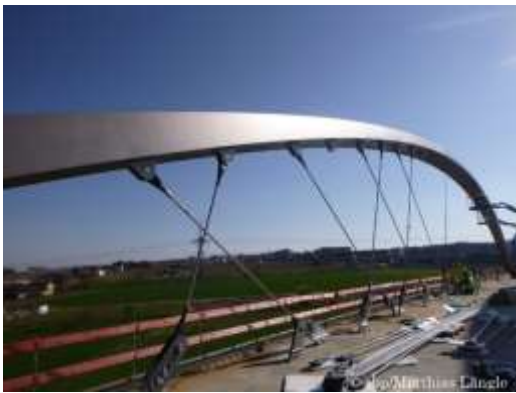


PRESS RELEASE

Teijin Carbon Fiber Used for World's First Railway Bridge Fully Suspended on CFRP Hangers

Wuppertal, Germany, May 27, 2020 --- The Stuttgart Stadtbahn bridge in Germany is the world's first network arch bridge that hangs entirely on tension elements made of carbon fiber reinforced plastic (CFRP). The 72 hangers made of CFRP are produced with Teijin carbon fiber Tenax® by Carbo-Link AG in Switzerland. The 127-meter-long railway bridge was installed over the A8 motorway near Stuttgart, Germany on May 3rd.



Originally, a conventional steel type bridge was planned, but in the end the CFRP cables are cheaper and, in particular, enable the crossing of the eight freeway lanes without supporting pillars. CFRP ideally fulfills the demanding requirements for hangers of network arch bridges: the cross-sectional area of the CFRP cables is only a quarter compared to the steel solution. This is a decisive factor for the profitability of the carbon cables. Due to the low weight, the 72 CFRP tension elements could be installed without a crane and with only three construction workers.

The new bridge incorporating CFRP is also pioneering in terms of sustainability: EMPA (Federal Material Testing and Research Institute, Switzerland) proved that CO₂ emissions arising during manufacturing are only about a third compared to the steel solution and the energy consumption is more than halved.

Teijin is accelerating the development of applications for carbon fiber in architecture and construction industry and intends to further strengthen its position as the world's leading provider of cost-effective and sustainable composite solutions. Dr. Bernd Wohlmann, president of Teijin Carbon Europe GmbH said: "The Stuttgart railway bridge as the first network arch bridge solely made of CFRP cables should be groundbreaking for other bridges and constructions comprising CFRP. We are only at the beginning of manifold possibilities."

About the Teijin Group

Teijin (TSE: 3401) is a technology-driven global group offering advanced solutions in the fields of environmental value; safety, security and disaster mitigation; and demographic change and increased health consciousness. Originally established as Japan's first rayon manufacturer in 1918, Teijin has evolved into a unique enterprise encompassing three core business domains: high-performance materials including aramid, carbon fibers and composites, and also resin and plastic processing, films, polyester fibers and products converting; healthcare including pharmaceuticals and home healthcare equipment for bone/joint, respiratory and cardiovascular/metabolic diseases, nursing care and pre-symptomatic healthcare; and IT including B2B solutions for medical, corporate and public systems as well as packaged software and B2C online services for digital entertainment. Deeply committed to its stakeholders, as expressed in the brand statement "Human Chemistry, Human Solutions", Teijin aims to be a company that supports the society of the future. The group comprises more than 170 companies and employs some 20,000 people across 20 countries worldwide. Teijin posted consolidated sales of JPY 853.7 billion (USD 8.0 billion) and total assets of JPY 1,004.2 billion (USD 9.4 billion) in the fiscal year that ended on March 31, 2020

About Carbo-Link

Carbo-Link specializes in the calculation, design and manufacture of structural elements made of carbon fiber for high loads. Carbo-Link was founded in 2000 as a spin-off from EMPA (Swiss Federal Materials Testing and Research Institute). Based on this extensive knowledge and research base, Carbo-Link continues to develop optimal and unique technologies for manufacturing and implementation of lightweight, customer-specific cable, pipe and component solutions. Carbo-Link carries out the entire design, engineering and production in a state-of-the-art plant near Zurich in Switzerland.

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