, 5030 mm



CNC Single-Axis Drilling Machine, PSD-4015

- High Speed Drilling allows the user to increase production speed
- Maximum dimensional capacity, 1400*1500 mm
- Maximum drilling diameter, 32 mm



Cold Plate Beveling Machine

- Cutting speed, 330 mm/min
- Cutter rotating speed, 300 RPM
- Longitudinal limits, more than 200 mm
- Transverse limits, more than 150 mm
- Thickness limits, 4-40 mm
- Beveling thickness limits up to 17 mm
- Ability of Beveling with 30, 35, 45, 60 angles



CNC Punch Machine, KTPK-100 Model

- Together with hydraulic clamp
- Power pressure, 100 Tons
- Plate working dimensions limits, 100*100*6 mm up to 500*1000*25 mm
- Maximum drilling capacity 25 mm, thickness with diameter of 32 mm

Introduction to the projects



Steel structures of ammonia plant of Kermanshah Petrochemical Industries

Oil, gas, and petrochemical industries

Undoubtedly, oil, as one of the most important natural resources of Iran, plays a prominent role in the Iranian economy. Through the construction and operation of several important industrial sites, such as the steel structures of the ammonia plant of Kermanshah Petrochemical Industries, the Persian Gulf Bidboland Gas Refinery project in Mahshahr, the Persian Gulf Bidboland Gas Refinery project in Behbahan, the steel structures (utility unit and offsite), the construction of the olefin project for the Gachsaran Petrochemical Co, etc., we were able to gain the trust of Iran's GC employers and complete strategic projects in this industry.



Steel framework of the smelting plant of the Sepid Farab Kavir Steel Complex

Projects in the steel and mineral industry

The importance of the steel industry is such that it started the industrial revolution in the mid-18th century, and steel is the second most consumed material in the world after petroleum. The Islamic Republic of Iran ranked 10th in the world with a production of about 32 million tons of steel in 2019, improving 4 places from 2016. Iranian steel production has continued to increase in recent years, tripling in the last 10 years. Sazvar Sazeh Azarestan has taken successful steps in manufacturing and installing key equipment of this important industry with the implementation of projects such as the steel structure of the halls of the melting and casting plant of Sepid Farab Kavir Steel Complex, the steel structure of the machine structure and running rails for the construction project of Kharameh pellet plant, the project to develop and improve the quality of iron ore concentrate in lines 7, 6, and 5 in Gol Gohar, and so on.



Southern Development Plan Hall of Crouse Manufacturing Industries Company

Industrial factory construction projects

Construction of industrial plants is another area that the Group's executives always focus on based on Sazvar Sazeh Azarestan's business development strategy. So far, we have been able to satisfy many employers throughout Iran with the operational construction of industrial facilities. Some of these projects are as follows:



Manufacturing pressure tanks for utility unit of Pasargad Qeshm Power Plant

Industrial equipment manufacturing projects

Industrial equipment manufacturing is another attractive and challenging area of activity for the Sazvar Sazeh Azarestan Company. We have focused on designing and manufacturing major parts and equipment for industrial projects in Iran and have been able to build, transport, and install equipment such as pressure vessels for the construction of the utility unit of Pasargad Qeshm Power Plant, sand filter tanks for the 100,000 m3 seawater desalination project in Bandar Abbas and so on.



Sand Filter Tanks for Bandar Abbas Desalination Project

Hospital projects

Hospital construction is another area in which Sazvar Sazeh Azarestan has been able to successfully complete projects. Urban development and expansion of construction activity in cities are tied to the construction and development of healthcare centers. Hospitals have complex structures that require specific design and construction standards. These standards are set in each city and region based on factors such as the weather, the cultural status of the people, the region's geographic location, the economy, and so on. The standards for all stages of construction are set by the managers of Sazvar Sazeh Azarestan, always keeping the most important rules and criteria in mind. Some of the completed projects are the Qom Khatam Hospital, the upper part of the Salamat Barkat Hospital, the Kasra Hospital Development Plan, Tat Charitable Hospital, and others.



