Products
Media No. 4396

habasit

Operating Instructions
Belt Tension Meter
BTM-1

PC Software

Habasit – Solutions in motion

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Introduction

Thank you for choosing the new Habasit Belt Tension Meter and the associated reporting software.
We hope to be able to provide to you a helpful instrument which helts you to improve the service activities.
Before making any measurements, please read and follow the safety guidelines and precautionary measures. In addition, see the operating instructions in **Belt Tension Measurement System**.
We wish you great success in using your new device.

Caution
To connect the Belt Tension Meter to a PC, only use the special BG 810000 cable that is supplied.
If a regular RS232 cable is used, the instrument can be damaged.

Reporting software for the PC

The Belt Tension Meter PC-Software is the most important tool for evaluating and documenting the measurements that are performed.

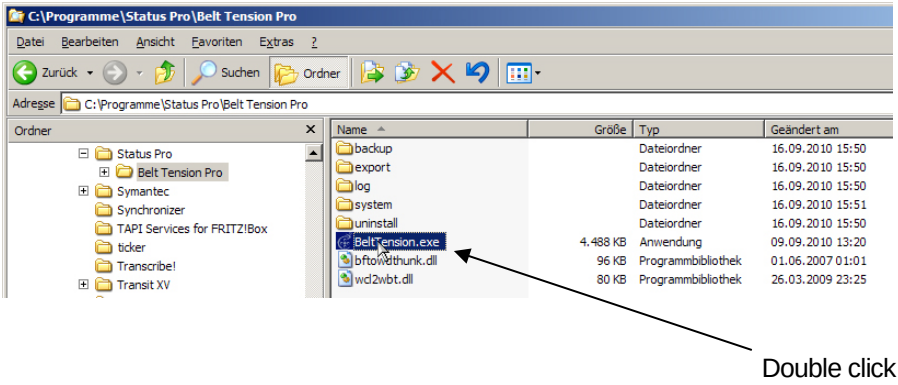
Note
Copy the entire "Belt Tension Meter" directory from the supplied software CD into a directory of your choice on your local hard drive. Please consult the continually updated belt database at www.statuspro.de.

Program installation

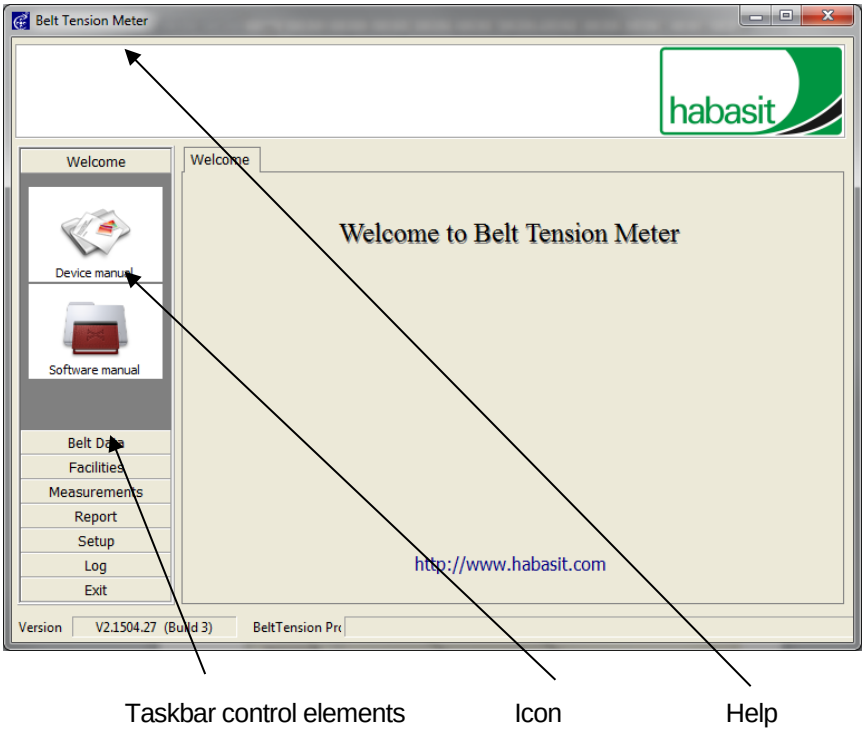
1. Log in on your PC as the administrator.
2. Double click the file named "Belt Tension Meter Setup.exe".
3. Follow the directions of the setup assistant.
4. If necessary, make a copy of the existing data.
5. Select the installation folder on your hard drive where the program data is to be installed as well as the start menu folder and, if necessary, the Desktop or the Quick Launch toolbar.

