

GERMANY

# Generation Change at FRIATEC GmbH – Ceramics Division

FRIATEC's activities in Technical Ceramics have developed very well in recent years and by the close of the 2017 business year reached sales in excess of EUR 40 million. For 2018, over 10 % growth is expected. In recent months, as part of the forthcoming generation change, a reorganization has been undertaken and strategic orientation refocussed. Armin Kayser (AK), who took over management of the Ceramics Division in November 2017, explained the new concepts to us.

**CA:** Since Klaus Wolf (Director), Alois Danzer (Head of R&D), Ludwig Mühlbauer (Technical Manager) went into retirement, as Division Manager, you have been in charge of the technical ceramics activities at FRIATEC. What other personnel changes have there been?



Fig. 1  
Armin Kayser

**AK:** When I joined the company in 2016, I took over the technical management in ceramics. I have been working in ceramics for 25 years, and was previously at Daimler and 3M Technical Ceramics. I have since handed over technical management to a long-serving employee. The position of Head of R&D could also be filled internally. The Human Resources Department is headed by Bernhard Stähle. A new appointment has been made as the Head of Global Sales Management as of 1.9., and for the newly created Division for Product and Innovation Management, a new colleague will join us from November 2018. For 2018, a total of 25 new staff and an increase in apprenticeship vacancies are planned. Accordingly, the number of employees is increasing from 250 in 2016 to 270 this year, FRIATEC is a very attractive employer in the region with future-proof and interesting jobs in high-performance ceramics.

**CA:** As part of these measures, you are expanding the Sales Division. Are new strategies associated with this?

**AK:** We shall continue to present ourselves as a provider of technical solutions, as we have been very successful with this in recent years. We have introduced a segmentation in sales according to the most important target markets (sensors and electrical engineering, mechanical engineering and new markets – e.g. automotive, oil and gas) as the level of consultation is steadily increasing in these individual fields. In addition come DEGUSSIT standard products, that can be supplied from the warehouse (tubes and rods). In the next few months, we shall engage more intensively with marketing in the internet as already many interesting requests reach us by this route.

**CA:** What user segments are the focus today?

**AK:** Sensor and electrical engineering (including medical technology) make up half of the turnover and have high growth potential. We score points primarily with functionalized components (flowmeters with sintered-in Pt-cermet for a long-standing customer) or with metal-ceramic components, where with our know-how in joining techniques we can offer interesting solutions. These also include components for particle accelerators, for which there is high international demand.

**CA:** How are you positioned on the market internationally?

**AK:** Our focuses are Germany and Europe. A notable part of our products reaches the global market via our internationally operating customers. Outside Europe, we are mainly cultivating USA, Russia, and China directly. The growth potential in Europe is, however, still very good.

**CA:** What technological innovations do you have in preparation for the users?

**AK:** Over a year ago, we successfully started with rapid prototyping. Here, we use a subtractive process (CAD/CAM based on 5-axis machining) for pressed green or sintered parts, that we machine according to customer requirements. In this way, we achieve high precision and very



Fig. 3  
Ceramic-metal component with  
high-alumina ceramics Frialit F 99,7



Fig. 2  
Spacer cans

good strength for the components, and we can also offer short delivery times (approx. 1 week). That is appreciated, for example, by our customers in motor sports, but also generally in the automotive or semiconductor technology sectors.

Technological further developments here have enabled the spacer cans developed around 20 years ago for magnetic-coupling pumps to be made more efficient, so that today they can be used with up to 60 bar. The sizes have now been increased to 360 mm in diameter. We have therefore been able to become permanently established in the segment of industry pumps for the oil and gas industry. Here for safety reasons, ceramics is even prescribed as a material. In many areas, too, it could be shown that the use of ceramic spacer cans brings the operational reliability of pumps up to a completely new level.

**CA:** Are you going to widen the range of materials, too?

**AK:** We are working on yttria materials, and will report on this in more detail soon.

**CA:** How do you address the topic of Industry 4.0 in your company?

**AK:** Naturally, we aren't shutting ourselves off from this current topic. Here we are pursuing only those approaches that bring us and our customers further. This includes our new Supply Chain Management that we are organizing individually with our customers. Our highly modern Advanced Planning System is at the heart of this activity, and will lead to orders, and therefore also the production organization being imported into our system. It can then be linked with the order system for our supply parts.

**CA:** How do you want to implement the ambitious growth strategy?

**AK:** We are strongly focussed on SMEs and are constantly receiving technologically demanding requests from existing and new customers, which we have been able to resolve efficiently with our know-how. Our slogan "Problems Wanted" is perhaps a little cheeky, but sums up applications in which there are extraordinary stresses, and where ceramics can play out their strengths. Our customers are often "hidden champions", who with the advantages and strengths of ceramics in their complex plants and systems gain benefits and can therefore grow faster than their competitors. If that is achieved, then we have both won.

**CA:** Thank you for talking to us.

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