Steel framework of Block C of Khatam Qom Hospital

Construction Projects

Designing, manufacturing, and installing steel structures for high-rise buildings is another area in which the Sazvar Sazeh Azarestan Company has been able to carry out successful projects all over Iran. Since its establishment, the Sazvar Sazeh Azarestan Company has gradually developed its activities by building a modern factory, hiring skilled workers, and equipping them with modern machinery and equipment. The ability to change and adapt the factory's production lines according to the needs of different projects is one of our potential capabilities in Iran's manufacturing sector. However, some of the factory's production lines have been assigned to specific work areas due to the scale and complexity of various structures. For construction projects, there are special lines based on the different specifications of the steel frame structure.

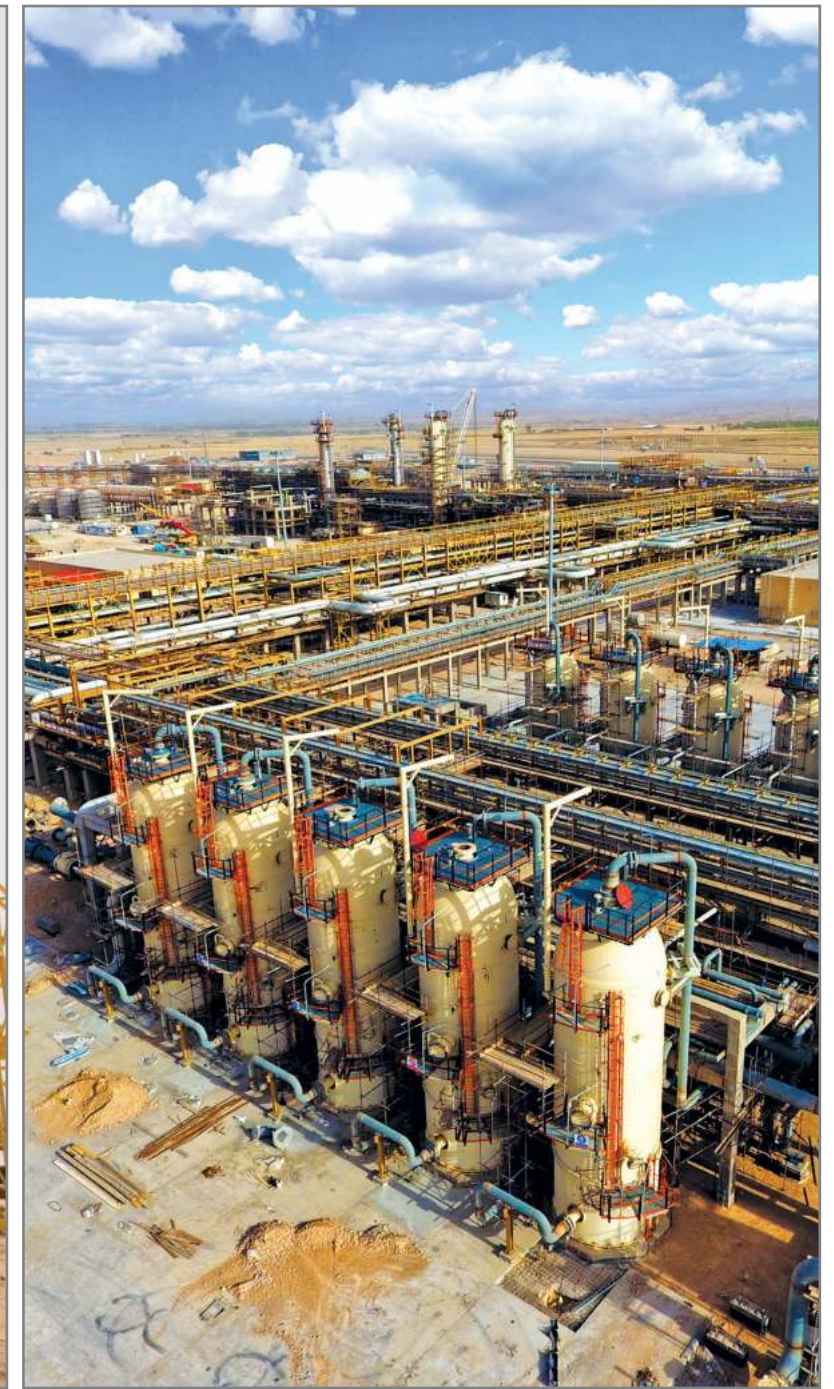


Steel framework for the Metal Hotel project

Steel structures
for the Persian
Gulf Bidboland gas
refinery project

15000 Ton

Client: Persian Gulf
Bidboland Gas Refining
Company



SCAN ME !



