



## **German Materials Research Institute, BAM,**

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Burbach, Germany (October 31, 2005)

IPG Laser GmbH, a subsidiary of IPG Photonics Corporation, announced that it installed a diode-pumped 20 kilowatt Ytterbium fiber laser system, the world's most powerful commercial solid-state laser in Berlin under a contract award from BAM (Bundesanstalt für Materialforschung und-prüfung/the German Federal Institute for Materials Research & Testing).

BAM, the national materials and chemicals technological institute of Germany, purchased a YLR-20000 with central emission wavelength of 1070nm and beam quality of less than 11 mm x mrad. The unit is water cooled and delivers 20kW of output power through a flexible fiber having a 200µm core. The efficiency, beam quality and the size of the 20kW fiber laser are without match by any other solid state laser in the world. It will be used for materials processing research on alloys and steel.

"The installation at BAM signals that IPG is opening doors to new challenges in materials processing", stated Dr. Valentin Gapontsev, CEO of IPG Photonics Corporation. "In addition to a 36kW laser and another 20kW laser ordered previously by Japanese and US customers, BAM's purchase of a 20kW laser proves that IPG is setting commercial records in addition to laboratory records for our advanced technology." Dr. Gapontsev added "there is great interest in our higher power systems because they are enabling new applications that other laser technologies cannot."

Prof. Dr. Thomas Böllinghaus, Vice President of BAM, stated "BAM welcomes partners in industry and science for cooperation with BAM in all high power applications."

IPG sells cost-effective CW Ytterbium fiber laser systems from 1W to 50kW for a variety of materials processing applications in different industries. With several worldwide production facilities, IPG has the capacity to meet volume requirements for its high power lasers. IPG's diode-pumped fiber lasers offer performance, maintenance, reliability, and cost advantages over conventional solid state and gas laser systems.

#### **About IPG Photonics**

IPG Photonics has been a global leader and pioneer for over fourteen years in the design and manufacture of high performance fiber and diode lasers and fiber amplifiers for materials processing, aerospace, telecommunications, test and measurement, biomedical, and other commercial applications.

IPG's proprietary technology, materials science expertise, unique product reliability program, and vertically integrated, manufacturing operations enable IPG to produce the world's largest range of cost-effective, high and low power fiber lasers, diode laser systems, and amplifiers with superior efficiency, performance, reliability and quality.

IPG Photonics has its world headquarters in Oxford, Massachusetts and manufacturing facilities and sales operations in Massachusetts, Germany, Russia, Italy, Japan, India, Korea, and the United Kingdom. For more information, visit

<http://www.ipgphotonics.com/>. IPGP-G

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Installation of mobile 20kW fiber laser,  
model YLR-20000 in BAM in Berlin