عنوان مقاله:

a comparison of laser and resistance spot welding of steel sheets fatigue lives and residual stresses

محل انتشار:

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خلاصه مقاله:

this study addresses the results of a comparison of laser spot welding and resistance spot welding regarding to residual stresses and fatigue performance of spot joints inoverlapped steel sheets experimental and numerical studies were conducted to characterize laser and resistance spot welds to gain an understanding of load carrying capacity under static and cyclic loading temperature distributions and residual stress states of different joint geometries used in automotive industry experimental and numerical results revealed different failure types with different fatigue lives of the laser and resistance spot welds it was found out that the weld region in LSW has been surrounded by a compressive region which has higher compressive stress values and bigger size than of resistance spot welds

کلمات کلیدی:

laser spot welding, resistance spot welding, fatigue, residual stress

لینک ثابت مقاله در پایگاه سیویلیکا:

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