

## Fiber lasers with pulse on demand

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New laser based production technologies are focused to production of small series of custom-made products what leads to a need for precise and highly adaptable manufacturing systems. Such processes require laser processing systems that will enable fast and precise spatial and temporal energy transfer at high peak powers to the workpiece. This requirement can be fulfilled by new concepts of lasers generating pulses on demand on different time scales. An example of such system is a highly adjustable fiber laser for the laser transfer printing with a completely adjustable pulse length (from ns range to CW), a very wide range of the repetition frequency (upto several 10s of MHz and beyond) and the high average power (several 100s W) to maintain high throughput.