



Alvan Sabet Knowledge-Based Company

Manufacturer of paints and chemicals

The largest paint manufacturer and synthesizer in the Middle East

A brief introduction

Alvan Sabet Company at a glance

Alvan Sabet was established in 1982 located at a region 45 km from Hamedan city on the Hamedan-Qazvin road. As the largest producer of dyes and chemicals in the Middle East and with the aim of covering the textile and leather industries in two groups of textile dyes (acidic and direct), it was put into operation in 1996.

This factory was built on a land of 26 hectares with an infrastructure of 42,000 square meters. The initial production capacity of Alvan Sabet was 2,000 tons of all kinds of textile dyes, leather, and textile auxiliary materials.

The company's current annual production capacity is more than 10,000 tons of acid, direct, reactive, basic, and solvent dyes, as well as optical bleach for the textile, detergent, and paper industries.

Alvan Sabet annually supplies hundreds of types of dyes for the textile industry, leather, detergent, cosmetics, gasoline and petroleum derivatives, agricultural fertilizers and pesticides, food and pharmaceutical materials, and paper and textile cooperative materials for the company's countless customers throughout the country and some neighboring countries. Currently, Alvan Sabet produces the following color groups:



- Acid and Metal Complex Dyes
- Direct (substantive) Dyes
- Basic (cationic) Dyes
- Disperse Dyes
- Reactive Dyes
- Food and Detergent Dyes (FD & C Dyes)
- Pigment Paste

Sub-units of Alvan Sabet

Production and synthesis

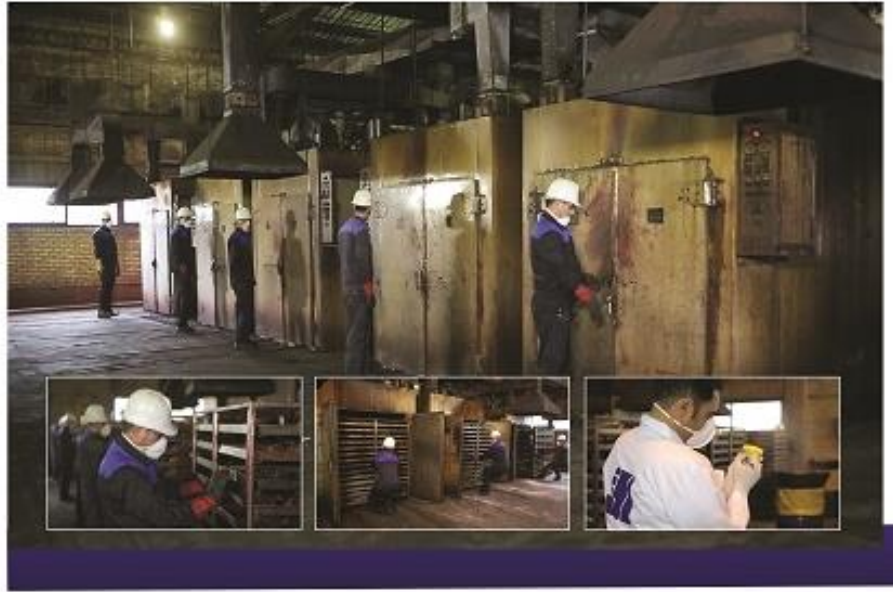
The production unit consists of 16 independent production and processing stations. In each station, three to four types of production plants of different products can be synthesized and processed at the same time.

This unit, which is built on three floors, is located on the south side of the factory and has an area of about 42,000 square meters. A total of 126 reaction tank reactors are placed on three floors. The color synthesis starts on the third floor and ends on the ground floor. There are a total of 65 filter press machines in the production building, some of which are placed between the floors and are used for intermediate product filtration. About 35 machines are used for the final product filtration.



Dryer

The dryer unit is used to dry the paint made in the production unit. It contains 150 dryer rooms with each room holding about 700 to 1,000 kg of wet cake. Each room in the dryer unit is equipped with temperature and humidity control systems. After the paint dries, the dryer automatically shuts off to prevent overheating the product.



Spray Dryer

One of the latest technologies for converting drying liquid paint into powder is a spray dryer. One of the most important applications of this device is to preserve the environment, reduce energy consumption, and produce high-quality products, especially for reactive dyes. Alvan Sabet spray dryer with a production capacity of 4,000 tons per year supplies high-quality paint needed by industries.



