



## Dynamic Properties of Motorcycle and Scooter Tires: Measurement and Comparison

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### SUMMARY

Results of an experimental research program dealing with motorcycle and scooter tires are presented. Experimental tests were carried out by means of a rotating disk test machine, which is particularly suited to test tires in the presence of large camber angles. First, the capabilities of the rotating disk machine are discussed and results are compared with the ones obtained by means of other test machines. Then the properties of several motorcycle and scooter tires are presented and compared. The advantage of presenting results in terms of camber and sideslip stiffness is highlighted. The effect of tire working conditions (inflation pressure, load and temperature) is analyzed. Finally the measurement of tire torques is discussed and some results dealing with self-aligning, twisting and rolling resistance torques are presented.

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