

CeraPrinter at Fraunhofer IKTS for High-performance Ceramics & Applications !



“ CERADROP, a MGI Group company, supplied The Fraunhofer Institute for Ceramic Technologies and Systems IKTS with the Hybrid CeraPrinter F-Serie Platform. IKTS conducts applied research on high-performance ceramics and represents Europe’s largest R&D institute dedicated to the study of the most complex ceramic devices.

MGI-CERADROP provided such a Leading Institute with the breakthrough equipment for development of the most powerful properties in ceramic materials, industrial manufacturing processes as well as prototype components and systems in complete production lines.

The entire MGI-CERADROP team expresses gratitude to Dr.-Ing. Steffen Ziesche - Group Leader of Microsystems, LTCC and HTCC, for collaboration and incredible opportunity to contribute to the development of the high-end hybrid ceramic components for industrial sectors.

Therefore, with a focus on constant development of flexible and modular concept, the CeraPrinter equipment meets the most challenging tasks in complex multi-material devices design and printing by integrating a large variety of digital deposition technologies for the specific shapes. “



“ A cost-effective solution for producing individualized and miniaturized ceramic components in small quantities economically is to employ digital printing technologies like Inkjet or Aerosol jet. These printing techniques are maskless and entirely additive, making them incredibly adaptable. The Ceradrop Printer enables the highly efficient use of these technologies in combination with the appropriate machine-integrated curing technologies.

The prospectively manufactured hybrid ceramic components are used in the application fields of electronics and power electronics (automotive, aerospace, telecommunications, industry) as well as sensor and energy technology.

The Ceradrop machine is characterized by high reliability, excellent usability and by the timely and competent support of the manufacturer. “



*Dr.-Ing. Steffen Ziesche;
Group Leader Microsystems,
LTCC and HTCC*



CERADROP, A MGI GROUP COMPANY

The MGI Group is composed of MGI Digital Technology, headquartered in Fresnes, France, CERADROP, located in Limoges, France and KÖRA-PACKMAT, located in Villingendorf, Germany. Founded in 1982, MGI Digital Technology designs, manufactures and markets a full and innovative range of award-winning digital presses and a complete line of versatile finishing solutions.

CERADROP designs and markets Materials Deposition Digital Printers exclusively for Printed Electronics Industry and Smart 3D Printing. Thanks to its modular-based scalable concept, CeraPrinter Series models present new opportunities for feasibility study and launch of new products into the Printed Electronics market. Combining several materials deposition technologies as well as the latest generation of curing modules, this equipment line permits to reach a wide range of application fields such as: membrane switch, antennas, sensors, passive components, interconnection, flexible solar cells (OPV), OLED and many others.

As the subsidiary of MGI Group focused on Printed Electronics and Smart 3D Printing, CERADROP can call up more than 60 engineers specialized in inkjet engine, mechanics, automation, software, chemistry, and ink management to supply the best materials deposition digital printing solution from advanced R&D up to 24/7 high performance manufacturing.



FRAUNHOFER INSTITUTE FOR CERAMIC TECHNOLOGIES AND SYSTEMS IKTS

The Fraunhofer Institute for Ceramic Technologies and Systems IKTS conducts applied research on high-performance ceramics. The institute's three sites in Dresden and Hermsdorf (Thuringia), Germany, collectively represent Europe's largest R&D institute dedicated to the study of ceramics.

As a research and technology service provider, the Fraunhofer IKTS develops advanced high-performance ceramic materials, industrial manufacturing processes as well as prototype components and systems in complete production lines up to the pilot-plant scale. In addition, the research portfolio also includes materials diagnostics and testing. The department "Hybrid Microsystems" focuses on the development of thick-film and multilayer-based functional ceramic materials, microcomponents and microsystems.

CERADROP, a MGI Group company
32 rue de Soyouz, Parc d'ESTER,
87068 Limoges, FRANCE
Tel: +33 555 38 26 96

Viktoriya TESSIER-DOYEN
Business Development Manager
v.tessier-doyen@mgi-fr.com

