



TachoScan® Control enables fast and accurate analysis of data from the driver card, record sheet and tachograph memory in compliance with the current law.

Furthermore, a simple and intuitive interface enables carrying out an efficient and precise checks with protocols both on a road and in a company. TachoScan Control is a multi-language software enabling inspectors to work in many different languages.

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Analysis of infringements:

- Automatic and fast analysis of infringements regarding drivers' working time according to Regulations 561/2006, 1073/2009 and AETR with the list of infringements,
- Automatic and optional searching of 12 consecutive 24-hour periods in case of occasional international carriage of passengers,
- Automatic verification of derogation 6c described in art. 8 of AETR regarding taking weekly rests in case of multi-manning,
- Searching for "most serious infringements" according to Regulation 1071/2009 annex IV and classifying infringements by their seriousness according to Directive 2009/5/EC,
- Many options of analysis of infringements to adjust to internal regulations and/or interpretations,
- Analysis of working time described in Directive 2002/15/EC,
- Generation of reports in all EU languages plus Turkish and Russian,

- Control reports with graphic presentations of activities with marked infringements and a detailed description for every week.

Driving time and resting time analysis is performed in accordance with the current regulations. All changes in legislation are prepared in advance, so even before the new directives and regulations start to apply, the control authorities already have the system updated.

Data presentation and edition

- Complete verification of digital signatures of data from cards and digital tachographs,
- Fast information about periods not registered on driver card or without manual entry from a driver, for which there is a need of attestation of activities,
- Showing all data read from the tachograph: technical data, calibrations, events and faults, events of changing the country, driver and workshop cards insertion and withdrawals, lock in and out list, last download, full history of registered controls,
- Speed diagram from digital tachograph for accident investigations and finding magnets,
- Analysis of the detailed speed from the last 168 hours and data with speed recorded 4 times per 1 second (4 Hz), only VDO tachographs,
- Fast and precise analysis of analogue discs using any scanner. Analogue data is converted into digital and connected together to provide full analysis of infringements from all data (digital and analogue) on one graph,
- Possibility of seeing and comparing of 1 or 2 drivers (for multi-manning) and graphs from tachograph slot 1 and 2 with detailed speed, all graphs on one window – useful tool for fast searching for periods of driving without a card, on cards of other drivers, for detecting short driving during rest (below 30 sec.) etc.,
- Full data edition and a possibility to copy activities from tachograph to driver's activities – useful when a driver has incorrectly used the selector during resting, forgot to press the ferry/train sing or enter other information, when a driver drives without a card on purpose or with somebody else's card etc.,
- Weekly graph with driver's activities from a 7 day period – tool useful for analysis and verification of infringements generated in the whole week period,

- Monthly graph with driver's activities from 5 weeks – used for verification and analysis of weekly rests and searching for incorrect usage of the tachograph selector,
 - History of tachograph and driver cards' downloads – a mechanism which automatically calculates the amount of days between the reading of driver card and tachograph, useful during a control in a company to check if the company meets the deadlines for downloading data according to Regulation 581/2010,
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Manipulation Warnings

Based on our experience and cooperation with inspectorates working with our software, we have created an innovative module for automatic search for manipulation warnings. Automatic analysis of data read from the tachographs and driver cards as well as detecting all suspicious situations are the main task of the module. Manipulations in tachographs are nowadays more and more popular and more complicated, and thus inspectors need a reliable tool to detect them in the shortest possible time.

Many advanced functions allowing fast identification of possible manipulations were introduced in TachoScan Control software to help inspectors in their work and to shorten the time of the roadside and company checks.

The current version of TachoScan Control automatically generates more than 20 types of manipulation warnings, e.g.

- Velocity during rest in slot 1
- Driving without a proper card
- Use of several driver cards
- Significant change characteristic coefficient (w) or constant (k)
- Date of first sensor pairing different from date of first calibration-activation
- Rapid acceleration/deceleration
- Event – power interruption
- Event – motion data error

- Fault – sensor failure
- Event – vehicle motion conflict

For each manipulation warning there is an instruction on how to detect the manipulation, what to check, what to focus on. The instruction was prepared in cooperation with the BAG (German Transport Inspectorate). It is a kind of self-training for every inspector starting work with this issue.

TachoScan Control also enables comparison of the distance from a tachograph with a map for faster pre-selection of trucks with manipulations. This feature is used by Enforcement Authorities to detect more advanced devices used to manipulate tachographs.