Effect of Machining the Load Capacity Notched Components

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Nowadays is issue investigation the notch problems and their influence on component durability. For many manufactured components, we find various types of notches, such as grooves, step and holes. They have a tend to be the place where is concentrated stress, so called the macroscopic stress concentrator. In this area is higher risk of part destruction. Nowadays, there are hypotheses that are based on the assumption that the higher the roughness, the lower the durability. In many cases the designers prescribe unnecessarily high surface quality. It is necessary to maintain adequate quality of the surface, and also necessary that the component has attained a high durability. The paper deals with the influence of machining technology carrying capacity of notched components. As the test material was used steel Fe510 according to EN ISO (11523, according to CSN 42 0002).

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