

## عنوان مقاله:

Experimental Study of Residual Stress on TIG Welding of Ck45 Sheet by Contour Method

## محل انتشار:

پانزدهمین کنفرانس ملی و چهارمین کنفرانس بین المللی مهندسی ساخت و تولید (سال: 1397)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

Contour method is one of the methods used to measure residual stresses in a two-dimensional state. Residual stresses reduce the load tolerance, the life of the weld joints and deform the weld structures. The purpose of this study was to investigate the residual stresses on stress-relieved samples in two methods on steel sheets of Ck45 and in the state of change in its metallographic structure before welding operations. In this study, using the Taguchi method of designing the experiments and the effect of input parameters on the residual stresses of Ck45 steel sheets was investigated. In this regard, the results of experiments with changes in the type of aggregate by the method of normalizing the sheets and stress-relieving after the welding operation and its effect on the residual stresses due to welding by Co2 method was obtained. The results indicated that the optimal condition for reducing residual stresses after welding process obtained on normalized Ck45 sheet which was stress-relieved at the temperature of 650°C and .by 12 hours in the Stable state inside the furnace

## کلمات کلیدی:

TIG Welding - Normalize- Stress relieving- Contour Method- Ck45 steel

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/837818>

