

High Power Q-switched Laser - Ideal Laser Sources for high Speed Ablation

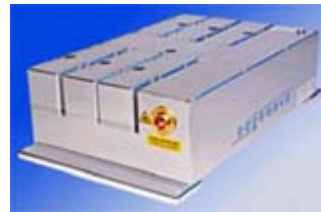
Press release of EdgeWave GmbH, 16.07.2007

EdgeWave has successfully introduced high power HD-series q-switched INNOSLAB lasers with average power up to 600W

Würselen, Germany, 16.07.2007 – At the Laser 2007 EdgeWave GmbH has successfully introduced new HD-series of high power INNOSLAB-lasers for industrial and scientific applications. The average power of the model HD40I-E and HD60I-E amounts 400W and 600W, respectively.

The new HD-series INNOSLAB lasers are highly flexible in beam profile, from circular beam profile, through line shaped one dimensional Top-Hat, to two dimensional Top-Hat with square cross section, together with the outstanding features of the INNOSLAB design:

- high beam quality $M^2 < 4$,
- high pulse repetition rate (up to 150 kHz),
- short pulse length 12ns at 100kHz,
- high pulse energy (up to 60mJ)
- high average power (up to 600W).



The new HD-series INNOSLAB lasers with high average power and with circular beam profile are well suited for precision machining micro features in all types of materials. Their short pulse length results in a minimal heat-affected zone. Typical applications are drilling of solar wafers and processing of glass at high speed.

The new HD series INNOSLAB lasers line shaped Top-hat profile are the ideal sources for large area ablation of thin layers for example in photovoltaic and in car industry and for annealing to generate thin micro crystalline layers in display industry.

The new HD-series INNOSLAB lasers with square Top-Hat beam profile are especially favourable for structuring and ablation of conduction layers or dielectric layers for production of thin film solar cells, crystalline solar cells and flat display panels, etc. Their Top-Hat beam profile and short pulse length guarantee homogeneous ablation without beam overlap, highly efficient use of pulse energy and low thermal damage of substrates.

As with all INNOSLAB laser product families, the new INNOSLAB lasers adapt the proved design with rugged construction and sealed laser heads. They are superior stable and reliable and offers low cost of ownership. Their high flexibility in beam profile enables customized laser solutions based on our standard proved system technology and design, tailored to the customer's specific requirements.