

No. 9/e
Munich, September 7, 2017
Press Release

Innovative Solutions in Powder Metallurgy at ceramitec 2018

- **Focus on higher sintering temperatures**
- **Modified hot isostatic pressing (HIP) plants**
- **Additive manufacturing**

Dr. Jutta Seitz
PR Manager
Tel. +49 89 949-21480
Jutta.Seitz@
messe-muenchen.de

ceramitec 2018 will be held on the grounds of Messe München from April 10 to 13, 2018. And several months before these dates it is already certain that the event enjoys great popularity among the exhibitors in the power metallurgy segment again.

Well-known international exhibitors, such as Dorst Technologies GmbH & Co. KG, ProGrit GmbH, Laeis Bucher GmbH, Osterwalder AG, Nanoe, Maschinenfabrik Lauffer, EROWA AG, KOMAGE-Gellner Maschinenfabrik KG, SEPR SAINT-GOBAIN ZIRPRO and Saint-Gobain Silicon Carbide – to mention but a few – have already signed up again for ceramitec 2018. They will present their new mechanical and thermal processes in powder metallurgy, as for example even better manufacturing processes and appropriately optimized materials.

Powder metallurgy products are nowadays omnipresent in many technical areas. Due to their high economic efficiency and functional flexibility, PM parts have become the rule in the past decades, above all in the automotive industry, aerospace, mechanical engineering, medical technology and the electrical industry. Besides high performance, the economic aspect is in the foreground when PM products are used.

The topic of mobility, in particular, is closely related with powder metallurgy because the automotive industry is the most important customer industry for powder metallurgy components. In turn, one of the focuses in the automotive sector is on electric mobility, which entails new challenges.

Messe München GmbH
Messegelände
81823 München
Germany
www.messe-muenchen.de



Press Release | September 7, 2017 | 2/2

If one casts a glance at the procedural aspect, there is a focus on increased sintering temperatures. There has been a sharp increase in the prices for alloy elements, such as nickel and molybdenum; by contrast, chromium, manganese and silicon are gaining in importance as alloy elements because they offer the targeted higher levels of strength. The sintering temperatures of 1250 °C, which are required for this, are critical for conveyor-type kilns. Therefore, new plants show a trend towards roller passage kilns. In this context, the industrial furnace construction sector will present optimized concepts at ceramitec 2018.

In the area of forming technologies, pressing, extruding, powder injection molding and additive manufacturing (AM) are being continuously refined. Initially, AM was predominantly used for rapid prototyping. Now, however, AM is paving the way for further fields of application of PM components – for example in medicine and aircraft construction. In this context, the focus in aircraft construction is on components for high temperature applications, which must simultaneously meet the requirements of lightweight construction.

To be able to cope with applications placing high demands on the required strengths, the hot isostatic pressing (HIP) procedure is indispensable for subsequent densification, particularly with components produced by additive manufacturing. New HIP plants directly tailored to the needs of powder metallurgy have already been developed.

The topic of Industry 4.0 will be mapped on the basis of ceramitec 2018, because it is especially driven by the automotive industry. Meanwhile, suppliers of powder metallurgy plants have taken it up and are working on its technological implementation.

Further information is available online at www.ceramitec.de

In 2018, analytica will take place in parallel with ceramitec. You can find further information on analytica at <http://www.analytica.de>

Press Release | September 7, 2017 | 3/3

ceramitec

ceramitec is the international key trade show of the ceramic industry. It covers the entire spectrum of the ceramic industry – ranging from classic ceramics and raw materials to technical ceramics through to powder metallurgy. ceramitec 2015 attracted 600 exhibitors from 37 countries and more than 15,000 visitors from 93 countries. ceramitec Technologies - Innovations - Materials takes place every three years; the next event will be held in Munich from April 10 to 13, 2018.

International trade shows of the ceramic industry of Messe München International

Besides ceramitec, the international key trade show, Messe München's portfolio of ceramics trade shows also includes Indian Ceramics. India's leading trade show for the ceramic industry combines international competence with in-depth regional know-how. Indian Ceramics takes place on an annual basis, the next event being scheduled in Ahmedabad, Gujarat, India, from March 7 to 9, 2018. It will be held in parallel with Ceramics Asia. More than 280 exhibitors and over 7,100 trade visitors took part in Indian Ceramics & Ceramics Asia 2017.

Messe München

Messe München is one of the leading exhibition organizers worldwide with more than 50 of its own trade shows for capital goods, consumer goods and new technologies. Every year, a total of over 50,000 exhibitors and around three million visitors take part in more than 200 events at the exhibition center in Munich, at the ICM – Internationales Congress Center München and the MOC Veranstaltungszentrum München as well as abroad. Together with its subsidiary companies, Messe München organizes trade shows in China, India, Brazil, Russia, Turkey, South Africa, Nigeria, Vietnam and Iran. With a network of associated companies in Europe, Asia, Africa and South America as well as around 70 representations abroad for over 100 countries, Messe München has a global presence.

Press Release | September 7, 2017 | 4/4