

# Press release

Advanced ceramics for the fight against COVID-19

## **CeramTec piezoceramics atomise liquid drugs in ventilators**

***Plochingen, 29 April 2020 - Ventilators are lifesavers for many critically ill patients and are now in the news daily in the fight against the COVID-19 virus. The extremely increasing number of intensive care patients fighting for their lives against this virus with ventilators has made these devices a very scarce commodity and poses great challenges for manufacturers to produce and provide additional devices as quickly as possible.***

In addition to the actual ventilation, the simultaneous medication of the patient also plays a central role. In the recent past, there has been a move towards atomising or nebulising liquid medication during delivery. Due to the good pulmonary mobility of the atomised particles, the effectiveness of the administered medication is significantly increased compared to conventional dosing methods.

Piezoceramic components from CeramTec form the heart of various atomisers. As soon as an alternating voltage is applied to them, they begin to oscillate at a high frequency. The oscillating effect of the piezoceramics excites the medication either directly or indirectly and produces small droplets that the patient can inhale.

Do you have any questions or need more information? Then contact the CeramTec communications department at [pr@ceramtec.de](mailto:pr@ceramtec.de).



Caption:

Ventilators are lifesavers for many seriously ill patients. In addition to the actual ventilation, the simultaneous administration of nebulised, liquid medication plays a central role. Piezoceramic components from CeramTec are at the heart of various nebulisers.

Photo: CeramTec

### **About CeramTec GmbH**

CeramTec is a leading international manufacturer of technical ceramics and specialises in the development, production and distribution of parts, components and products made of ceramic materials. With over 100 years of development and production experience, CeramTec is a global leader in the manufacture of advanced ceramics and uses these materials in a wide range of applications. CeramTec advanced ceramics are used in numerous industries, including medical technology, the automotive industry, electronics, energy, environmental technology, as well as in equipment and mechanical engineering. The product range includes well over 10,000 products, components and parts made of technical ceramics and a variety of ceramic materials.

With production facilities and subsidiaries in Europe, America and Asia, CeramTec has an international presence as a manufacturer and supplier. The company is headquartered in Plochingen near Stuttgart. In 2018, CeramTec generated sales of over 600 million euros. CeramTec employs more than 3,500 people worldwide, including around 2,000 in Germany.

**CeramTec GmbH** CeramTec Platz 1-9 D-73207 Plochingen