

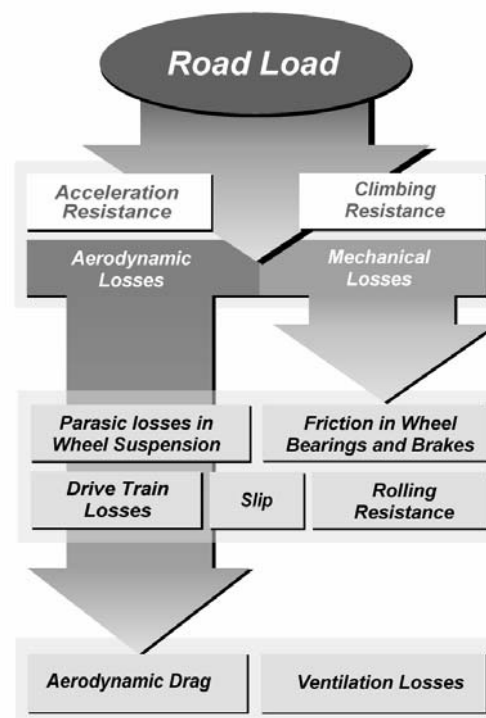
Road Load Investigations

- Split up of the road load by using a strictly experimental approach to measure every single road load component.

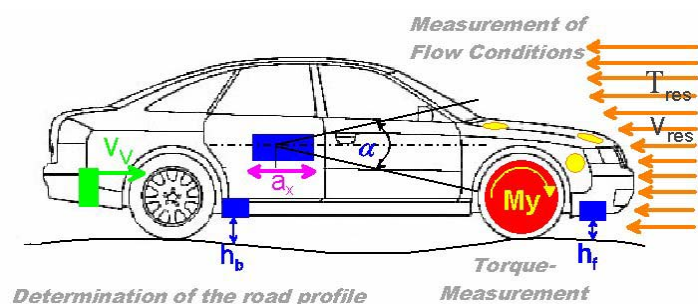
To achieve a complete road load split-up, only the total road load and the road load components depending on the road and environment are determined in road tests. The components which are not influenced by road and environment are determined on test stands and added for the completion of the split up.

By means of the new developed approach the exact driving condition of the vehicle including road profile and flow conditions can be measured. This is either realized with the test vehicle or e.g. with the rolling resistance measurement trailer developed at FKFS.

Based on the measurements and using the research approach mentioned, test stand and road measurements can be compared. E.g. differences of the effect of aerodynamic changes between the wind tunnel and the road can be investigated. It is also possible to determine the difference in the rolling resistance between road and test stands which is caused by the different road surfaces.



Splitting up the Total Road Load



Test Vehicle with Measurement Equipment