

Press Information

Kyocera presents conventionally and 3D-printed components made of high-performance ceramics at Space Tech Expo Europe 2025

From 18 to 20 November, Kyocera will be presenting its innovative ceramic materials and additively manufactured components at the international trade fair for aerospace technology in Bremen, Germany.

Kyoto/Esslingen, 13th November 2025. KYOCERA Fineceramics Europe GmbH is presenting its latest developments in the field of high-performance technical ceramics at this year's Space Tech Expo trade fair taking place in Bremen, Germany. The focus is on the materials Fine Cordierite and silicon-infiltrated silicon carbide (SiSiC). Furthermore, Kyocera is showcasing new approaches in the additive manufacturing of ceramic components.

Fine Cordierite & SiSiC – versatile and highly precise to use

Fine Cordierite is characterised by an extremely low coefficient of thermal expansion and remains dimensionally stable even under extreme temperature fluctuations. Thanks to its high rigidity, it allows weight reductions of up to 70 per cent compared to glass. Due to these mechanical properties, Fine Cordierite is used for structural components that require reliable performance under extreme conditions.

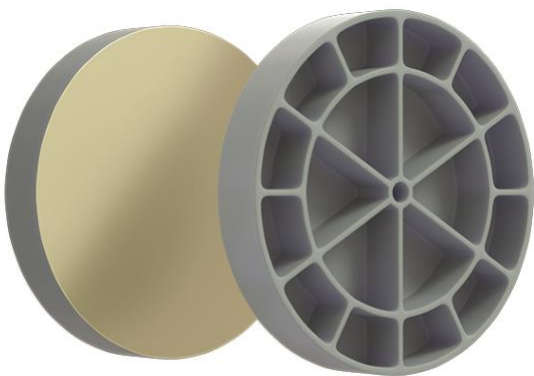
Besides Fine Cordierite, silicon-infiltrated silicon carbide (SiSiC) has established itself as a versatile high-performance material. SiSiC is one of the most powerful technical ceramics and is characterised by outstanding mechanical strength, high rigidity, thermal stability and excellent wear resistance. Thanks to its extremely low thermal expansion, SiSiC is particularly suitable for applications with the highest precision requirements – such as aerospace, semiconductor manufacturing or industrial production processes. The proprietary joining and manufacturing technology enables the production of complex, gas- and water-tight components with fine structures measuring less than 1 mm. Even large-area, monolithic components measuring up to 950 × 950 × 650 mm can be produced. Kyocera manufactures both StarCeram® Si, which is used for conventional manufacturing processes, and StarCeram® AM-Si, which is optimised for additive manufacturing. Both variants offer an almost identical property profile and therefore guarantee consistently high material quality – regardless of the manufacturing process.

Additive manufacturing offers new design and construction possibilities

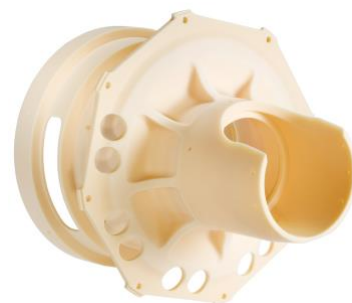
[3D printing](#) of SiSiC components offers a significantly higher degree of design freedom for complex structures and enables the implementation of topology-optimised designs that lead to a noticeable reduction in weight. It is therefore the ideal solution for demanding designs where conventional processes such as isostatic pressing, slip casting or film casting reach their limits. A two-stage manufacturing process is used to produce high-precision, durable components that are suitable for both prototypes and series production. During the process, a green body is initially created from silicon carbide powder and polymer binder using the binder jetting method. Afterwards, it is infiltrated with molten silicon, which reacts with the remaining carbon to form the final SiSiC structure.

The production process was particularly developed for large-volume and complex components. By eliminating green machining, reducing programming effort and eliminating tool production, short production times are possible. The more complex the geometry (e.g. undercuts, curved surfaces, bionic structures), the more apparent are the advantages of additive manufacturing over conventional processes.

Additionally, Kyocera offers design consulting and support in optimising component geometries. By working closely with the company's own design centre, it is possible to develop solutions that are precisely tailored to the respective requirements.



Fine Cordierite mirror



Camera housing



Example of complex geometries realised using additive manufacturing from silicon-infiltrated silicon carbide (SiSiC)



SiSiC mirror

About Space Tech Expo Europe 2025

[Space Tech Expo Europe 2025](#) is Europe's leading trade fair for aerospace technologies. Every year, the event brings together decision-makers, engineers and developers from the entire aerospace industry and offers a holistic overview of innovative components, materials, systems and solutions along the entire value chain. The trade fair is complemented by an accompanying conference programme featuring international experts and industry representatives.

Overview: Kyocera at Space Tech Expo Europe 2025

Show	Space Tech Expo Europe 2025
Date	18 th to 20 th November 2025
Location	Bremen, Germany
Kyocera's booth	Hall 7, Booth #X24

The press material is available for download via the following link:

<https://spgroup.box.com/s/e70tixtkdqdbfqs7ha0f2wlpn17hipe>



For more information on Kyocera: www.kyocera-fineceramics.de

About Kyocera

Kyocera has been successful in Europe for over 50 years. From its European headquarters in Esslingen am Neckar, KYOCERA Europe GmbH operates 29 sites including manufacturing facilities, with products ranging from fine ceramics, automotive, semiconductor and optical components to components for medical products, industrial tools, LCDs, touch solutions, industrial printing components, and consumer goods such as kitchen and office products.

Kyocera's high-performance ceramic products are produced and distributed by [KYOCERA Fineceramics Europe GmbH](#), a subsidiary of [KYOCERA Europe GmbH](#). The Kyocera Group is one of the world's leading providers of high-performance ceramic components for the technology industry, offering over 200 different ceramic materials, as well as state-of-the-art technologies and services tailored to the specific needs of each market.

KYOCERA Europe GmbH is a company of the [KYOCERA Corporation](#) headquartered in Kyoto/Japan, a renowned supplier in semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, smart energy systems, and communications technology. Kyocera is one of the most experienced technology producers, with more than 65 years of industry expertise. The Kyocera Group comprises 288 subsidiaries (31 March 2025). With around 77,200 employees, Kyocera generated net annual sales of around EUR 12.43 billion in the 2024/2025 fiscal year.

Kyocera is ranked 874 on Forbes magazine's 'Global 2000' list for 2024, and ranked as 'The 100 Most Sustainably Managed Companies in the World' according to the Wall Street Journal. For the second year in a row, Kyocera qualified for the Dow Jones Sustainability Index (Asia-Pacific). As well, Kyocera receives a Bronze rating on EcoVadis Sustainability Survey and was acknowledged as a 'Top 100 Global Innovator 2025' for the ninth time by Clarivate, being one of the world's leading innovators.

Kyocera also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr Kazuo Inamori — to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (equivalent to approximately €596,500 per prize category).

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