

## عنوان مقاله:

Surface Modification of Hot Work Tool Steel by High Power Diode Laser

## محل انتشار:

اولین کنفرانس بین المللی و هفتمین کنفرانس ملی مهندسی ساخت و تولید (سال: 1384)

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## خلاصه مقاله:

Laser surface modification, although for a number of years, is a technology which is still in its infancy. This paper presents the results of laser alloying influence on structure and properties of the surface of the X38CrMoV5-3 hot work steel, carried out using the high power diode laser (HPDL). Niobium carbide powder was used for alloying. In the paper investigation results are presented of the melting and alloying of ceramic particles on the surface layer. Results of the metallographic examinations qualitative X-ray phase analysis and the mechanical properties are presented.

## کلمات کلیدی:

HPDL laser, hot work tool steel, ceramic particles

## لینک ثابت مقاله در پایگاه سیویلیکا:

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