Steel structures
for the ammonia
plant of Kermanshah
Petrochemical
Company

6000 Ton

Client: Kermanshah
Petrochemical Company



SCAN ME !



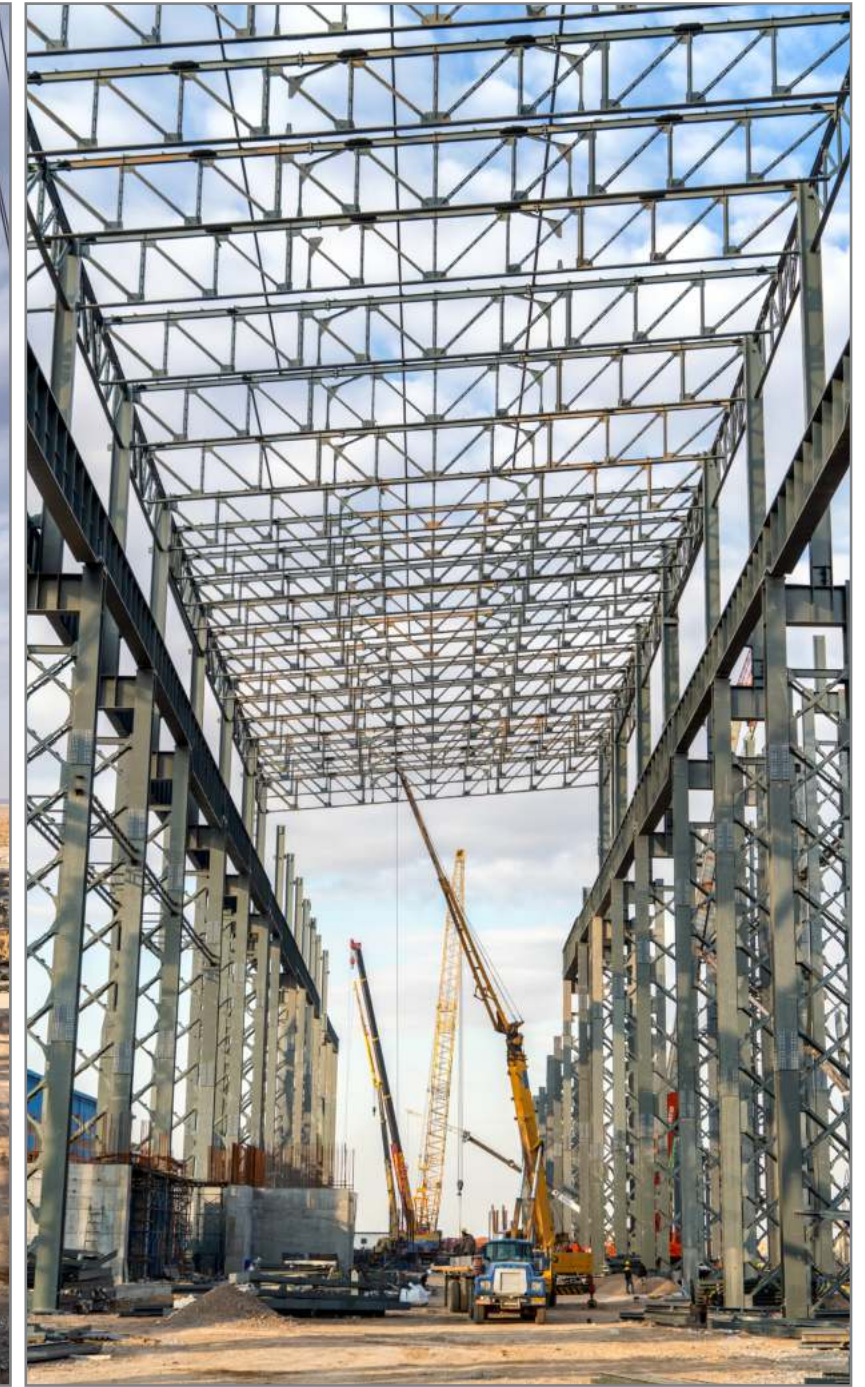
Steel structures
for melting and
casting hall of the
Sepid Farab Kavir
Steel Complex

12000 Ton

Client:
Sepid Farab Kavir Steel
Complex Company



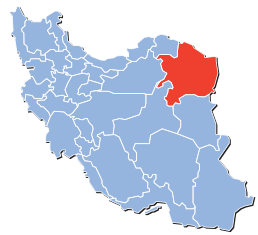
SCAN ME !



