
Iran Smuggles Ceramic Matrix Composite, a Key Material for Building a Nuclear Bomb

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By: Alireza Jafarzadeh

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The information has been obtained from sources inside the Iranian regime that have provided accurate information in the past including the revelations on Iran's Natanz, Arak, Abali (Kala Electric), Lavizan, and Parchin nuclear sites.

In a violation of international law, Iran smuggles Ceramic Matrix Composite (CMC) a key material for building a nuclear bomb.

Iran is building a large Graphite Electrode Plant, which by small changes in production line, can be used to produce Ceramic Matrix Composite.

Iran has already managed to produce C.M.C. in its Defense Industry. Iran's need for the C.M.C. and its background.

In order to build a nuclear bomb, Iran has been trying to obtain graphite composites. According to military experts of the Iranian regime, obtaining CMC has been one of the strategic goals of the Defense Industry and the Atomic Energy Organization of Iran.

This kind of graphite known as Ceramic Matrix Composite (C.M.C.) or Carbon-Carbon Composites (CC Composites) are used in building a nuclear bomb and preserving the highly enriched uranium (HEU). Without having this kind of graphite, highly enriched uranium can not be placed in a bomb structure because of high radiation.

Exporting C.M.C. to Iran is against the international law.

Iran had spent huge amount of money in the Revolutionary Guards' Research Center and Construction Crusade Research Center prior to 1991. Since that year the research has continued in the Defense Industry of the Iranian regime. In addition to its need for building the nuclear bomb, Iran has used the CMC for its missile industry, and high temperature parts of the missiles. The use of CMC in missile industry of the Defense Industries is pursued by Brigadier General Bazargani.

Smuggling C.M.C. from abroad:

It is against the international law to export C.M.C. to Iran; other types of Graphite have been banned to be provided to Iran since the beginning of 2004 as well. Some foreign companies (including Chinese and Russian companies) who used to provide some types of Graphite to Iran have ceased their trade with Iran. But Iran continues to smuggle this product into the country.

The Ministry of Defense of the Iranian regime continues to smuggle C.M.C. into Iran. The person in charge of foreign purchases of the Defense Ministry, named Mr. Tabatabaiee has continued to order and purchase this material from abroad. In order to smuggle the C.M.C. into the country, Iran has been using third countries to divert the material into Iran. Some countries in the southern Persian Gulf have been used for this purpose.

One of the ways of smuggling C.M.C. into the country is using some companies based in Dubai. One company that smuggles Graphite from China to Iran is a Dubai-based Iranian company. The Company is named "Gulf Resources Development Corporation." This company has branches in China and India. The Company is run by an Iranian engineer named Raouf Mashayekh who is himself based in Dubai but regularly travels to Iran.

The Iranian regime smuggles C.M.C. from various countries including China, where Iran has used a number of Chinese companies to divert the material to Iran via Gulf States.

Between 1987 to 1989, a British Company owned by Iranians purchased C.M.C. from an American Company and diverted the material to several countries before it actually ended up in Iran.

Stealing Scientific and Technical Information from abroad:

In order to gather the necessary scientific and technical information and expertise, Iran has been dispatching delegations to various western countries covered as "expert training" to gradually obtain the technology and expertise on producing C.M.C. and transfer them to Iran. One of the countries used for this purpose is Germany. A delegation is scheduled to be sent to Germany soon ostensibly for "technical cooperation and research opportunity" but in reality their mission is to gather information on C.M.C. and transferring the plans, maps, graphs, and other relevant information to Iran, part by part.

According to sources, this is the same strategy Iran used to obtain nuclear technology over the past few years; Iran was quite successful in that.

Defense Industry Heavily Involved in Research on C.M.C.:

The Defense Industry is currently heavily involved in research to make composite graphite.

One of the places used by the Defense Industry is their affiliate university, known as Malek Ashtar University located in Lavizan near Tehran, where they are using the ovens there trying to make C.M.C. Some of the engineers and experts who have most recently been involved in these activities are Alizadeh and a woman named Azadeh Ranjbar. Iran had succeeded in the years prior to 1991 to produce C.M.C. in small laboratory scale in the Revolutionary Guards' Research Center and Construction Crusade Research Center.

Iranian Experts Involved in Producing C.M.C.:

1. Nasser Ehsani, Deputy President of the Malek Ashtar University (affiliated with the Defense Ministry) and chairman of the University's research programs. Nasser Ehsani is in direct contact with Revolutionary Guards Brigadier General Hosseini Tash, who is the number two in the Ministry of Defense and in charge of Iran's parallel nuclear weapons program that is run by the military.

2. Dr. Ehsan Taheri Nassaj, from Tarbiat Modarres (training instructors) University

3. Mr. Alireza Mir Habibi, from Elm va San'at (Science and Industry) University, chair of the University's Research Center

4. Dr. Maztarzadeh, chair of Research Center for Material and Energy (affiliated with the Ministry of Science) Iran building its own Graphite Electrode Plant:

In May 2004, Iran made the contract and started the construction of a large Graphite Electrode Plant in Iran. The budget allocated to this project has been over 450 million dollars. The plant will have the capacity of 30000 MTPA of UHP (Ultra High Power) grade Electrodes.

This large plant is built in an area of 80 hectare (nearly 200 acres) and is located near Ardekan, in the KM 15 of the Ardekan-Naiin road (Yazd Province) in central Iran.

A consortium of a number of companies including two companies known as IRITIEC and IRASCO, are pursuing this project. IRITIEC is an Iranian Company based in Iran, but IRASCO is Italy-based Company owned by Iranians. An Indian Company known as HEG is also involved, with providing technical assistance and know-how for the project. The Italian IRASCO is responsible for equipment purchase and procurement from abroad. IRITIEC is 40% owned by the state-run 'Iranian Mines and Mining Industries Development and Renovation Organization' (IMIDRO). A number of other companies are involved in cooperation with this project, such as German Company SCS Technology.

According to Iranian experts, and sources inside the Iranian regime, this plant will allow Iran to master the graphite technology (only 19 countries have this capability) including the technology to produce C.M.C. and other needed products of graphite for a nuclear bomb. Minor changes in the line of production of this plant would enable the Iranian regime to produce graphite products needed for a nuclear bomb.