Starting the program

1. Switch from the file manager into the "BeltTensionPro" program directory.
2. Double click on "BeltTension.exe"; the program starts.



Welcome Screen



1. The PC-Software is controlled through the control elements ("tabs") of the taskbar on the left side.
2. When the mouse is moved over the control elements, help text is displayed at the top of the program window. Help is available for all of the control elements.
3. The tab over which the mouse pointer is located is indicated in bold letters (example **Belt Data**).
4. Click on an element and the programs open that are represented by icons and that are under the menu item.

Program overview

The Belt Tension Meter PC-Software contains the following menu items and programs:

1. Welcome
   - Device manual — Opens the handbook (PDF)
   - Software manual — Opens the handbook (PDF)
2. Belt Data
   - from PC — Displays the belt database of the PC
   - from Belt Tension — Opens the Belt Tension belt data
   - Import/Export — Imports/exports individual belt data sets
3. Facilities
   - Edit Assigns from belt data, "Measurement round"
4. Measurements
   - Belt Tension — Retrieves the measurements from the Belt Tension
   - Manage — Structures measurements
5. Report
   - Evaluate — Prepares reports
6. Setup
   - General — Assigns general settings
   - Update — Updates Belt Tension software
   - COM Port — Selects COM port, searches
7. Log
   - Delete log — Deletes program log files
   - Store log Stores program log files
8. Exit — Exits program

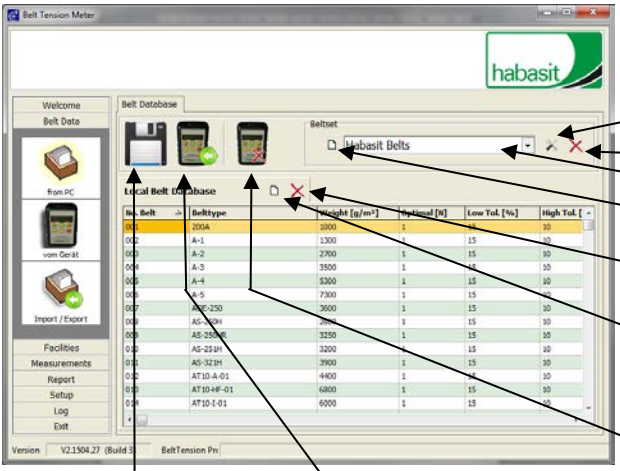
The software version number as well as the status of the connection with the Belt Tension Meter can be found in the footer.

Belt Data

All the important belt data are stored in the Belt Tension Meter PC-Software.

Caution
To connect the Belt Tension Meter to a PC, only use the special BG 810000 cable that is supplied.
If a regular RS232 cable is used, the instrument can be damaged.

1. In the main screen, click on "Belt Data".
2. The sub menu opens. You may select between
   - from PC
   - from Belt Tension as well as
   - Import/Export
3. Click on "from PC" to display the belt database which is stored on the PC. The following screen appears:



rename

delete belt data set name

create new data set

delete belt in the data set

create new belt in the data set

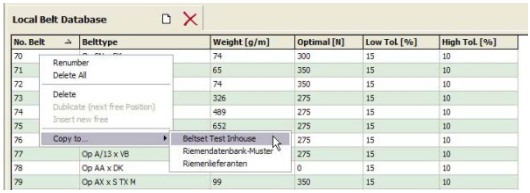
delete all belts in Belt Tension

store belt in database

load displayed belt into Belt Tension

Preparing belt data

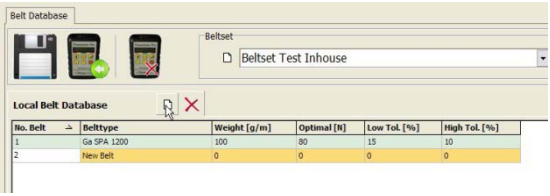
1. Click on "Create new data set".
2. In the field, enter the name of the new belt data set. The new belt data set is created; it does not yet contain any belt data.
3. Open, for example, the Timing belt data. Confirm with "YES".
4. Sort the data for a better overview by, for example, clicking on the belt type in the header.
5. In the database, select "your" belt, press the right mouse button.



