

CTIS FOR LOGGING TRUCKS IN GERMANY

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Abstract: *Central Tire Inflation Systems (CTIS) enable the driver to vary the tire pressure depending on aspects such as vehicle speed, ground structure or loading condition. There are a number of well known economical, ergonomical and ecological benefits caused by an adjusted tire pressure. Various studies prove decreasing fuel consumption, tire damage and maintenance needs of vehicles equipped with CTI-Systems. The contact area of the tires and the traction on fields or poor roads increase, thus soil compaction or respectively damages on roads decrease and the weather depending trafficability is longer.*

The objective of the joint research project “CTI-Holz” is to identify the potential benefits of an adjustable tire pressure on logging trucks in Germany and to refine the CTIS-technology for a better adaption to the particular requirements of timber transports.

The Department of Forest Work Science and Engineering conducts empirical experiments to study different issues. During measurements on test roads and transportation of timber in the North German Plains, changes in traction, fuel consumption, ride comfort and damages of forest roads caused by optimised tire pressure will be analysed.

Based on the results different scenarios shall be considered. This will help timber logistic companies with their investment decision in CTI-Systems and additionally potential savings in road maintenance for forest owners will also be identified.