

Diode Laser System Series With Extended Beam Quality



DILAS Industrial Laser Systems today introduced a new diode laser system based on a diode laser module with an optical output power of 30W CW and increased beam quality. This module is integrated into the well-established COMPACT platform, the fiber-coupled turnkey diode laser system solution. Due to the beam parameter product of $\pm 11\text{mm mrad}$ (100 μm fiber core diameter, NA0.22), this direct diode laser system can handle new application fields in materials processing since considerably small focal diameters can be reached. In combination with DILAS' standardized processing heads, like fixed optics with integrated pyrometer and CCD camera or galvo scanner heads, applications such as micro plastics welding and selective micro soldering can be performed. Especially in medical device manufacturing those processes gain more importance.

Miniaturization of the products requires production technologies that are able to connect smallest solder joints or weld micro fluidic devices. Focus diameters of less than 180 μm with DILAS' fixed optics or less than 400 μm when using a galvo scanner are reached. The standard package comes with a fiber cable and focusing head.

Source URL (retrieved on 02/01/2015 - 1:29pm):

http://www.mdtmag.com/product-releases/2011/08/diode-laser-system-series-extended-beam-quality?qt-video_of_the_day=0&qt-recent_content=0