

A- Shahroud Cement Company

With two production lines and daily production capacity of 6500 tons of clinker Portland and over 7500 tons of gray cement in various types, Shahroud Cement Plant is amongst the most important industries and one of the renowned producers of cement in Iran.

In addition to being a holder of the Iranian National Standard Certificate for all the Company's products, several international quality and management systems have already been implemented in the company to make sure that the products have consistent and desirable quality.

The certificates acquired by the company include:

- Iranian Nations Standard for all products (Types 1-325, 1-425, 1-525, 2, 3, and 5)
- European Product Conformity Standard CE (Conformité Européenne) for type CEM I-42.5N cement
- Commonwealth Independent States (CIS) including Russia and Caspian Regional States Product Conformity Standard under the name GSOT-R for type PC-M500 and PC-M500 Anti Sulfate cements.
- ISO 9001:2008 International Quality Management Standard
- ISO 14001:2004 International Environmental Management Standard
- OHSAS 18001:2007 International Occupational Health and Safety Management Standard
- IMS Integrated Management System Standard

B- Superior Quality

Availability of quality materials in the vicinity of the plant, production process with the world's leading technology, equipped laboratories, and services of the most specialized and experienced workforces, guarantee the quality of Shahroud Cement Company's products. The machineries used in this factory are of the world's most update technologies and are supplied by selected from countries such as Iran, Germany, and Denmark to facilitate production with maximum capacity and to ensure the high quality of Shahroud Cement Company's products. The raw materials, materials in baking process, semi-final product, and the final product are consistently and regularly controlled and tested at the laboratory so that Shahroud Cement Company's products can continuously have the desired quality. In addition to adding strength to various structures, the superior quality of Shahroud Cement is economical and leads to less cement consumption in making concrete and mortar.

The nomination of Shahroud Cement as the exemplary quality unit in national scale from 66 active factories in the cement industry in the year 1391 (March 20, 2012 to March 20, 2013) is a proof to the round-the-clock efforts of the management and the staff of the company in order to maintain and increase the quality.

C- Exports

The products of Shahroud Cement Company include clinker and cement in various types and in jumbo, bulk, and jumbo sack packages which are shipped via rail, sea, or land to countries such as Russia, Turkmenistan, Azerbaijan, Tajikistan, Kazakhstan, Iraq, UAE, Qatar, Kuwait, Yemen, Somalia, Afghanistan, Pakistan, and Sudan. A significant portion of the exports are carried out by the exclusive loading boxcars and through Iran's northeast railway. Also, Shahroud Cement Company is ready to produce and deliver various types of cement according to the international standards and packaging specified by the costumers.

Various products of Shahroud Cement Company

1- Portland clinker

Clinker is gray in color with both small and large grains and is the product of the chemical reaction between limestone, clay, and other additives under sever heat treatment in a furnace with an approximate temperature of 1500 degree centigrade.

2- Portland cement

By grinding and mixing clinker and other additives (chalk, slag, etc.) in mill, the Portland cement in different varieties is produced.

3- Type 1 Portland cement

If the type of cement is not specified, the type one cement is intended. This cement is used in conditions where the processed concrete should not be exposed to sulfate compounds present in its environment and is mostly used in making mortar, regular concrete, and general purposes.

Various products produced by this company in this type are:

1-325: The 28 day resistance of this cement is over 325 Kg per square centimeter.

1-425: The 28 day resistance of this cement is over 425 Kg per square centimeter.

1-525: The 28 day resistance of this cement is over 525 Kg per square centimeter.

4- Type 2 Portland cement

A large portion of the production capacity is dedicated to this type of cement. This type of cement has average hydration heat and also has average resistance to sulfate compounds invasion.

5- Type 3 Portland cement

In order to produce this type of cement, the clinker is ground into finer grains in micrometer dimensions in order to possess shorter hardening time and it becomes very strong at an early resistant growth age. This type of cement is used when concrete casts are to be opened and the concrete is put under load in a short time such as large concrete slabs and bridges. The concrete made with this cement produces large amount of heat during its first hours.

6- Type 5 Portland cement

This type of cement is known as the anti-sulfate cement and is used when the concrete is to be exposed to corrosive and sulfated compounds in its environment. This type of cement does not have high resistance growth and strength during its early stages of life and is generally used for developing foundations, foundation parts, and walls of dams, bridges and underground structures.

7- Type PC-M500 and PC-M500 Anti Sulfate cements in accordance with GSOT-R standard

This type of cement is produced in accordance with the standards of Commonwealth Independent States (CIS) of Russia and Caspian Region State which is the GSOT-R standard and had 28 days age resistance close to 60 Mega Pascals (M.Pa). This company has received the product conformity certificate for the two PC-M500 and PC-M500 Anti Sulfate type cements issued by the Techsert authority in Russia.

8- Cement storage guide

In sealed and impermeable containers, cement can be stored for long periods of time. In proper silos, cement can be stored for three months. However, when stored in three-ply paper bags, even under good conditions, after 4 to 6 weeks it loses a considerable amount of its resistance and after 6 months it becomes almost completely unusable. Therefore, not only it needs to be protected from water and

moisture, it also must not be exposed to damp weather. Prolonged storage of cements leads to formation of clumps which are resulted from contact with the moisture in the air. A practical way to see if the cement is still usable is to crush these clumps with fingers; if they cannot be crushed with fingers the cement must not be used. Cement that clumps of which can be crushed with fingers might be still usable, but it has lost much of its strength.

9- Safety and health guide

Safety label: Harmful, irritating or caustic, harmful to the environment.

Threshold of the permitted dust inhalation in 8 hours: 10 milligrams per cubic meter (TLV-TWA): 10 mg/m³

Personal protection equipment required: Gloves, work cloths, boots, goggles, protective mask