EasyLink™

MANUAL

English

EASY-LASER®

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EasyLink version 6.0

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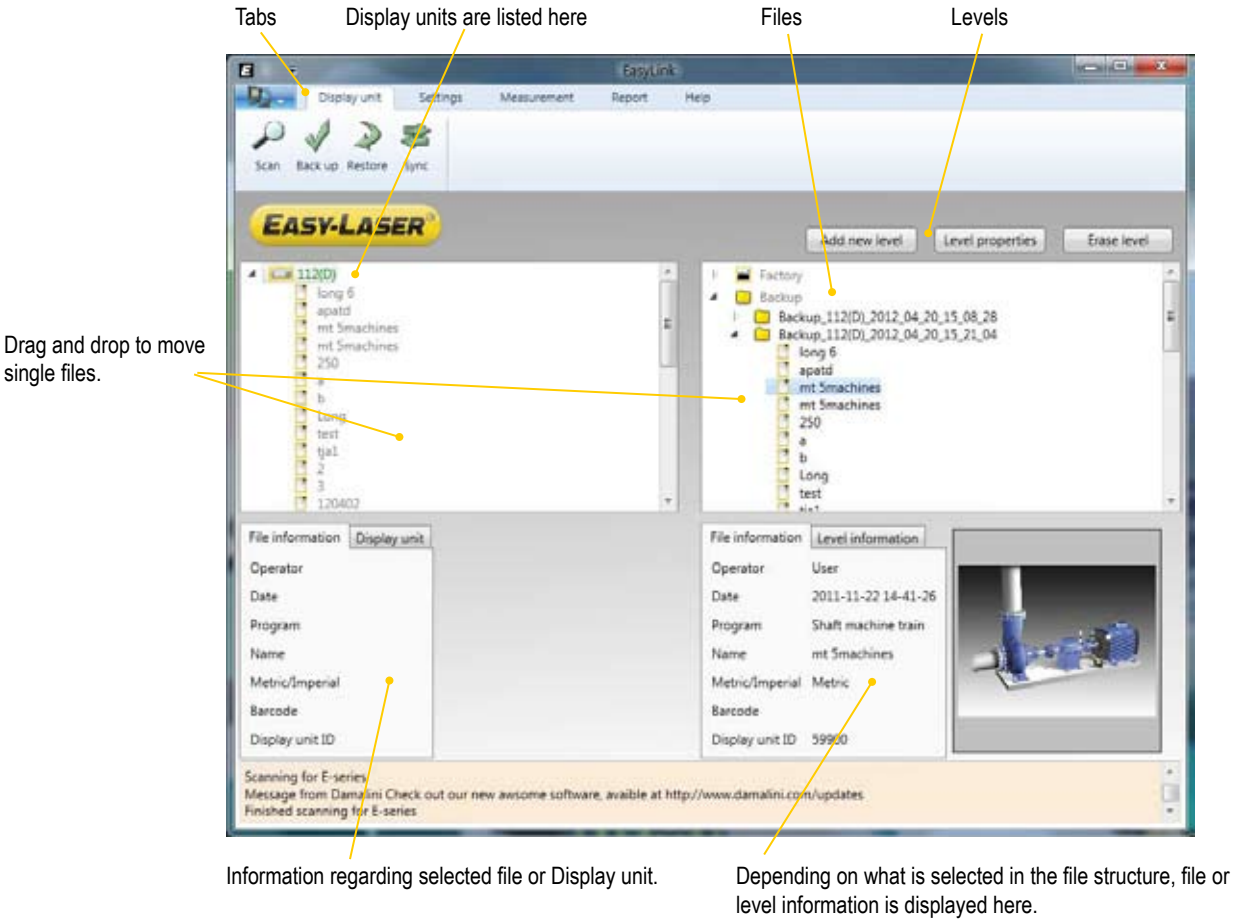
EASYLINK

With EasyLink you can easily transfer measuring results from the Display unit to the PC and generate reports, or export the results to an Excel chart for further analysis.



Import files

E-series

1. Start EasyLink.
2. Start the Display unit.
3. Connect the Display unit to the PC using the USB cable. The connected Display units are automatically presented.

D-series

1. Click to start a manual scan for Display units.
2. EasyLink will scan for available COM ports. All Display units are listed.

Import CSD

Select to import data from earlier versions of EasyLink.

