News from the world of Lasers

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Distributed by Raymax Lasers ® - Keeping our customers in the light!

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LASER World of PHOTONICS – Munich 2015

Final Report (extracts)

The event in Munich attracted more people than ever and required an extra exhibition hall! Heralded as the most important platform for the international photonics world, it's popularity this year reflected its significance.

A new section for young entrepreneurs called STARTUP World, was a huge success providing platforms with finalists demonstrating 'the unlimited potential of Photonics in production and medicines.'

Photonics affects all fields of endeavor – the internet, smart phones, cars, traffic, aviation, food and beverages, medical operation, disease diagnosis, lightweight construction, dental technology and so on. 'Photonics is intelligent, is part of our everyday lives and is transforming our world.'

An example is the application of laser technology to the LED lighting system in the new BMW i8, exhibited and explained at the show.

From BMW: *The i8 is equipped with completely new light technology. All lighting elements are in LED. The optional high-beam headlights with laser light technology includes a typical BMW i U-shaped frame. A second, wide light frame surrounds the innovative laser light unit and emphasizes its three-dimensionality. (And all for a cool $200k!)*

OPHIR Optronics Solutions

L2000W-BB-120

Ophir have announced a larger aperture sensor in the L100W-BB-120, following thermal modeling. It was shown to withstand up to 2000W (instead of 1000W) when the water flow rate was changed from 1.8 to 2 liter per minute.

The advantages of this improved sensor are the very large aperture for measuring beams such as diode laser arrays. It can measure power from 1W to 2000W and energy from 2J to 6000J. It has the spectrally flat broadband coating and covers the spectral range from 0.19 to 20µm.

The sensor comes with a standard 1.5 meter cable for connecting to a meter or PC interface. Optional cable lengths can be ordered up to 12 meters in length.

For more information on Ophir power meters and sensors contact Raymax on 9979 7646. Establishing the most suitable power meter for your needs can be done by going to:
http://www.ophiropt.com/laser-measurement-instruments/laser-power-energy-meters/services/sensor-finder

At LASER World of PHOTONICS Munich, 2015

JDSU

JDSU at the Exhibition:

PicoBlade®

A precise, fast, full-featured picosecond system that features cold-ablation process, the PicoBlade® laser is suited for demanding industrial Applications and the requirements of system integrators.

Q-Series Lasers

JDSU's new Q306 laser delivered 40W of UV power in the exact same form factor as its Q305 predecessor.

NPRO Lasers

The JDSU NPRO 125/126 diode-pumped lasers produce up to 700mW of continuous-wave (CW), single-frequency output at either 1064 nm or 1319 nm.

ST Series Fiber Laser Pump

The ST Series The highly integrated and ultra-compact 140W ST Series Fiber Laser Pump is the highest brightness diode laser in the market providing state-of-the-art electrical to optical power conversion efficiency of 50%, and remarkable robustness and reliability.

Solid-state lasers

JDSU's continuous-wave and pulsed-diode-pumped solid-state lasers cover a wide range of wavelengths, from visible to near-IR, with low noise and excellent beam quality.

Ultrafast scientific lasers

JDSU's ultrafast scientific lasers offer low-volume, turn-key, customer-friendly operation without compromising reliability.

JDSU at the Congress:

JDSU Senior Director, Lasers Product & Technology Strategy, Erik Zucker, gave the following talks:
'Laser and Applications in Macro- and Micro-Materials Processing' and *'Multi kW Fiber Laser Modules and Engines Enabled by High-Brightness Laser Diode Pumps'*

If you'd like to read more about the research conducted by JDSU contact us for a research paper entitled *High Power, High Efficiency Laser Diodes at JDSU.*

AUSTECH – Melbourne May 2015

Raymax exhibited and found two distinct areas of interest from the many visitors to the exhibition as indicated in this extract form our report:

Interest fitted broadly into two categories, the first being requests for information and advice regarding improvements to laser marking. Raymax has a selection of marking lasers, but at AUSTECH we featured the FOBA laser maker. Questions centered around speed, accuracy, marking of 2D codes, and facilitating permanent, traceable marks to meet regulations or to meet company traceability requirements. We were fortunate in having the FOBA Asian Area Manager on our stand to meet and talk with visitors interested in marking on a range of stratum and to learn more about the efficiencies offered with the 'intelligence mark positioning' (IMP) capability of the new FOBA laser.

The other big area of interest, no doubt stemming from the recent downturn, came from Australian manufacturers looking for solutions to help grow their business into the future. This area concerned laser additive manufacturing (AM) using metal powders. Raymax is developing expertise in this area to meet current interest and demand for appropriate solutions. Lasers offer technological advances in the region of 3D metal applications either with selective laser melting (SLM) or shaped medal deposition (SMD) both applications are developing at explosive rates overseas. Raymax already has an installed base of cladding lasers successfully applying cladding processes for repair to damaged parts in heavy industry. In Australia interest in using 3D for manufacturing is very high although this has mostly been where plastics are applicable. 3D using metal has the potential of expanding advanced manufacturing exponentially in Australia, as it is in Europe and the USA, and is the continued focus of Raymax Applications Pty Ltd.

What's in MY INBOX!

In an Australian-first surgical procedure, a custom-made **3D-printed prosthetic jaw** joint has successfully corrected a congenital jaw deformity in a young man. Designed and created in Melbourne, the titanium jaw implant is the result of a collaboration between the University of Melbourne, 3D Medical and Epworth Hospital.

Another laser contribution!!