6. Select "Copy to…" and copy the selected belt in the new data set (in the example, Dummy Belt Set).
7. Click on the floppy disk symbol to store.
8. The selected belt data is now stored in the belt data set that was created.

Alternative: Manual input of belt data

1. Click on "Create new belt" to create a new, empty belt data set.
2. Click on the assigned box.
3. Input the belt data manually.
   - No. Belt
   - Belt type
   - Weight
   - Optimal
   - Low Tol.
   - High Tol.



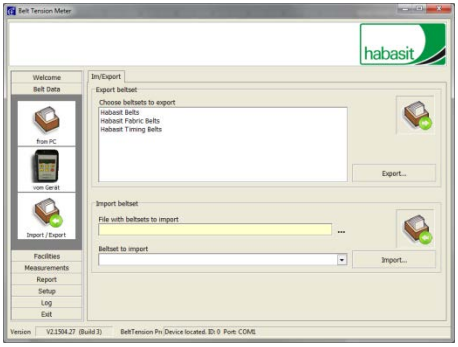
Caution
The software does provide a feature which cannot be used currently with the Belt Tension Meter. The input of “Optimal [N]”, “Low Tol [%]” and “High Tol [%]” is not supported in the this firmware version.

Transferring belt data to the Belt Tension

1. Connect the Belt Tension to the PC; the connection status is displayed in the footer.
   For example "Belt Tension connected ID: "….." Port: COM1".
2. Click on "Transfer data to Belt Tension".
3. Confirm by clicking on "Yes".
4. The prepared data is copied to the Belt Tension and is available for the measurements.

Importing/exporting belt data

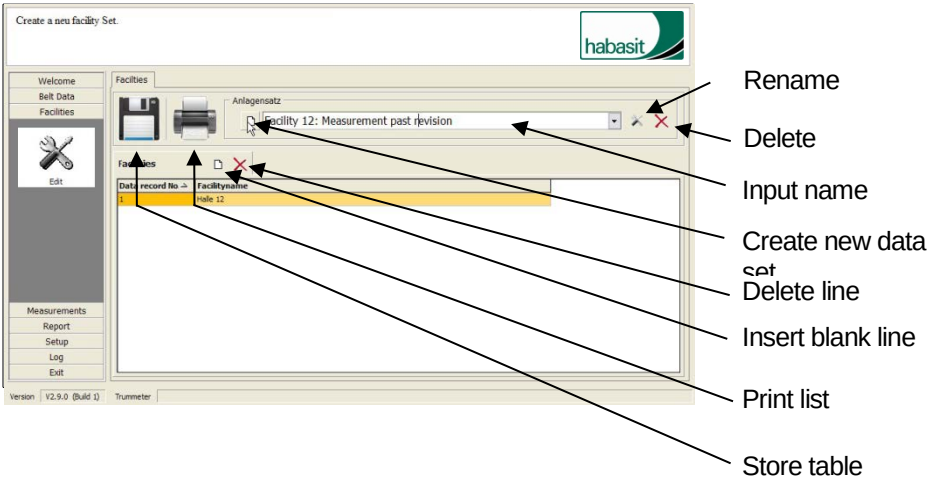
For safeguarding purposes, you may export your own belt data and also import existing belt data sets for use in the Belt Tension Meter.
Click on the Import/Export icon.



1. At the top, select, for example, the belt data set to be exported and then click on "Export...".
2. Provide a meaningful name to the file to be exported and confirm with OK. The file is stored in the selected directory under the selected name.
3. During "Import belt data set", import new or stored belt data sets by clicking on the button to the right of the field for the name to select the belt data set.
4. The selected belt data set is displayed.

