

High Power and high Pulse Energy INNOSLAB Lasers with Profiles

Ideal Laser Sources for high Speed Ablation

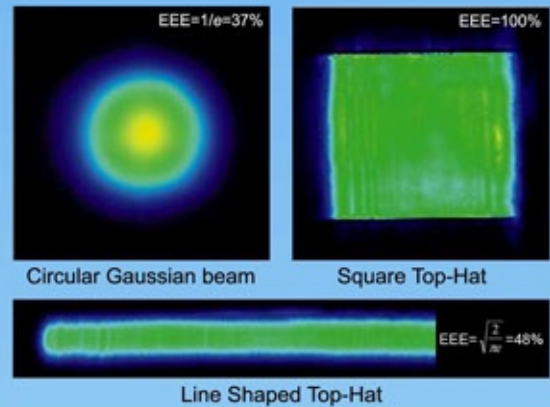
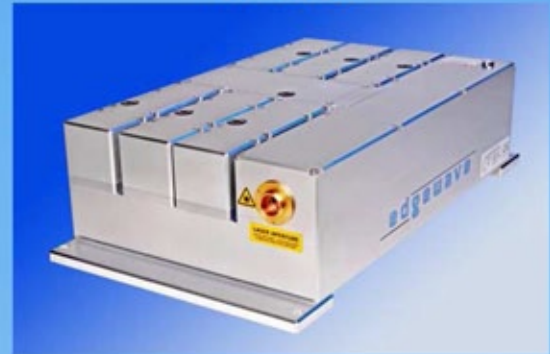
Superior performances

Model	HD40I-E, HD60I-E
Nd doped	YVO4/YAG/YLF
beam quality	$M^2 = 2$
pulse energy	up to 60 mJ
pulse length	down to 4 ns
peak power	up to 6 MW
pulse repetition rate	up to 150 kHz
average power	up to 600 W
wavelength	1064 nm, 532 nm

Tailored beam profiles

- circular Gaussian beam with $M^2 < 1,5$
- line shaped one dimensional Top-Hat with $M^2 < 2$
- square two dimensional Top-Hat with $M^2 < 2$

HD-Series

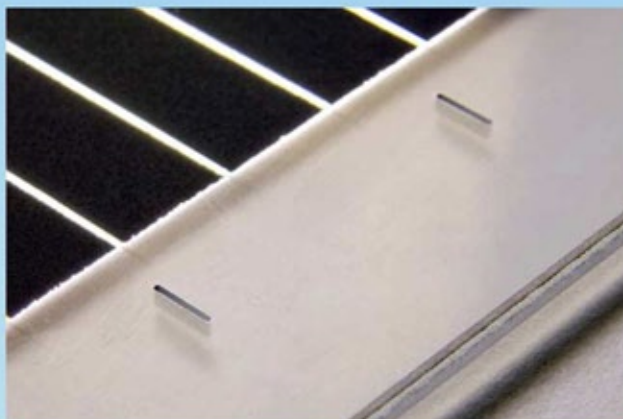


Favourable applications

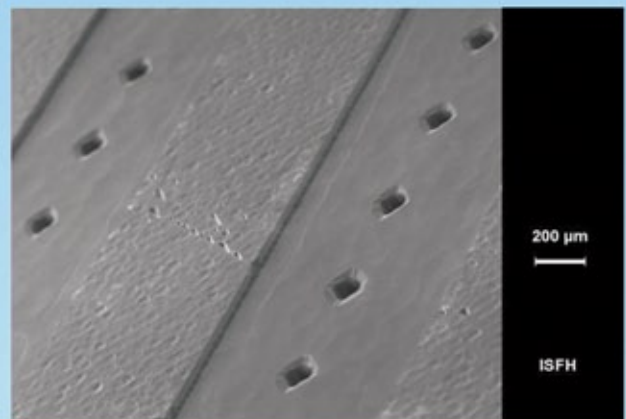
- ablation and structuring of thin metallic and dielectric layers
- sequential lateral crystallization of Si
- drilling and cutting of Si-wafer, edge deletion in thin film solar
- pumping of dye laser, pumping of OPO and Ti:Sapphire laser

Advantages

- high beam quality: large working distance, high flexibility in system configuration
- short pulse length and high peak power: high controllability and low thermal influence
- tailored beam profile: enhanced overlapping and processing efficiency
- high repetition rate and high average power: high productivity and lower cost of ownership



Scribing and edge deletion with top-hat beam and glass milling with Gaussian beam



Structuring dielectric coating in Si-solar wafer with square Top-Hat

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