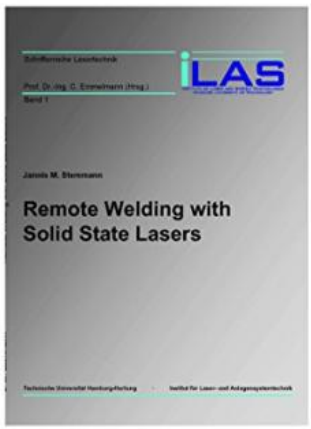

Remote Welding with Solid State Lasers

By Jannis Martin Stemmann

Cuvillier Verlag Mrz 2006, 2006. Taschenbuch. Book Condition: Neu. 209x147x12 mm. Neuware - As a young technology on the verge of application in series production, literature on remote welding with solid state lasers is still rare to find. The thesis at hand probably is the first encompassing text on this subject. Therefore a broad introduction into remote welding setups is given, including those with CO2 lasers for which more experience exists. Robot based CO2 laser systems suffer from a cumbersome beam delivery, which is the reason why gantry machine beds are preferred. This restriction does not exist for YAG lasers, and as a consequence more flexible systems assisted by standard articulated robots can be devised. Furthermore, an overview on remote welding process characteristics is covered. The seminal difference to conventional laser welding (or any other joining technology) is the remarkably low amount of auxiliary processing times resulting from high speed focus displacement. This is achieved by means of rotating optic units or components, favourably supported by long working distances and angular beam incidence. Process development differs in only few aspects from common laser welding, for instance shielding gas supply. Following this delineation of basic remote welding principles, suggestions on system...

Reviews

It becomes an incredible book that we actually have possibly study. It really is rally exciting throgh studying period of time. I am very easily could get a satisfaction of reading through a written book.

-- ***Gianni Hoppe***

A really awesome pdf with perfect and lucid reasons. It is actually rally fascinating throgh reading period of time. Your lifestyle period will probably be transform as soon as you total looking over this ebook.

-- ***Alford Kihn***