Mixer and Crusher

The mixer and crusher unit consists of 14 micronized devices that have a capacity of 2 to 6 tons of powder paint. The dry color cake from the output of the dryer is analyzed in the quality control unit and the required materials are determined. The materials are mixed with paint and crushed in the crusher part and poured into the mixer with specific granulation. Next, the required additives are added to make it uniform. The test is done on the output color sample, and then the packing instructions are given by the quality control unit and the product is packed.



Pigment

The pigment unit is established in a separate building that has several vertical and horizontal grinding machines (pearl mill and sand mill). Based on the physical nature of pigment powder, one of these machines is used to grind and produce pigment paste. These devices can crush pigment particles to the nano level. The quality control unit is equipped with the latest methods for printing and comparing samples. The pigment paste produced by the company with high

resistance and stability is provided for various uses (such as cotton fabric dyeing workshops) for the export markets in the Middle East.



Quality Control

The quality control unit is equipped with both production and product control equipment in accordance with GMP, ISO, SDC, and AATCC standards. The presence of experienced experts and suitable equipment in this unit has led to the approval of these laboratories by the Iranian Standards Institute. Currently, Alvan Sabet's quality control unit is a standard partner in the 7728, 7729, and 17025 standards and the incentive standard mark for textile dyes and detergents. Alvan Sabet also has a license to use the mandatory standard mark.



Alvan Sabet's Labs

Alvan Sabet's laboratories are among the most equipped research and development units in Iran. They are also equipped with the latest color and chemical analysis tools such as HPLC devices, UV-VIS spectrometers, etc. Alvan Sabet includes the following laboratories:

- Research and development laboratory
- Raw materials laboratory
- Production control laboratory
- Quality control laboratory

To control the quality and improve the process, various tests are conducted throughout the process in different labs, from checking the quality control of raw materials to the production stages to packaging and standardization of colors.



Alvan Sabet's Research and Development Laboratory

With more than 28 years of experience and relying on local knowledge and the power of domestic and foreign experts, Alvan Sabet Research Laboratory has succeeded in producing and developing 5 color groups. They consist of more than 4,000 types of colors which are needed in different industries.



Alvan Sabet's Raw Materials Laboratory

After quality checks and physical and chemical analysis, all raw materials entering the collection are entered into the raw material warehouse. After another quality check, the input materials are sent to the production line.



Production Control Laboratory

This laboratory, located in the production line, examines various samples of the production line during the production process. This ensures that if they comply with the standards, they will be referred to the next stage.



Quality Control Laboratory

At the end of the production line and before product packaging, the quality control laboratory conducts a sampling of all the produced batches. After matching with the relevant standards, the final approval will be issued.



Health and Safety Units and Fire Extinguishing System

Alvan Sabet's fire fighting unit is ready to provide round-the-clock service to the entire industrial town with up-to-date fire fighting equipment.

The company's health and safety unit has a physician's room with equipment and an ambulance. It is ready to serve the company's personnel.



Alvan Sabet's Warehouses

The warehouses of Alvan Sabet are built with an area of 10,000 square meters. Based on the MSDS, chemicals, and paints are stored in separate areas.

There are three types of warehouses for storing materials and goods in the company, and the materials are stored in one of these warehouses according to their physical and chemical nature.

Open Warehouse

Chemicals that are highly volatile or are ignitable or explosive are stored in this warehouse. Most of the liquids in the barrels are stored in this warehouse.

Closed Warehouse

This warehouse is completely closed, covered, and isolated. Chemicals that have high stability against temperature changes are kept in this warehouse.

Tank Farm

Chemicals purchased in bulk are stored in this warehouse.

Customs Warehouse

Alvan Sabet, in cooperation with the regional customs, is considered one of the authorized economic operators of AEO. All imported goods remain in this warehouse until the legal procedures (clearance) go through.

Technical Warehouse

Machine parts, materials needed for paint packaging, stationery, and daily consumables are kept in this warehouse.

Food Storage

This warehouse is completely separate from other warehouses. It contains food ingredients for the purpose of cooking food for the factory employees.

Others Units

Other units at Alvan Sabet include the following:

- Raw water storage tanks
- RO water purification system
- Processed water storage tanks containing drinking water and water used for washing tanks, workshop floors, and watering green spaces
- 4 hot water boilers and two steam boilers
- 3 air compressors to meet the daily needs of the factory

In addition to the above, Alvan Sabet has a water purifier with an ion exchange resin system with a capacity of 960 cubic meters per day, which is used in emergency situations.

Administrative Units and Related Parts

The office building of Alvan Sabet is built on two floors, which includes 10 equipped rooms.

