

IPG Challenge Organization Overview

IPG Photonics, an international company headquartered in Oxford, Massachusetts, is the world's leading developer and manufacturer of high-performance fiber lasers. IPG Photonics' low, mid and high-power lasers are used in materials processing, communications, medical and advanced applications. A vertically integrated company, IPG manufactures key components used the final products as well, including semiconductor diodes, specialty fibers and optical components.

IPG fiber lasers are rapidly replacing older, less efficient lasers in an array of material processing applications including welding, marking, cutting, ablation, and much more. Because the laser light is generated inside an optical fiber, integration with robotic delivery systems is simplified, allowing applications as diverse as 3D cutting of automotive parts, deep penetration welding of thick steels for ships, drilling shaped holes in aerospace applications, and micromachining of cardiovascular stents.

IPG's Application Facilities offer customers the ability to perform research and development for proof-of-concept all the way through process development, resulting in customized materials processing applications.