

Analysis and Investigation on Vehicle Collision Theory

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ABSTRACT

In car accidents, most surveyors used to figure out the speed of the vehicle by braking distance, despite of the reacting time, road characteristics, road conditions, ..etc. The study is aim to reconstruct the original conditions of the accident, including the beginning position of vehicle, hitting point and moving track,etc..., to obtain the more accurate vehicle speed before the accident. The purposes of this study focus on the comparisons of the methods used in the dynamics of vehicle collisions: the theoretical analysis, graphic method and PC-Crash. These different methods are discussed separately in the beginning chapter. The case-studies are done with different methods afterwards. By putting these data into these theories, the original car accident conditions can be shown and studied.

Keywords : Dynamics of vehicle collisions, Graphic method, PC-Crash , Accident reconstruction

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