

Aurubis Bulgaria receives "European Technical Approval" for the incorporation of iron silicate in green cements

The company's sustainable product is involved in a number of successful projects

After Aurubis Bulgaria successfully certified one of its main by-products - iron silicate, as a construction product, with application in concrete and mortars in Bulgaria, the company reached European certification. After long-term testing of the material and a discussion between multiple laboratories, each representing a member country of the European Union, it was unanimously decided that the iron silicate produced by Aurubis Bulgaria can replace up to 20% of Portland cement (CEM I 42,5). This would directly reduce carbon emissions into the atmosphere and create cement-based building materials that are much more environmentally friendly.

The present certificate extends the applications of iron silicate in construction and once again proves its appropriate use in traditional construction products, recognized in practice. In addition, its use has a strong economic effect.

Behind the successful use of iron silicate are a number of projects in which it has been involved, among them the provision of sustainable carbon flooring in a Karin Dom therapeutic complex in Varna.

"Our product has high mechanical performance and increases the durability of building products. Therefore, we are confident that we will ensure the long-lasting use of the flooring in the new building," said Engineer Dr. Emanuela Manolova, Business Development Manager Iron Silicates at Aurubis Bulgaria.

Iron silicate has a great future in many directions and the proof of this is its application in the new Bulgarian Antarctic Base building. It is not just any building, but the new research center. A building without a solid foundation is doomed, even more in a location like this. Iron silicate is the component in concrete foundations that increases density and durability and is the best proof of how reliable and resilient the material is, even in these harsh conditions. The best specialists in the concrete industry have joined forces with the scientists at the Arctic Base to complete this project, which requires the expertise and boldness needed for any significant progress.

The use of iron silicate as a raw material for other industries is an integral part of Aurubis Bulgaria's sustainable development strategy. The raw materials of the future are already produced materials, ready and certified to be used in the circular process of sustainable recovery.