Steel structures of the main shop building of the Sangan iron ore mine project

4000 Ton

Client:
Mana Company



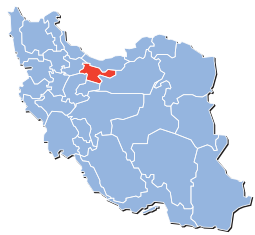
SCAN ME !



Southern building structure, site No.3 of the Crouse Company

11000 Ton

Client:
Crouse Manufacturing Industries Company



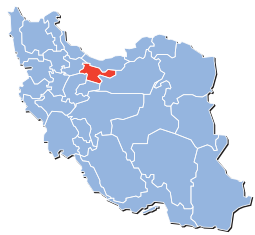
SCAN ME !



Bahman Motor
Company press
shop construction

4000 Ton

Client: Bahman
Motor Company



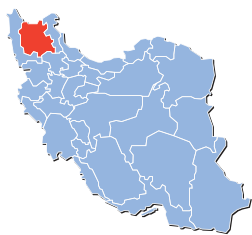
SCAN ME !



Steel structure
of industrial halls
for Tabriz Metro

4000 Ton

Client: Omran
Azarestan Company



SCAN ME !





Press shop-2
Building

3000 Ton

Client: Iran Industrial
Parts Design and
Manufacturing Company



SCAN ME !



Sand filters for the Bandar Abbas sea water desalination project

700 Ton

Client:
Tana Energy Company

14 Sand filter



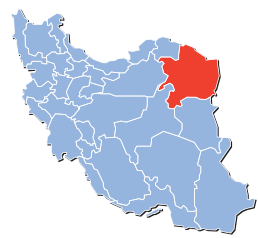
SCAN ME !



Air and Gas ducts for the direct reduction plant in Torbat Heydariyeh

700 Ton

Client: Fakoor Sanat
Tehran Engineering
Company



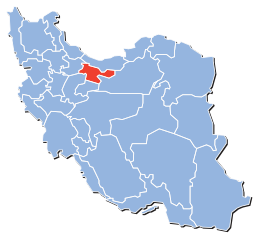
SCAN ME !



Steel Structure for
Salamat Barkat
Hospital

15000 Ton

Client: Taban Shahr
Company



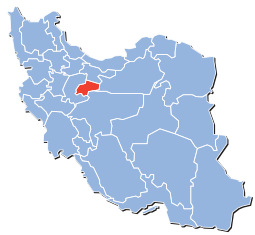
SCAN ME !