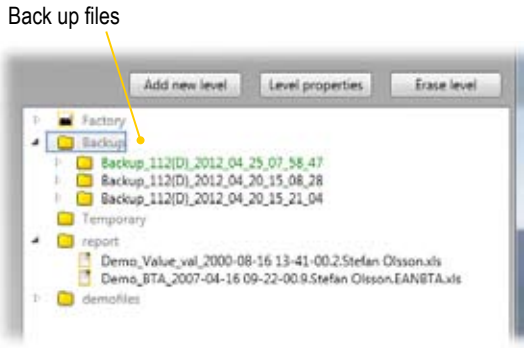
Import file

Select to import single measurement files. For example files sent to you via e-mail. The imported file is automatically saved in the folder “Temporary”.

Back-up, Restore and Sync

Back up

All files in the selected Display unit are copied and backed up in the Backup folder.



Restore

Select a back up file and click . The connected Display unit is restored with the earlier version.

Sync

1. Save a measurement with a barcode.
2. Click .
3. The system searches for existing files with the same barcode and will copy the new files to the same folder.

Open file

Double click on a file to open. All measurement files have the following buttons in common.

Reset view

Return to the default settings.

Copy image to clipboard

Copy the image. You can for example paste the image in an e-mail.

Save image

Save the image on your PC.

Create report

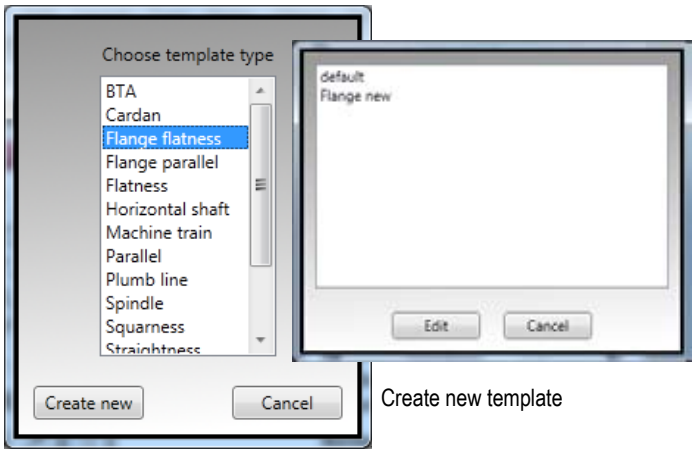
Create an Excel report. For more information *see Report files*.

Exit

Close window.

Report files

- Edit existing.
- Create new. Select a name. The new template will be visible in the list when you select Edit existing or Create report from a program.
- Import



Create new template

Help

- Log file.
- Register. *See User settings below*.
- Help.
- Support. Click to send an e-mail to Damalini AB.
- About

Settings

Program settings

Splash screen is the image shown when you start EasyLink.

Internet settings

Directory where report files are saved

Directory where measurement files are saved

The original demofiles are recreated

User settings

For full EasyLink™ Flange functionality, you need the activation code. Select the check box *Request activation code*. Your local supplier will provide you with the code.

Levels

In the file structure, you can add new levels to organize your measurement files and reports.

