Laser applications for efficient production in automotive Body in white and structure assemblies

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The automobile industry relies of the unique ability of lasers to provide high joint strength with minimum material usage, at the same time promoting safety and fuel economy. High power fiber lasers allow for both cleaning and joining in one-step with improved joint appearance: straight seam borders, smooth surface, no spatter and control of brazing temperature. Through reduction of manual cleaning efforts, utilizing the specialty fiber lasers enables process automation at a fractional cost.
This presentation will introduce high power fiber laser methods for static beam forming with multiple fibers and dynamic beam forming using wobble technology to improve joint integrity and joining speed.

[1] https://www.ipgphotonics.com/en/647/Widget/Industrial+Fiber+Lasers+for+Materials+Processing+2018.pdf
[2]https://www.laserfocusworld.com/articles/print/volume-52/issue-02/features/fiber-lasers-multiple-laser-beam-materials-processing.html

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