Steel Structure for
Block C of Khatam
Qom Hospital

4000 Ton

Client: Omran
Azarestan Company



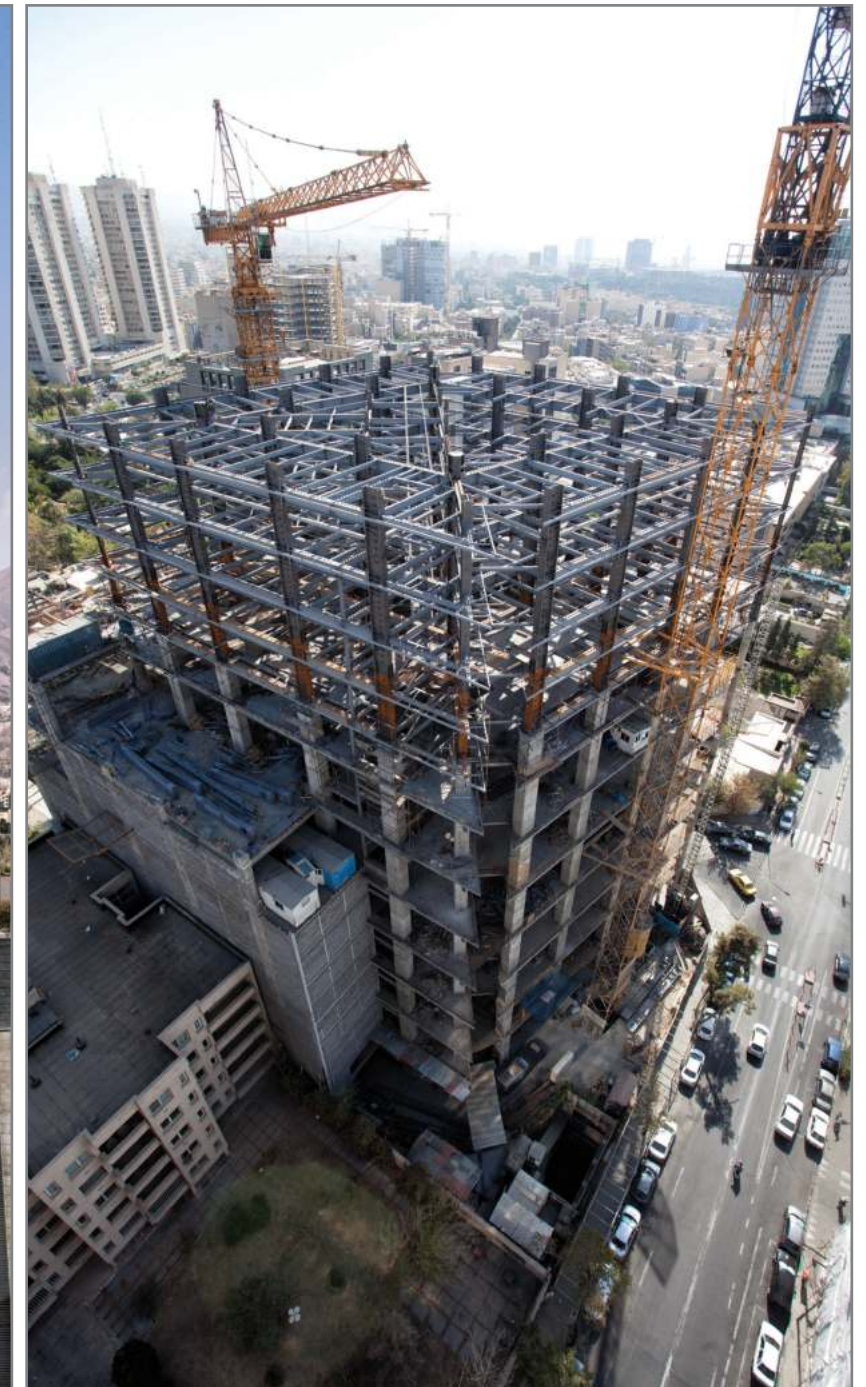
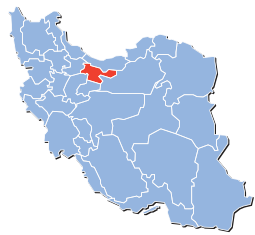
SCAN ME !



Steel structure
for Melal Hotel
project

16000 Ton

Client: Melal
Hotels Group



SCAN ME !



Steel structure for
the central building of
IT services

3500 Ton

Client: Omran
Azarestan Company



SCAN ME !



Bring the moon into your home!

Sazvar Sazeh Azarestan knows very well that social responsibility brings benefits to all parties. On the one hand, a more coherent ethical approach flows into the company, and on the other hand, external stakeholders – society and the environment – also benefit from the myriad advantages of this approach. We have developed a multi-layered charter for exercising social responsibility. Based on the scope of activities in our beloved Iran concerning the needs of this region, we have put cultural objectives and support for disadvantaged areas on the agenda. We believe that sustainable development is only possible with the two wings of culture and economy, and it is with this approach that we have taken the measures below.

