



_THERMAL SPRAY

Baking Plates

Ceramic-coated Metal Plates for Industrial and Craft Ovens

Thermal spraying methods such as plasma spraying offer diverse opportunities for increasing the performance, life-span and energy efficiency of products. GfE Fremat GmbH (GfE) offers coatings under the brand name "e-CER" which are able to increase the efficiency of thermal processes significantly through high emissivity in the infrared range (especially in wavelengths from 2 to 14 μm). The ceramic layers produced by GfE for over 10 years are used in the construction of industrial ovens, drying systems and refrigeration, among other things.

GfE also produces steel and aluminium baking plates with a wear and shock resistant, food-safe ceramic coating. These new baking plates are especially suitable as a replacement for natural stone or ceramic plates and feature a range of advantageous characteristics.



Layer Materials

Modern coatings use oxide ceramic components with a layer thickness of just a few hundredths of a millimeter to provide unique properties for diverse areas of application. The properties can be adapted to requirements by combining various oxide ceramics and varying the percentages.

Products / Delivery Forms / Dimensions

The high flexibility of GfE makes it possible to furnish baking plates of all dimensions, geometry and materials according to your specifications and with ceramic coatings. Parts up to several meters length/width can be produced. Cost-effective series production is also guaranteed thanks to our partners.

Products with e-CER® coating

- plates made of steel, stainless steel, aluminium and other materials
- fastening elements such as mortises, drill holes, lugs and eyelets can be produced
- surfaces can be sealed with ceramic on one side or all over



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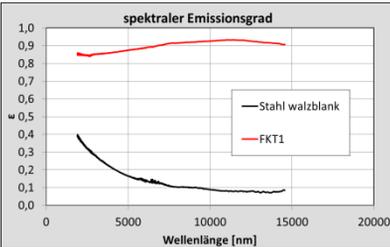
www.gfe.com



The Advantages of e-CER® Baking Plates

Unlike natural stone or concrete plates, baking plates are nonbreakable. Due to the ceramic coating with e-CER® the emissivity ϵ of surfaces radiating heat is increased to up 0.9 and higher. This leads to an accelerated and more energy-efficient baking process. Additional outstanding properties likewise result from combining the benefits of metal and ceramic.

- reduced backing/processing time
- energy saving
- reduced energy and operating costs
- chemically inert and food-safe
- improved mechanical stability and wear resistance
- almost no risk of plates breaking
- long lifetime
- lower manufacturing tolerances than stone plates



Applications

- domestic ovens
- craft and industrial ovens
- industrial baking systems
- grill, hot stone



Who we are

GfE is a leading global manufacturer and supplier of high performance metals and materials. We bring more than 100 years of experience and know-how to the field of material science. This invaluable experience is utilized in the development of tailor-made solutions for a wide variety of different industrial applications.

Certification in accordance with ISO 9001, ISO 14001 and BS OHSAS 18001 support our claim to the highest quality and safety. We can thus guarantee products that meet the specific requirements of our customers. Your trust and satisfaction are the cornerstone of our business.

GfE is a subsidiary of AMG Advanced Metallurgical Group N.V., Netherlands, a global leader in the production of specialty metals and metallurgical vacuum furnace systems.



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