Setting up facilities

For an optimal overview, it is advisable to select the "Facilities" tab and create the measurement data sets there, for example, for the individual measurement rounds.
This has the additional advantage that in the report - that is, in the overview of the measurements that have been made - you will have the measurement values for certain machines and facilities assigned. Click on the control element named "Facilities"



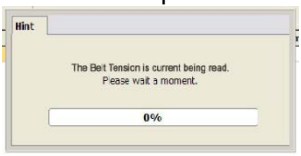
1. Click on "Create new data set" and input the name.
2. Click on "Insert blank line".
3. Click on "Facility name" and input a unique name for this measurement data set (for example, Hall 2, Ventilator 456).
4. To store your inputs after you have input all the measurement data sets and facilities, click on the floppy disk symbol.

Transferring and managing measurements

The control element named "Measurements" is used for transferring the measurements that have been made from the Belt Tension Meter to the PC-Software as well as for managing individual measurements. Click on the control element named "Measurements".

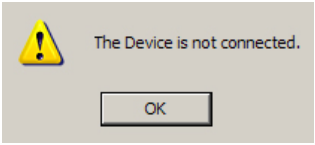
Transferring measurements from the Belt Tension

1. Connect the Belt Tension to the PC; the connection status is displayed in the footer.
   For example "Belt Tension connected ID: "….." Port: COM1".

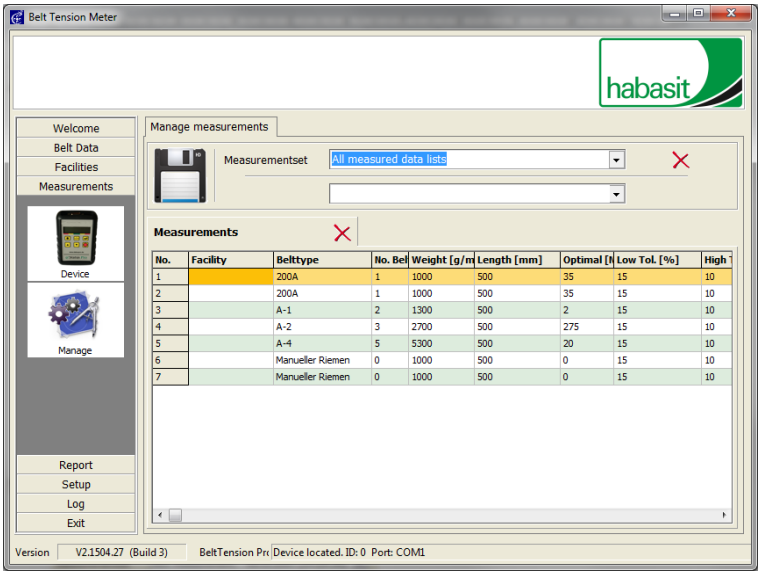


Note
For this purpose, only use the special BG 810000 cable that has been supplied.

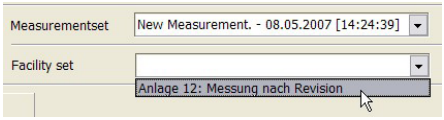
2. Click on the Belt Tension symbol; the measurements are transferred.
3. If the following message appears, then check to ensure that a proper connection has been made:



4. The measurement data screen appears



5. The individual measurements are listed in tabular form. At the top of the screen, the functions named "Store", "Delete" as well as the measurement set name, the facility set and the current date and time are displayed.

