

## Influence of Chemical Composition in Steel on Laser Cutting Stability

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**The translation in this article analyses the technology of laser cutting, describes properties of laser cutting equipment the oxidation process of melting and sublimation laser cutting. In the article chemical composition of cutted material in the interaction with the quality of cutting edges from cut-outs is analysed. The measurement was performed on experimental samples made from steel grade S355 however the composition of chemical elements in each sample varied. On these experimental samples the cutting edges was examined for the purpose to find out the influence of chemical purity of material on the quality of components which were cut by using laser technology.**

**Keywords:** laser cutting, mild steel S355, chemical purity of steel, quality of cutting edge

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