The office units are located on the ground floor and the company's guest house is on the second floor. Also, the company's kitchen is completely separate and can serve about 300 people at the same time.

Another administrative unit is the guard building that guards the factory around the clock.

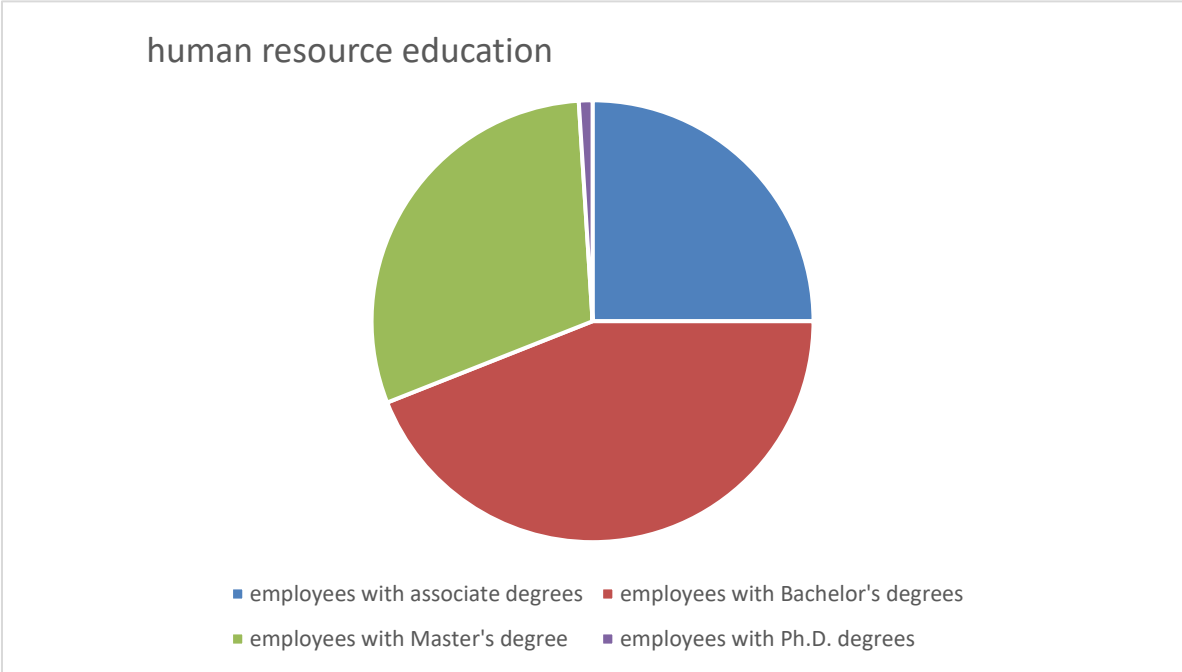
Chart of human resources of Alvan Thabit company:

Number of employees with associate degrees: 62

Number of employees with Bachelor's degrees: 110

Number of employees with Master's degree: 74

Number of employees with Ph.D. degrees: 4



Achievements

- Production of liquid solvent colors
- Production of medicinal, edible, and sanitary dyes
- Wide production and supply of dyes for detergent industries
- Production and supply of fluorescent antifreeze paints and petroleum derivatives
- Wide production and supply of paints used by Iranian refineries in the gasoline and petroleum solvent sector
- Production and a wide supply of new and diverse colors for leather industries (penetration powder, coating, and pigment)
- Production and supply of dyes used in agricultural fertilizers and pesticides based on the application and chemical structure of the fertilizer
- Production and supply of new dyes used in the textile industry, including reactive bifunctional dyes
- Wide production and supply of consumable paints for the paper industry (size press and internal) in liquid, powder, and waterproof form
- Production of a number of imported raw materials used by the company
- Production and supply of leather industry cooperative materials (soap and degreaser, penetrant, and pull-up oil filler)
- Production and supply of cooperative materials for textile industries (salt resist, silicone softener, silicone anti-foam, and all kinds of soaps and conditioners)
- Mass production and supply of optical bleach suitable for detergent industries for detergent powders and liquids, textile, and paper

Future Plans

- Production and localization of other imported raw materials in paint production
- Increasing the production capacity and optimizing the production of textile dyes
- Launching a new production line of highly used pigment powders for plastic, paint, resin, and artificial leather industries
- Production and formulation of textile dyes for jet printing
- Production of offset printing inks and all kinds of paper and lithography printing inks
- Production of optical bleach suitable for polyester fibers and plastic industries
- Production of glass paint