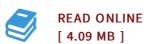




## Laser Peening Effects on Friction Stir Welding

By Omar Hatamleh

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 54 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Friction Stir Welding (FSW) is a welding technique that uses frictional heating combined with forging pressure to produce high strength bonds. It is attractive for aerospace applications. Although residual stresses in FSW are generally lower when compared to conventional fusion welds, recent work has shown that significant tensile residual stresses can be present in the weld after fabrication. Therefore, laser shock peening was investigated as a means of moderating the tensile residual stresses produced during welding. This slide presentation reviews the effect of Laser Peening on the weld, in tensile strength, strain, surface roughness, microhardness, surface wearfriction, and fatigue crack growth rates. The study concluded that the laser peening process can result in considerable improvement to crack initiaion, propagation and mechanical properties in FSW. This item ships from La Vergne, TN. Paperback.



## Reviews

This book is definitely not straightforward to get started on studying but extremely exciting to read. It is really simplistic but shocks in the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Ally Reichel

This publication is amazing. It is definitely basic but shocks in the fifty percent of your publication. You wont feel monotony at anytime of your own time (that's what catalogues are for concerning if you question me).

-- Prof. Kirk Cruickshank DDS