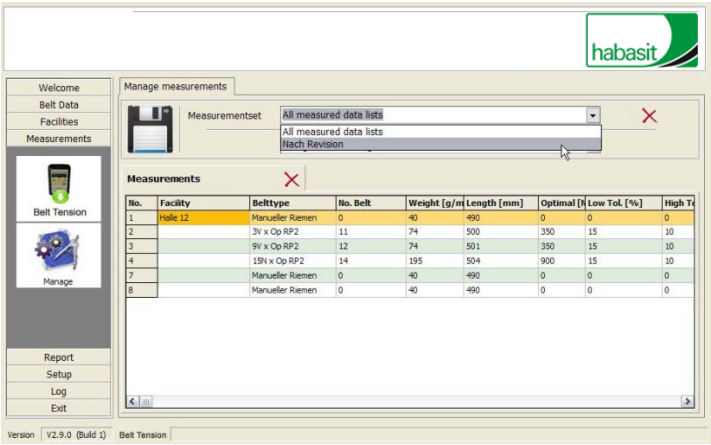


6. You may now assign the measurement data to a stored facility set. This facilitates an overview and creates a clear link between the measurement value and, for example, the machines and facilities of a measurement round. Click on "Facility set", or on the arrow as shown, and select a facility set.

7. The facility is now assigned to the measurement value in the table.

Managing measurements

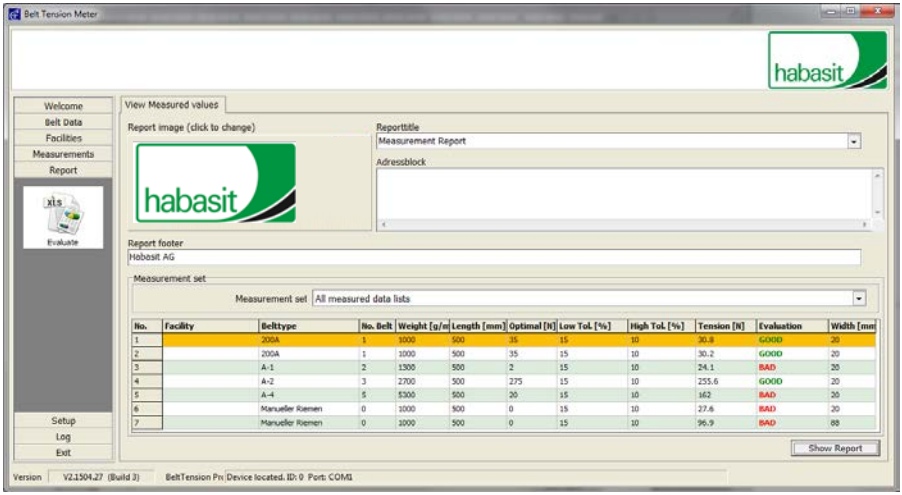
1. Click on "Manage".



2. Select a measurement data set and assign a facility set to the measurement data set.
3. You may manually assign a facility to a measurement. Click on the box and input the facility name and, if necessary, additional details.
4. Next, click on the floppy disk symbol to store your input together with the measurements.

Reporting Tool

The report section is used for evaluating and documenting the measured data. To open this area click on the task bar "Report".



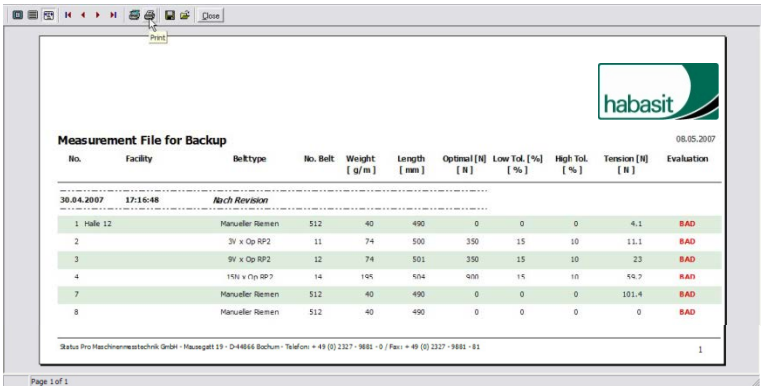
Changing the appearance

You may change the following entries to set the appearance of the report to the specifications required by your company:

- Reports – allowable formats: JPG, BMP, ICO, EMF, WMF
- Title – Report heading (click on "f" to select the print type, etc.)
- Address block – Company address
- Footer – Input footer (click on "f" to select the print type, etc.)
- Measurement data set – Selection of the measurement data set that is to be evaluated

Click to modify a particular item.