- Support for the Children's Foundation
- Establishment of the Iranak Childhood Museum
- Construction of a charitable school in Bushehr province
- Donation of canopies for the Jiroft education department
- Establishment of the Sadr al-Vaezin Children's and Youth Library
- Construction of the CT scan building of Shahid Sattari Hospital in Gharchak
- The organization of two symposiums «Read with me» and the awarding of the Jabar Baghcheban Prize
- Supporting employment, entrepreneurship, and raising the scientific level of young Iranian professionals
- Donating money and goods to earthquake-affected areas in Kermanshah, East Azarbaijan, Ardabil, etc.
- The publication of the poem of Heydar Baba by Ostad Shahryar together with a fluent Persian translation



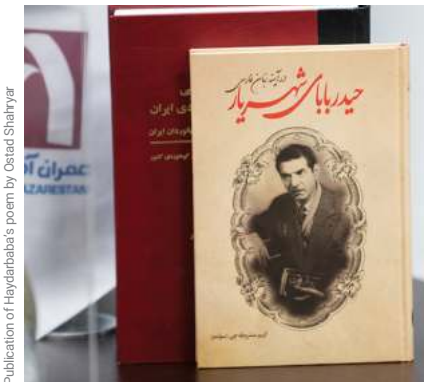
The Sazvar Sazeh Azarestan Company established the Iranak Childhood Museum intending to promote childhood culture. Childhood memories are sweet dreams that remain in our memory forever. If we keep childhood and children's literature alive in society, there will be constructive interaction between children and adults. The Iranak Childhood Museum is a museum exhibition located in the treasure building of the National Library and Archives of Iran to familiarize lovers of childhood culture and the new generation with the history of the past. This museum, launched by the Research Institute for the History of Children's Literature and with the support of the Sazvar Sazeh Azarestan Company, aims to familiarize children with their cultural roots. Thus, it is about cultural activities such as the presentation of the role of the child in the Shahnameh and in the miniature and the presentation of pioneering poets and writers of children's culture. Experts in behavioral sciences believe that toys should stimulate the child to think and develop his imagination by introducing him to various concepts such as colors, shapes, and so on. Most importantly, toys should be selected according to the child's age. In this museum, there are various toys such as dolls, cradles, and other toys. Childhood is one of the most important stages of learning, and the right toys can develop children's creativity and enable them to experience life.



Sadr al-Vaezzin Library, Khatam / Isfahan Province



CT Scan building of Shahid Sattari Hospital/Gharachak



Publication of Hydarbaba's poem by Ostad Shahrivar



7th TF Elementary School in Iranshahr / Sistan and Baluchestan



Construction of the 12-classroom Thohid charitable High School for Girls

Young people are a fundamental and valuable asset in any society and should be considered a target and carrier for economic, social, and cultural growth and development programs. In this sense, Sazvar Sazeh Azarestan Company, as part of its social responsibility, has built the Thohid high school for girls with twelve classrooms in Busher city, hoping to bring back the young people who missed school.



Letters of thanks, letters of appreciation



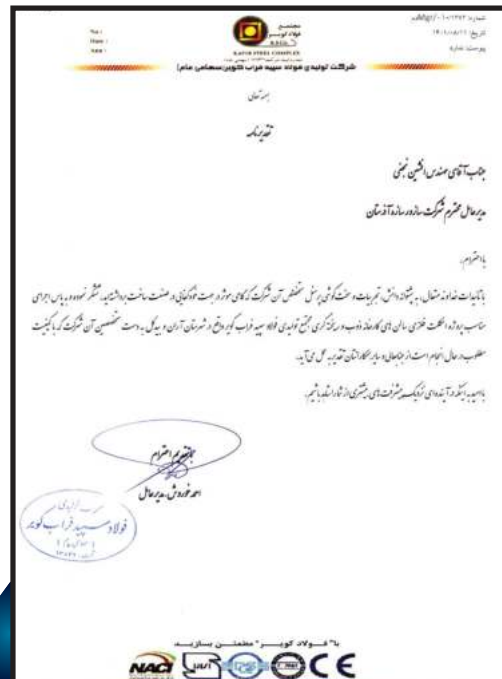
Iranian Society of Structural Engineering (ISSE)



Fakoor Meghnatis Spadana Co.



Tana Energy Co.



Sepid Farab Kavir Steel Complex



Persian Gulf Petrochemical Industries Co. (PGPIC)



Middle East Bank



Oil Turbo Compressor Co.

Letters of thanks, letters of appreciation



Sacookar Construction Co.



Paya Foolad Kavir Yazd Mining Industrial Co.



Hegmataneh Sanat Development Co.



Palladium Shopping Center



Goupheh Construction and Engineering Company



International Conference on Structure and Steel



Venus Glass Co.



Melal Hotels Group Co.

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