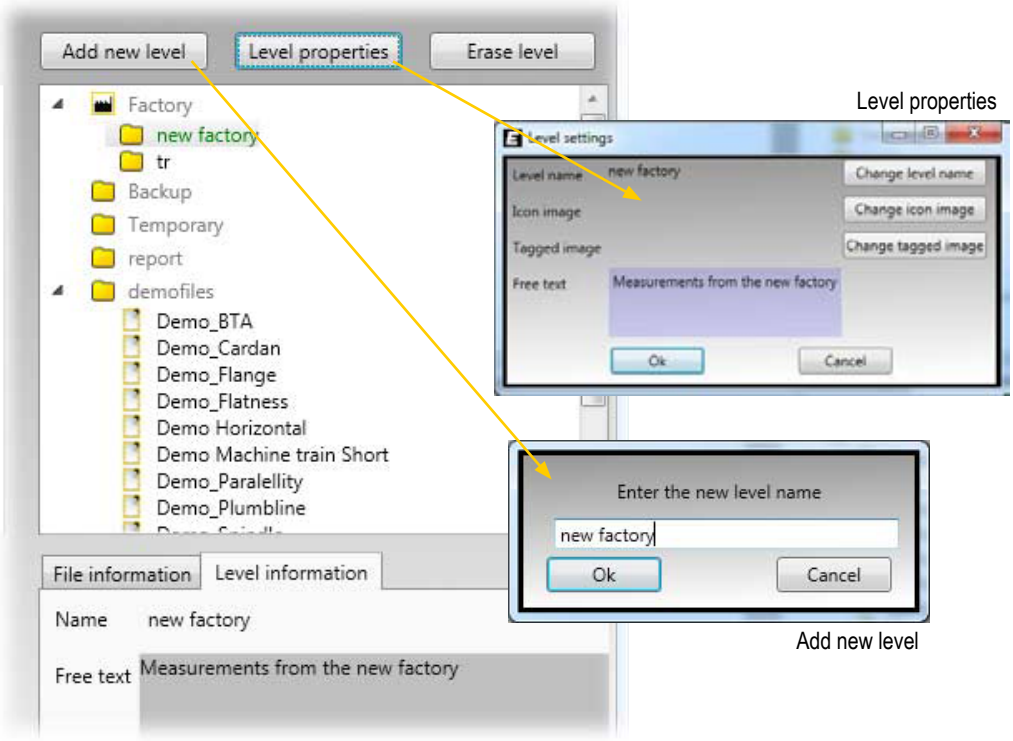
Add new level

1. Select the top level where you want to add a new level.
2. Select “Add new level” and enter a name for the new level. The new level is added to the file structure.

Level properties

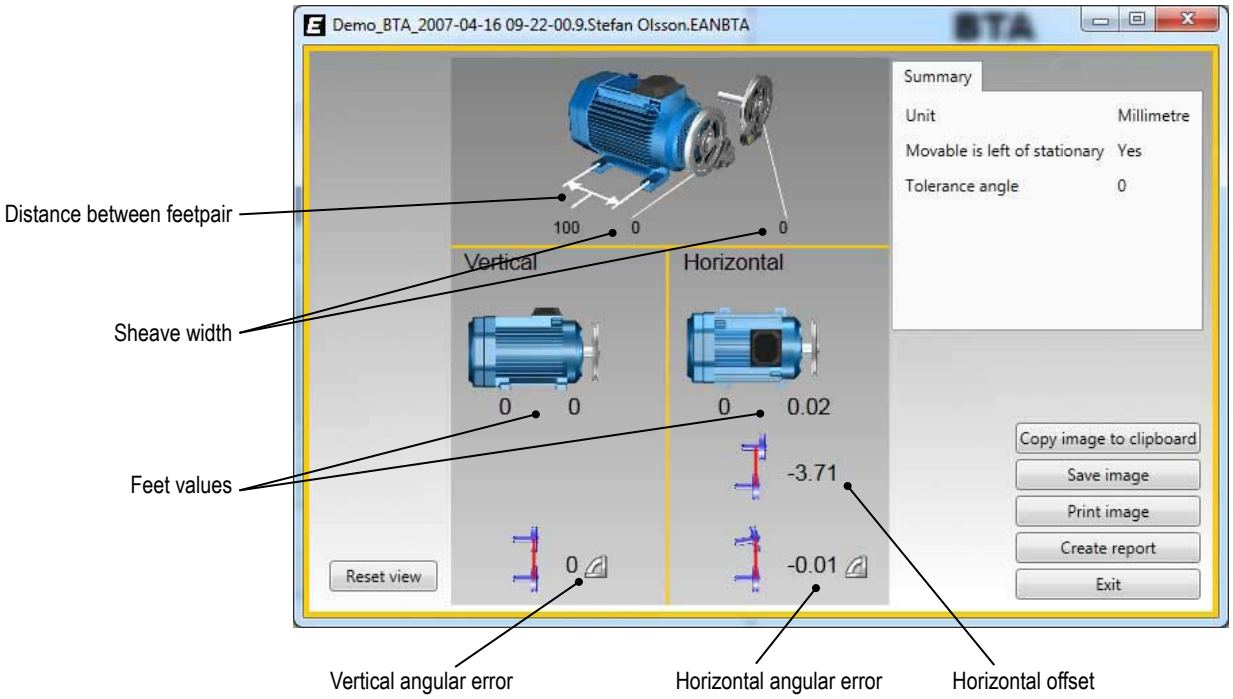
You can change the image used for the level and also add “Free text”. The comments are visible under the tab “Level information”.

The tagged image is shown beside the level information.

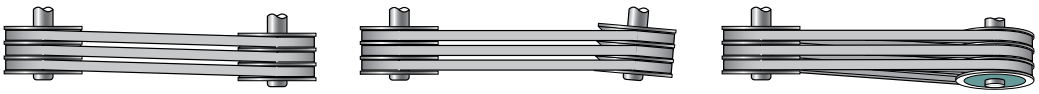


BTA

Easy-Laser® BTA system consists of a laser transmitter and a detector.



