

## **New concept of car door reinforcement**

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### **Abstract**

The purpose of this study is to make a series of finite element analyses and to show if the new concept of car door reinforcement brings any improvements. For this reason, was made a comparison between the finite element analyses of the actual concept of car door reinforcement and of the new proposal. The conditions for analyses were chosen as to reflect the reality of the situation. The analyses are of a dynamic type. In this way, we took into consideration the same material type for the car door and different material types and dimensions for the reinforcements. With the help of this study, the authors want to prove the improvements that the new proposal of car door reinforcement can bring into the automotive industry.

*Keywords: car doors, car door reinforcements*

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