



Tram A/S

Database Import and Export Modules

For online monitoring, reporting, and statistics

This material contains important information about import and export modules of TramQA. We recommend that you carefully read the content of this material prior to importing and exporting modules. Please do not hesitate to contact us if you have any questions.

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Import and export modules of TramQA

The import and export modules of TramQA provide capabilities to import and export the quality assurance data directly to a central database, where all your product specific data are stored. A central database combined with the import and export modules for TramQA give you the following advantages:

- ✓ Combining process data and quality test data for trend analysis and feedback for process and product optimization.
- ✓ All your data are accessible through your network – instantly, where and when you need it.
- ✓ You have live access to your QA data as it is being produced.
- ✓ Automatic charting (control charts, distribution charts, etc.) visualizes your QA data simply by importing it into, e.g., MS Excel.
- ✓ Elimination of errors and delays caused by manually entered data.

Tram Quality Assurance System



You can analyse your QA data with your favourite report generator. This makes you capable of producing QA reports for products designated for a particular customer, or to prepare internal QA reports based on all your production data or selected parts of it.

A central database holding all your QA data gives you a unique tool for continuous fine-tuning of your production - based on the latest QA measurements.

Errors from manually entered data can be avoided by automatic import of key values and material specifications, e.g., nominal thickness based on product number. Even a barcode-reader may be used for the import of data. This will ensure faultless data entry and significantly improve the quality of your QA data.

The import module provides the facilities to draw from existing data resources and apply them to TramQA. This makes it easy to obtain and enter new data and makes data entry highly fault tolerant.

The automated export features of TramQA provide the ability to transfer collected product data into a centralized data resource. Having all relevant data organised in one database opens new possibilities for making detailed reports and statistics about production - and with a minimum of time and effort.

Quality assurance and specification

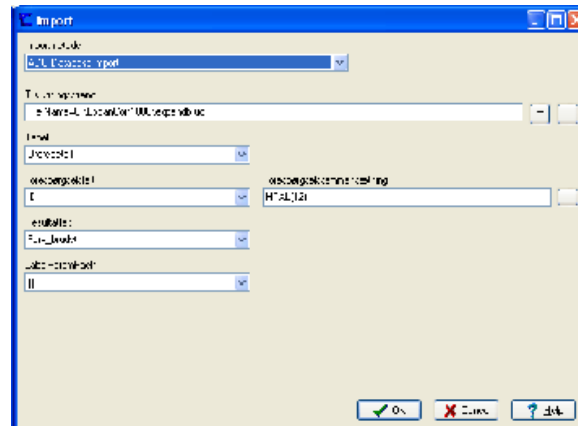
TramQA includes a variety of templates to control how data collected by the test machine is presented and formatted for import and export. The import/export properties of the templates are easy to manipulate, and still, it gives a wide range of possibilities.

ADO[1] based import module

The ADO import module in TramQA enables import from database systems supplied by many providers such as MS SQL, Excel and Access, CSV files, Oracle, and any ODBC based provider. Data previously entered manually into TramQA may now be imported from a central database, where you manage and maintain up-to-date information about your products such

as product dimensions, weight, various nominal values, and other characteristics. When you need this information in TramQA, you simply import it. This will eliminate the risk of faulty entered data. Additionally, data may be imported from data sources holding data collected by external measuring devices such as dimension gauges, lambda measuring units, etc.

ADO [1] based import module



ADO based export modules

The ADO export module in TramQA adds export functionality towards a variety of database systems, including MS SQL, Access, Excel. When new test values have been collected, TramQA export will automatically update the external database. This provides live updating of your database, making it possible to take immediate action based on the latest data. If you have already collected and accumulated data in TramQA, you may choose to make a bulk transfer to an external database in one single export. If you need to analyse only selected parts of data stored in TramQA, the filter option in TramQA helps you to export exactly the data you need.

ADO based export module