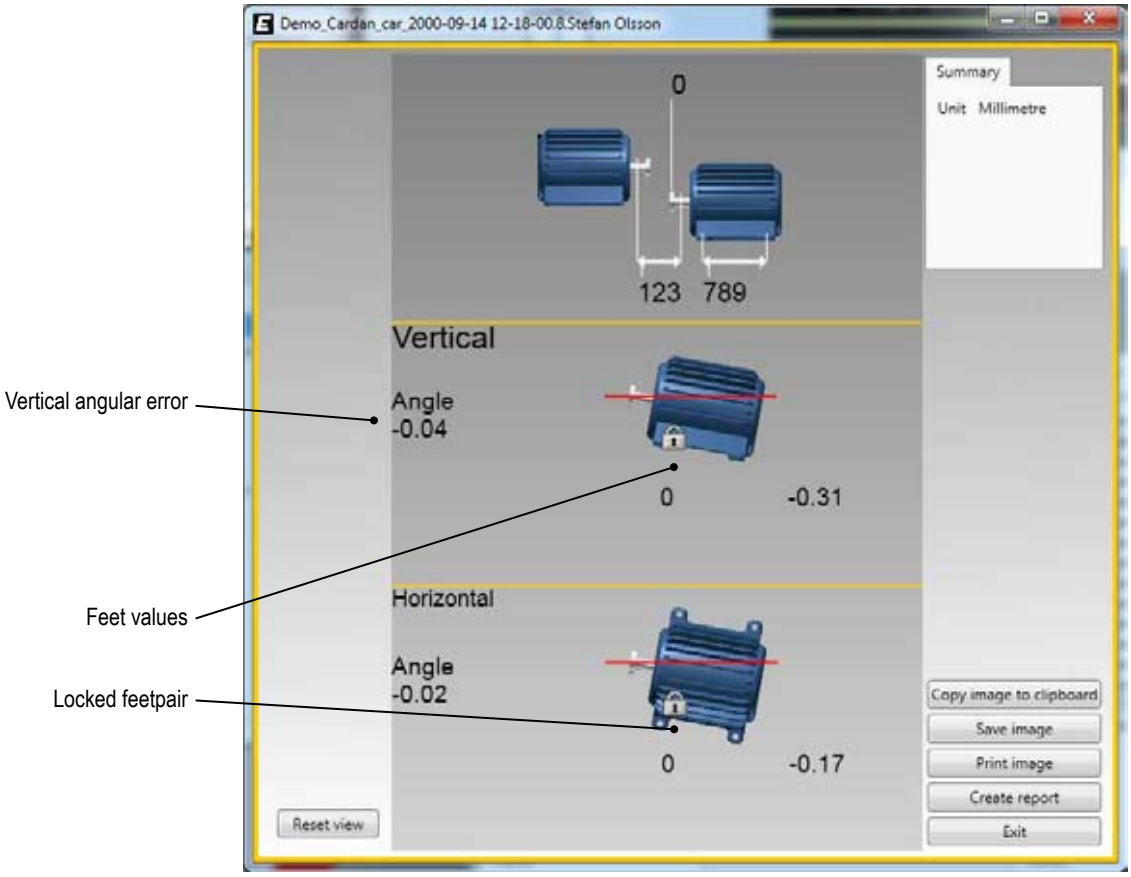
The misalignment can be offset or angular. It can also be a combination of both.



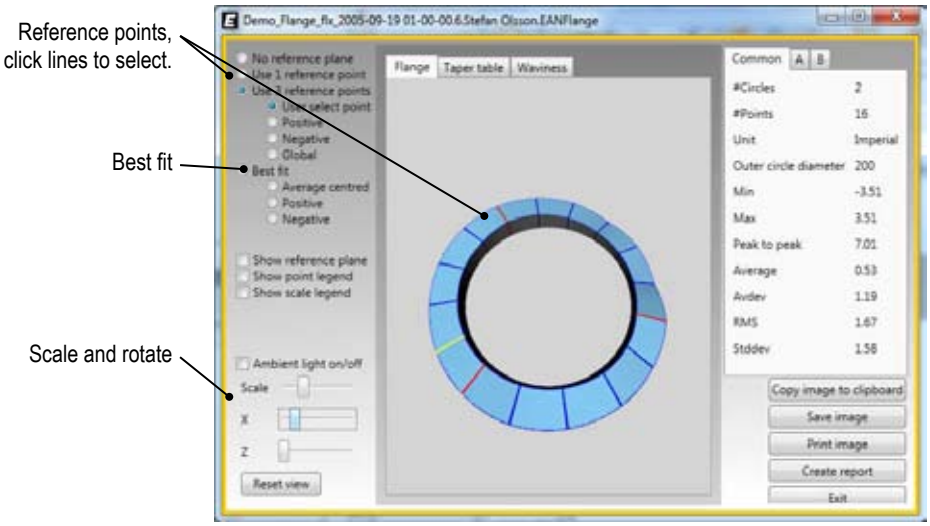
Offset misalignment | Angular misalignment | Offset and angular misalignment

Cardan

The Cardan program is used for alignment of cardan-shaft-coupled/centre-offset machines.