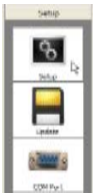
After setting the appearance, click on "Display report".



The report layout appears in a window.
In the window tool bar the following options can be selected:

- Zoom to fit – zoom to fit the size of the window 100%
- Zoom to width – scale to width
- ⏮ ◀ ▶ ⏭ – page forward, page backward
- Printer setup – set up the printer
- Print – start printing
- Save report - store as QRP file
- Load report – open report data
- Close – close report

Setup

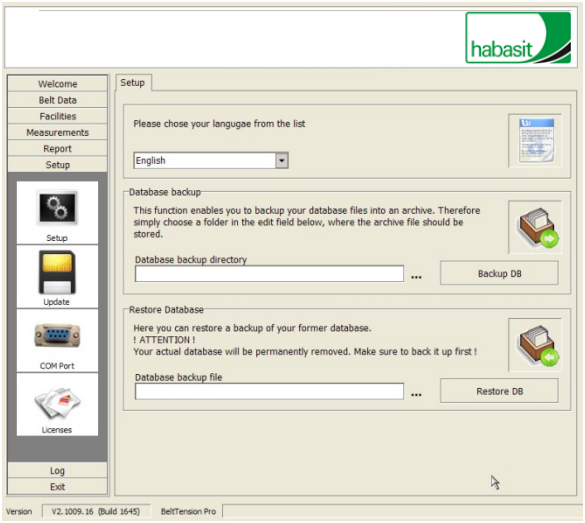


In the setup menu the language, updates and COM port setting can be configured.

General settings, setup

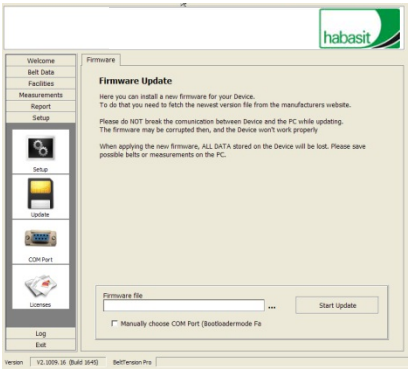
In the Setup chapter the language can be selected.

Furthermore there is a possibility to backup or restore belt database from a archive.



Update

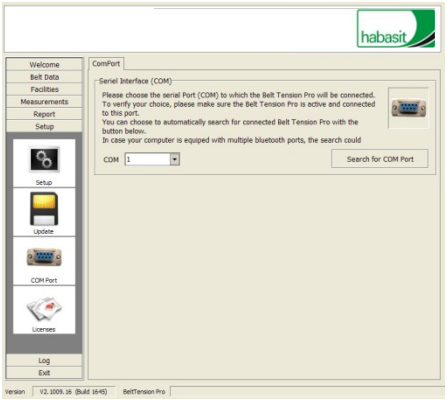
1. Click on the "Update" icon to perform a software update (firmware update) of the connected Belt Tension Meter.
2. Follow the instructions on the screen.
3. Click on "…" to select the current firmware.
4. Click on "Start update" to start updating.



Note
Do not separate the Belt Tension from the PC (or data cable) when updating.
Do not switch off the Belt Tension.
If the updating procedure has been started, then ALL DATA on the Belt Tension will be lost. Please first store your measurement data on the PC.

COM Port

1. Click on the "COM Port" icon to configure the communications between the PC and the connected Belt Tension Meter.
2. In addition, connect the Belt Tension Meter to the serial interface and switch it on.
3. If known, select the COM Port manually or let the software automatically seek and register the Belt Tension Meter. After the end of the search, an information window appears and the port is selected in the list.

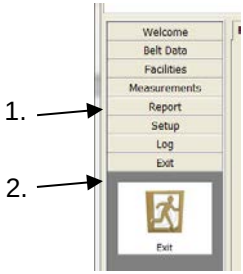


Log

The Log function documents system messages from the PC-Software in the background. The Log is used for administration and information or support through Habasit.

Closing the program

To leave the PC-Software first open the “Exit” taskbar. Next, click on the "Exit" icon.



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