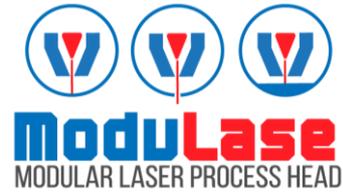


ModuLase | Final Press Release

The ModuLase Consortium developed a processing head covering welding, cladding and cutting. The system comprises monitoring unit, on board intelligent algorithms for setting the optical configuration and help the user in the selection of process parameters. Adaptable optical elements capable of delivering a wide range of laser beam energy



distributions, suitable for welding, cutting and cladding applications. First, the system was validated in a lab environment at TWI, and the final assembly integrated at GEL facilities in the UK, being the validation made at GEL's pilot laser cell.

A range of high-value goods, those made from advanced materials (advanced alloy steel, titanium, aluminium, etc.), were processed with the system making use of the three rapidly interchangeable end-effectors to cover welding, cutting and cladding applications. A plug and play system allows end-effectors to be changed on the end of the process head within a time of less than 1 minute. A process monitoring system suitable for welding, cladding and cutting processes is available to monitor the quality of any of the processes being used – this monitoring solution is embedded into the ModuLase system, in order to assure process stability and enabling to reduce additional time and costs involved. The ModuLase system comprises a user-friendly HMI interface, enabling to input the material grade, its thickness and the laser process required. Both the Quality Assurance System and BFU adjust vision and optical configurations and deliver the beam accordingly with minimal user contact.

The ModuLase system has been designed and manufactured to be flexible and accommodate three different laser processes. The capabilities of the system have been proven across three different technologies, welding, cladding and cutting and the results are aligned with the end-users' requirements.



The partners on this project are



You can check more information at:

www.modulase.eu

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