Flange



Max	The highest value.
Min	The lowest value.
Peak-peak	Difference between Max and Min value
Stddev	Standard deviation. Average difference between Max and Min value.
RMS	Root Mean Square (Numerical Flatness)

Reference points

You can use one or three reference points. Click the lines on the flange to select reference points.

Best fit

By default best fit is calculated on the selected circle in the table. You can also select all measurement points on a certain position. When you perform a best fit calculation, the flange is tilted to the lowest peak to peak value. It is fitted as flat as possible between two planes where the average value is zero.

- All positive
  The flange is tilted as in a Best fit calculation, but the reference line is moved to the lowest measurement point.
- All negative
  The flange is tilted as in a Best fit calculation, but the reference line is moved to the highest measurement point.

Scale and rotate

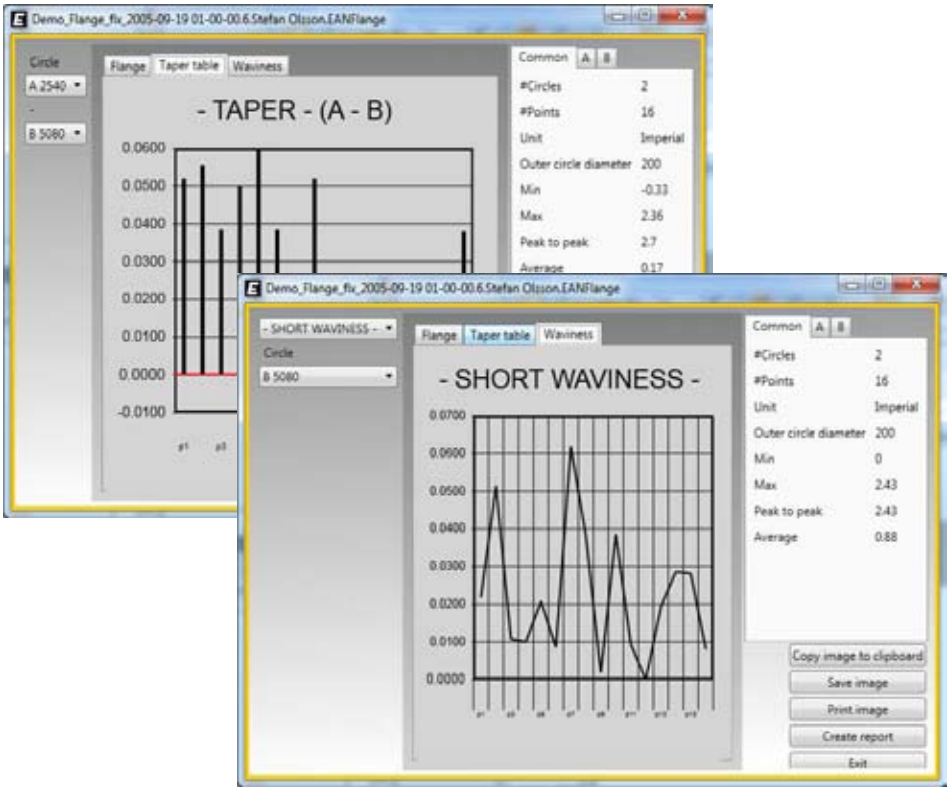
Drag the handles to scale or rotate the flange. You can also use the arrow keys on your keyboard.

Taper

View the inclination of the flange, between the measured circles.

