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IPG Laser GmbH announced that IMG GmbH, a developer and manufacturer of shipbuilding production equipment, demonstrated IPG's 10kW fiber laser welding 6 meter and 12 meter long micro ship panels at IMG's July 11 open house for the shipbuilding industry. In a hybrid welding process using standard welding heads, IMG showed that a 10kW fiber laser can weld shipyard steel at high speeds - 6mm plates at 3.2m/min and 10mm plates at 1.5m/min using 7.8kW and 10kW laser power, respectively.

The laser used in the production process at IMG was a 10 kilowatt IPG fiber laser operating at 1060 μm with a beam parameter product of 11 mm x mrad delivered through a 50 meter fiber with a diameter of 200 μm . As with IPG's other monolithic solid state lasers, the YLR-10000 is robust and reliable in production conditions. IMG, located in the Rostock, Germany's major shipbuilding center, will support its industrial shipyard customers in process development using the higher power levels of the fiber laser. IMG plans to use the 10,000 watt fiber lasers for hybrid high speed welding of shipyard steel from 5mm to 15mm in the production of complete panel welding devices.

"The IPG fiber laser gives us all the flexibility needed in shipyard applications. The output is fiber delivered, the laser is robust, has good beam quality and low maintenance costs" stated Prof. Seyffarth, R&D Director at IMG.

At the open house event, Mr. Gaede, Sales Manager at IMG, remarked to invited customers and experts from the shipyard industry that "welding speed, process stability as well as high wall plug-efficiency of more than 30% reduces the cost of ownership for customers dramatically. The time to introduce this technology is now."

"The installation and handling of such powerful laser systems is easy and can be accomplished in a very short time allowing end-users to concentrate on their applications and not the laser system," stated Dr. Jorg Thieme, IPG's product manager, who attended the IMG demonstration. He continued, "as a global company, IPG can support our products and train our customers and end-users wherever they are."

IPG sells cost-effective Ytterbium fiber laser systems from 10kW to 30kW for a variety of materials processing applications in different industries. With several production facilities, IPG has the capacity to meet volume requirements for its high power lasers. IPG's diode-pumped fiber lasers offer performance, maintenance and reliability advantages over conventional YAG and gas laser systems.

About IPG Photonics

IPG Photonics has been the global leader and pioneer for over fourteen years in the design and manufacture of high performance fiber and diode lasers, fiber amplifiers, and Raman pump lasers 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 fully 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, Hong Kong, and the United Kingdom. For more information, visit <http://www.ipgphotonics.com/>.

About IMG

IMG (Ingenieurtechnik und Maschinenbau GmbH) is located in the Hanseatic city of Rostock (German federal state of Mecklenburg-Vorpommern), the center of Germany's major shipbuilding.

Since 1990, the company has been operating under the name of IMG but looks back to a history of more than 30 years in the development and manufacturing of shipbuilding production equipment.

Its operating fields are consulting for shipyard modernization/extension as well as design and construction of production lines and special machinery for shipbuilding, engineering and steel construction industry up to turnkey installation, including soft and hardware solutions for robot programming and central control systems of production lines. <http://www.img-tech.de/engl/start.htm> . IPGP-G

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