

AdValue Photonics Revamps Applications Lab for Laser Material Processing

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Tucson, AZ, USA

AdValue Photonics, Inc. (Tucson, AZ) has executed a significant expansion of its applications lab for laser material processing. Two experienced PhD Material Scientists are dedicated to focus on processing samples and developing processes for industrial material processing applications. The laboratory is now well equipped with four laser workstations including the latest AdValue Photonics industrial fiber lasers, as well as metrology equipment for evaluations of processing results. "Growing the capabilities of our applications lab with experienced staff and state-of-the art equipment will enable us to qualify our industrial lasers for a large variety of applications in the industrial material processing market". said the President and CEO Dr. Shibin Jiang.

One of the lasers in the applications lab is the AdValue Photonics' EVERESTnano Green, which is a frequency doubled fiber laser producing a wavelength of 515nm, a pulse duration of 5ns with 100µJ pulse energy at 300kHz and an M2 of less than 1.2. These laser characteristics make the EVERESTnano Green an ideal choice for drilling small through holes in glass materials cost efficiently and at high speed. For example, 1mm diameter holes in 3.2mm thick glass can be drilled in less than one second.

Another laser installed in applications lab is the EVERESTpico 1µm which is an all-fiber based picosecond laser with a pulse energy up to 50µJ at 500kHz, 50ps pulse duration and an M2 less than 1.3. This laser can cut hard materials like sapphire and PCD diamond. Sapphire is an important optical material, for example commonly used as a cover glass for camera lenses in mobile devices because of its mechanical strength and scratch resistance. Using short pulsed lasers and proper processes, sapphire can be cut at a high speed with superior cut quality and yield that can not be matched by conventional methods.

Other lasers such as AdValue Photonics' pulsed fiber lasers with wavelengths in the 1.5µm and 2.0µm regions further add to the applications lab's unique capabilities as they allow processing of materials with special absorption characteristics like transparent polymers or thin film materials in solar cells and other devices. Nanosecond pulses in these wavelengths are available for application tests and process feasibility studies.

About AdValue Photonics: AdValue Photonics is a leading manufacturer of innovative fiber lasers for materials processing, scientific, LIDAR, and medical applications. Founded in 2007, with a reputation for delivering groundbreaking products based on its proprietary technology, the company utilizes its unique capabilities in specialty glasses and fibers to optimize the performance and reliability of its fiber lasers. For more information, please visit: <http://www.advaluephotonics.com>. Contact: Dr. Katherine Liu, Director of Marketing & Sales, +1 (520) 7905468, contact@advaluephotonics.com.