

Investigation of the Role of Friction in Reducing Pedestrian Injuries in Accidents at Intersections

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Abstract : Nowadays the subject of road traffic accidents and the high social and economic costs due to them is the most fundamental problem that experts and providers of transport and traffic brought to a challenge. One of the most effective measures is to enhance the skid resistance of road surface. This research aims to study the intersection of one case in Ahwaz and the effect of increasing the skid resistance in reducing pedestrian injuries in accidents at intersections. In this research the device was developed to measure the coefficient of friction and tried the rules and practices of it have a high similarity with the Locked Wheel Trailer. This device includes a steel frame, wheels, hydration systems, and force gauge. The output of the device is that the force gauge registers. By investigate this data and applying the relationships relative surface coefficient of friction is obtained. Friction coefficient data for the current state and the state of the new pavement are obtained and plotted on the graphs based on the graphs we can compare the two situations and speed at the moment of collision between the two modes are compared. The results show that increasing the coefficient of friction to what extent can be effective on the severity and number of accidents.

Keywords : intersection, coefficient of friction, skid resistance, locked wheels, accident, pedestrian

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