

“I expect these figures to be similar in 2016”

interview

DR. MICHAEL EFFING
PRESIDENT
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After the unprecedented success of JEC World 2016, the world’s leading composites event, we approached Composites Germany and its President Dr. M. Effing to discuss his feelings on the subject of the composites market in general, in Europe and in Germany, the European market leader.

JEC Composites Magazine:
What are the purposes and objectives of Composites Germany?

DR. MICHAEL EFFING: Composites Germany’s purpose as a new “umbrella organisation” is to promote innovation and technology, acting as one voice for the German composite industry, and thereby to strengthen the world’s leading supplier country of composite materials throughout the light-weight construction industry – particularly in the field of research. The organisation intends to determine common positions and to take overlapping interests into account while the member organisations keep their independence.

In total, Composites Germany represents 750 companies. The power will thus be bundled together, especially in the future-oriented areas of high-performance composites and automated mass production technology, which are key technologies particularly relevant in Germany. Composites Germany aims to promote the extraordinary innovation potential of composites, leading not only traditional but also new high-performance applications to their final breakthrough.

JCM: Composites Germany brings together four organisations: VDMA, AVK, CCeV and CFK Valley. What type of role does each of these structures have within Composites Germany?

DR. M. E. : The four organi-



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sations are the main composite associations in Germany with different focuses: VDMA deals with mechanical engineering, CFK Valley and CCeV with high-performance composites (CFRP), and AVK, as the oldest association of the Ger-

man plastics industry, with all composite materials, especially GFRP applications.

JCM: What tasks will each organisation handle within Composites Germany?

DR. M. E. : Each of the four member organisations will take on priority tasks within Composites Germany: CCeV takes over the lead in the field of lobbying, while CFK-Valley is in charge of education, VDMA of sustainability/recycling, and AVK of standardisation. These topics were defined according to Composites Germany’s strategy, since they are of mutual and general interest and importance. Thus, the potential of using composites will be represented in a more efficient way and, hopefully, be beneficial to the entire industry when it comes

About Composites Germany

With their trade association “Composites Germany”, the four strong organisations in the German fiber composite industry want to strengthen the German composite industry particularly in the field of research, determine common positions and take overlapping interests into account. Composites Germany is a member of the EU CIA.

The purpose of Composites Germany is:

- To build up representation of interests
- To promote innovation & technology
- To develop new markets & new value creation chains
- To encourage and drive forward education development and further training



The trade association Composites Germany organises the 2nd International Composites Congress (ICC), which will take place at the CCD Congress Center Düsseldorf from 28 – 29 November 2016.

to the decision of choosing materials for new, innovative and long-lasting industrial applications.

JCM: Unsurprisingly, there is a strong competition between regions and associations. How do you handle this situation?

DR. M. E. : Each of the four member organisations of Composites Germany claims to act supra-regionally, or even Germany-wide. Meanwhile, Composites Germany discusses options of possible future co-operations with other organisations, including regional ones. Composites Germany as an umbrella organisation always aims to represent the entire German composites industry. Therefore, regional interests or focuses are not emphasised.

JCM: As President of Composites Germany, how do you see the European composites market, and more specifically the German composites market, evolving in 2016?

DR. M. E. : The European composites market was still growing in 2015 with, on average, 2% for thermosets and 5% for thermoplastics, as indicated by the AVK reports. In Germany, the thermoset market grew by 4% and the thermoplastics market even by 6% (2015). I expect these figures to be similar in 2016, maybe even with a light upside potential for thermoplastics.

In Germany, there is a specific focus on the automotive industry, especially high-volume production. We expect the strongest growth to be in the areas of short and long fibre-reinforced plastics (LFT

types). Furthermore, we estimate that thermoplastics, including short and long fibre reinforcements, will make up to 50% of the European market in the short term while the thermoset composites market will be focusing on large and complex structures such as wind rotor blades, pipes and vessels, for example. Last year's growth is expected to continue in the next few quarters at least. We are also seeing a very nice revival in automotive SMC and BMC with new applications and new high-performance SMC compounds also using continuous fibres and even carbon fibres as reinforcement.

As for Germany, 29% of the country's current GDP is linked to production compared to 13% in France and 17% in the UK. This is, among others, due to the pioneering of Airbus in aerospace in the late 60s, or lately the pioneering of BMW, who always have been a technology and innovation driver, with their carbon composites i3 electric cars. Personally, I also think that it is extremely beneficial for a common growth to bring together research and industry in the country and join forces.

JCM: Germany is the first composites market in Europe. What are the reasons behind this ascendancy?

DR. M. E. : Medium-sized companies, which are traditionally active in plastic and composite moulding, as well as companies specialised in mechanical engineering, e.g. tooling, are considered to be the backbone of the German market. The automated mass production of composites is a

key technology for lightweight construction in the German industry. The governmental lobbying regarding lightweight material systems as well as the funding of the excellence initiative in the field of research and development are particularly appreciated here.

In particular, lobbying is a key part for high wage countries. Lobbying and networking are a strong part of Composite Germany's activity. Thus, we have very good contacts with German politicians. Next week, for example, Dr. Elmar Witten, Managing Director of AVK and Spokesperson of Composites Germany, and myself will meet again with Cem Özdemir, Federal Chairman of the Bündnis 90/Die Grünen party, Germany's ecologically oriented party, in order to discuss how to strengthen the use of innovative lightweight materials in the country.

The use of composite solutions is increasing in various industrial sectors and applications. Hence, the constant growth of the aerospace industry leads to a big success story for the use of lightweight materials where the Airbus production chain is of course a huge factor. In Germany, the automotive and wind energy sectors have been traditionally very strong and here, advanced materials are also increasingly used. The building and infrastructure sector has also seen intense growth over the past months due to more investments in residential and industrial applications. Overall, Germany stands for the development of sustainable solutions using renewable energies, as is the case in lightweight material solutions. While in South-

ern Europe, the rate of using composites partially decreased by about a quarter in comparison with a few years ago; the production volume, specifically for GRP, did not decrease that much during the period of financial and economic crisis in recent years. Industries like building & infrastructure or boat building, for example, have not settled back on their previous levels. Moreover, despite the general European trends, Germany records continuous and above-average growth in composite production volumes.

JCM: Which sectors are currently driving the market?

DR. M. E. : It is still to a large extent the automotive sector, with the need for weight saving in order to further reduce CO₂ emissions, and the aerospace sector, with its long-term growth prospects.

JCM: According to you, what are the next challenges for the composites industry here in Germany but also internationally?

DR. M. E. : After the hype in the automotive sector, which was due to the use of carbon fibres, a next step needs to be a sharp reduction of processing costs. As the automotive industry, for example, does not want to pay all the cost of lightweight materials, we need to work on more affordable solutions. We also need to develop reliable, robust production processes for high volumes, such as thermoplastic hybrid moulding and high-performance SMC. ■

More information:
www.composites-germany.org