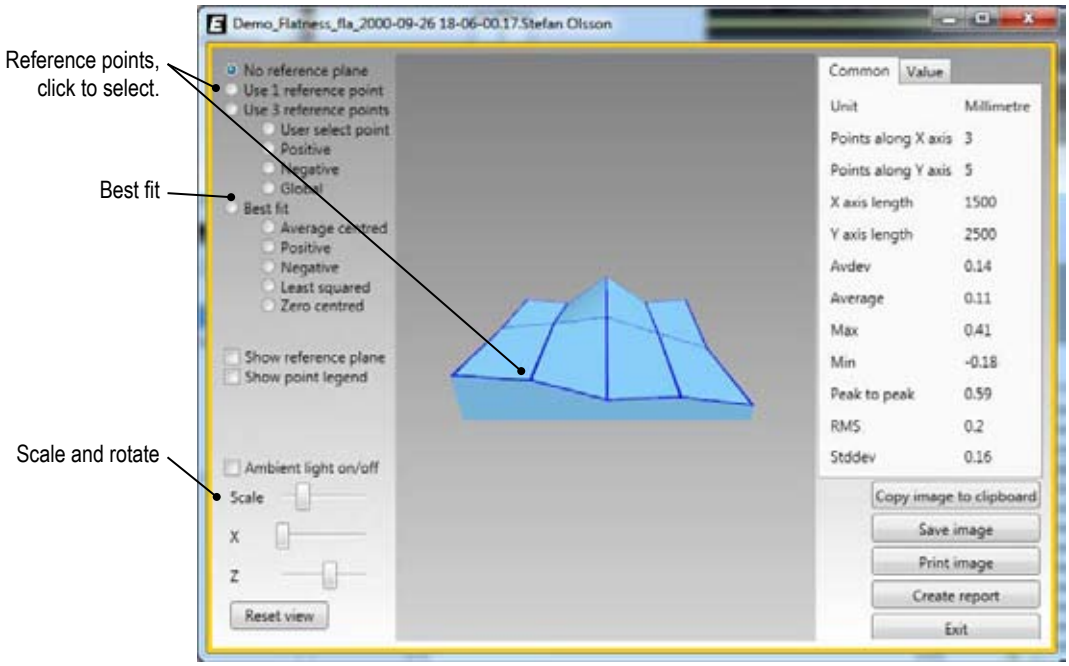
Waviness

The difference between two adjacent measurement points. This is measured on the outer circle.



Flatness

The reference points are marked in a coordinate system in X- and Y-direction.



Reference points

You can use one or three reference points. Click the measurement points to select reference points.

Best fit

By default best fit is calculated on the selected circle in the table. You can also select all measurement points on a certain position. When you perform a best fit calculation, the flange is tilted to the lowest peak to peak value. It is fitted as flat as possible between two planes where the average value is zero.

All positive

The flange is tilted as in a Best fit calculation, but the reference line is moved to the lowest measurement point.

All negative

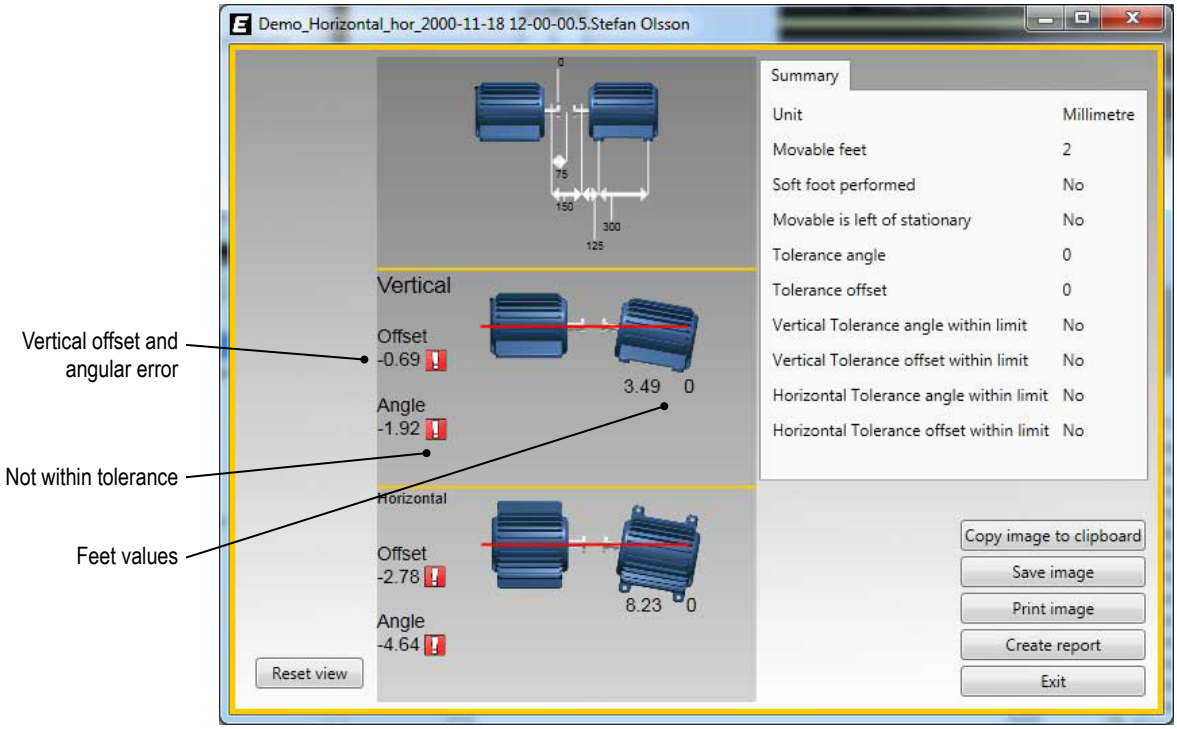
The flange is tilted as in a Best fit calculation, but the reference line is moved to the highest measurement point.

