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Analysis of Transient Thermo-Fluidic Behavior of Melt Pool during Spot

Laser Welding of 304 Stainless-Steel

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**Abstract** 

In this study, the transient evolution of temperature and velocity field, melt pool geometry (width,

depth of penetration and melt pool volume), melting and solidification behavior during spot laser

welding of 304 stainless-steel is presented. The transport phenomena associated with the melting and

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