Fiber optic solutions for industrial and medical lasers: CeramOptec at Photonics West 2020

Active beam shaping, UV application and, safe fiber coupling as focal points

At Photonics West 2020 in San Francisco, CeramOptec will once again be presenting fiber optics for industrial and medical lasers. The focus of the trade show appearance will be on solutions for active beam shaping, stable UV light application, and safe fiber coupling. In addition, the biolitec subsidiary will present low-attenuation silver halide fibers for medical CO_2-lasers as well as other high-quality solutions for numerous standardized applications.

Bonn/Livani, Dec. 12, 2019 - CeramOptec, one of the leading international developers and manufacturers of multimode optical fibers made of fused silica, will showcase high-quality fiber optics for industrial and medical lasers at Photonics West in San Francisco (February 04-06, 2020, at the Armadillo SIA booth, Hall D, Booth #3233). The focus of the company's presence at the show will be on specialty fibers for active laser beam shaping and long-term stable UV light applications, as well as fiber optic safety solutions for users of fiber-coupled laser systems. In addition, the biolitec subsidiary will be presenting fibers for medical CO_2-lasers, as well as various fiber optics with a wide range of uses and suitability for numerous standardized applications.

In the field of active beam shaping, CeramOptec will present its Optran® NCC fibers, whose polygonal core geometry supports the generation of top-hat beam profiles, thus eliminating the need for expensive homogenizers. For permanently stable UV light applications, there are the low-solarization Optran® UVNSS fibers, which still offer a transmission of 85 percent of the initial value even after long-term irradiation with UV-C light. Both fibers will also be presented at Photonics West together with other fiber optics in a special Safety Fiber version. In this special safety configuration, thin copper wire conductors in the polyamide cladding enable permanent detection of the fiber status, including automatic laser system shutdown in the event of fiber breakage or detachment from the beam source.

As a fiber-optic solution for medical CO_2-lasers, CeramOptec in San Francisco has the Optran® MIR fiber on board – a polycrystalline fiber made of silver halide that impresses with excellent transmission values in the 10.6 µm wavelength range typical for dermatological applications. The field of fiber-optic all-rounders is represented, among others, by the Optran® UVWFS broadband fibers, which have the properties of UV and infrared fibers, making them an ideal solution for optical applications with a wide spectral range.

More information about CeramOptec and the CeramOptec fiber optics can be found as usual at www.ceramoptec.com.

About CeramOptec

CeramOptec®, in cooperation with Ceram Optec SIA, specializes in the manufacture of multimode fiber optic cables made from quartz glass. The medium-sized company was founded in 1988 and is today a subsidiary of biolitec AG, one of the leading international medical technology companies in the field of laser applications. With subsidiaries in China and distribution partners in the USA, France, India, Japan, and Korea, CeramOptec® is strongly represented not just in Europe, but also on the Asian and North American markets. The

company’s range comprises fibers, fiber bundles, assemblies, and cables for numerous application areas, amongst these industrial and medical laser applications, aerospace sensor systems and spectroscopic applications in the fields of astronomy and the chemical industry. One special product in its range is the manufacture of glass fiber cores with square to octagonal geometries (non-circular core fibers/NCC), which are mainly used in astrophysics applications. The biolitec group has 245 employees in total.