Scale and rotate

Drag the handles to scale or rotate the flange. You can also use the arrow keys on your keyboard.

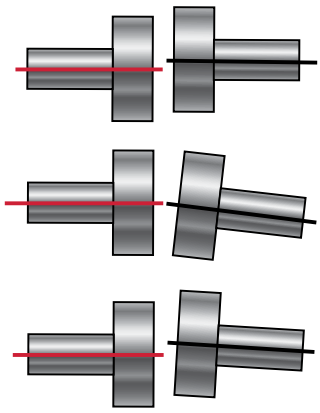
Horizontal

Offset, angle and feet values are clearly displayed.



Offset and angle values

The offset and angle value indicate how well the machine is aligned at the coupling. They appear in both horizontal and vertical direction.



Offset
The centre lines of two axis are not concentric but parallel.
This is measured at the coupling centres.

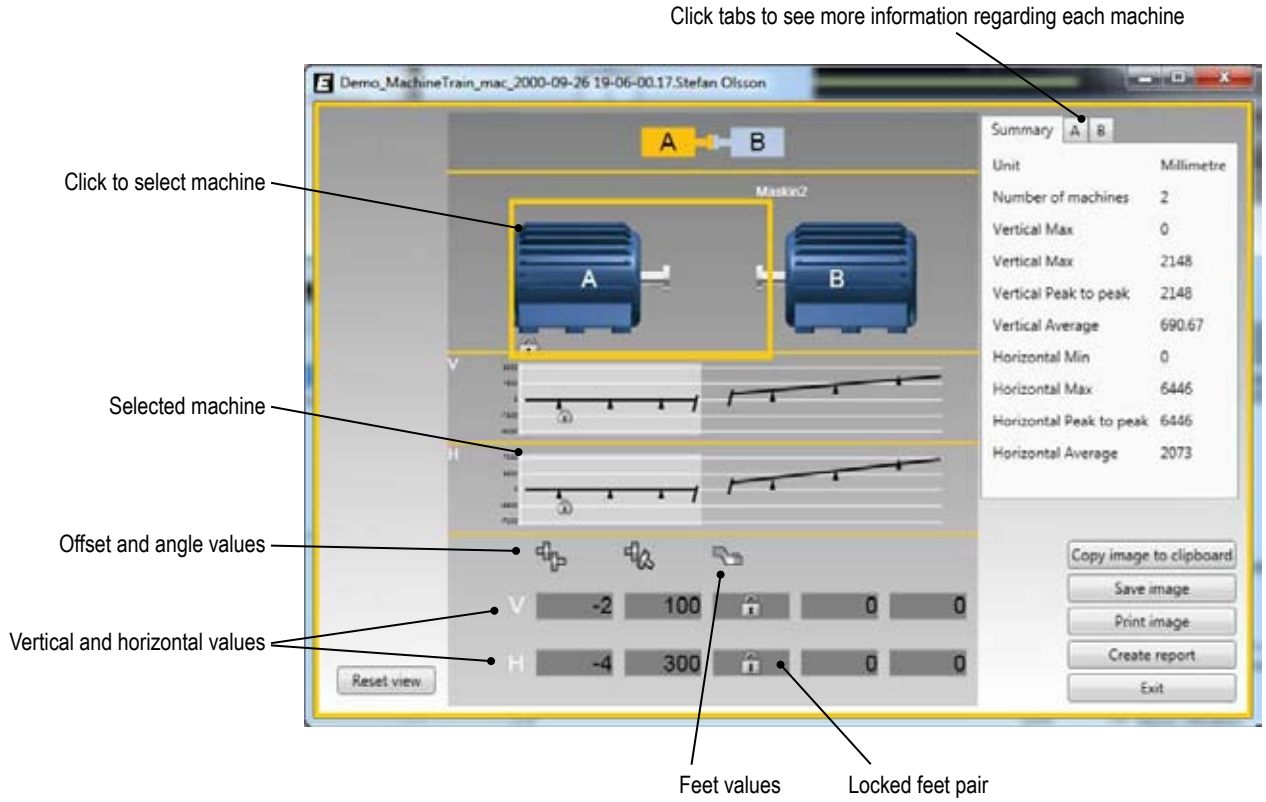
Angular misalignment
The centre lines of two axis are not parallel.

