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USE OF HIGH STRENGTH SHEET METALS FOR PASSENGER CAR BODIES

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The automobile industry is faced with the increasing number of requirements concerning the regulations that have to be met. One of the ways to meet them is the use of new materials. The paper presents possibilities for use of the high strength sheet metals in the passenger car bodies. In addition to the application trends relating to the material characteristics, opportunities for their use for side doors was particularly evaluated, in order to meet the side impact regulations.

Based on the experimental results, the vehicle redesign action were taken.

Key words: *Automobile, body, high strength sheet metals.*

UPOTREBA LIMOVA POVIŠENE ČVRSTOĆE KOD KAROSERIJE PUTNIČKIH AUTOMOBILA

Automobilska industrija suočena je sa sve većim zahtevima u pogledu zadovoljenja propisa. Jedan od načina je i primena novih materijala. U radu su date mogućnosti primene limova povišene čvrstoće kod karoserija putničkog automobila. Pored trendova primene, karakteristika materijala, posebno je analizirana mogućnost njihove primene na bočnim vratima, u cilju zadovoljenja propisa na udar.

Ključne reči: *Automobil, karoserija, limovi povišene čvrstoće.*