Offset and angular misalignment
Misalignment is often a combination of both offset and angular misalignment.

Feet values

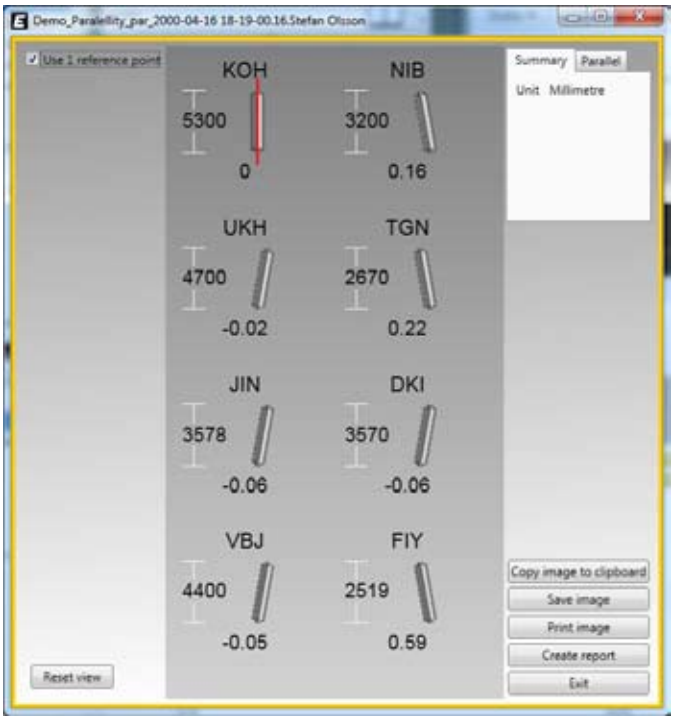
The feet values show the position of the machine where the adjustment is made.

Machine train

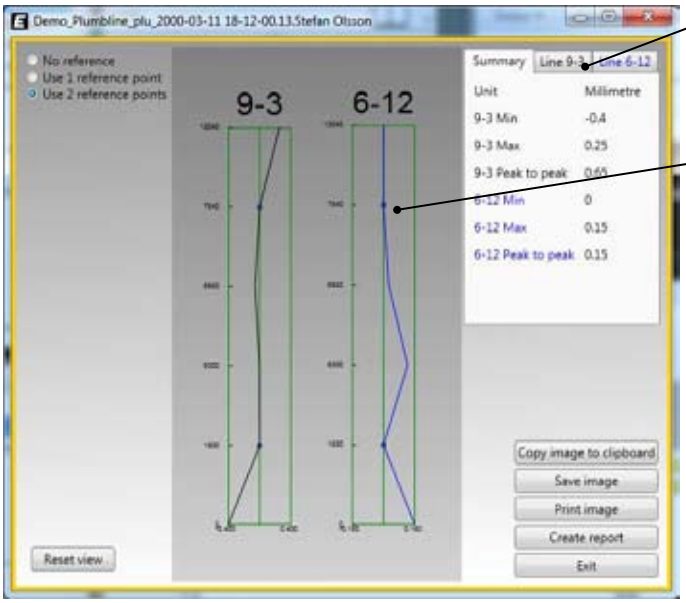


Paralellity

1. Select check box to use reference object. Object with red line is reference.
2. Click an object to make it the new reference object. Any of the objects can be chosen as reference.



Plumbline

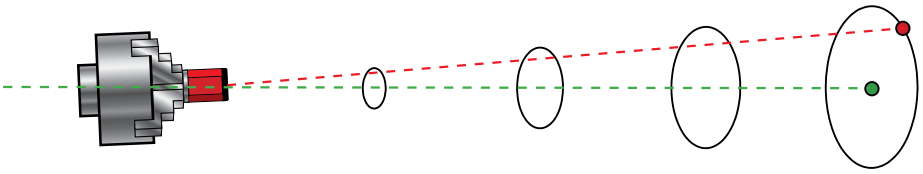


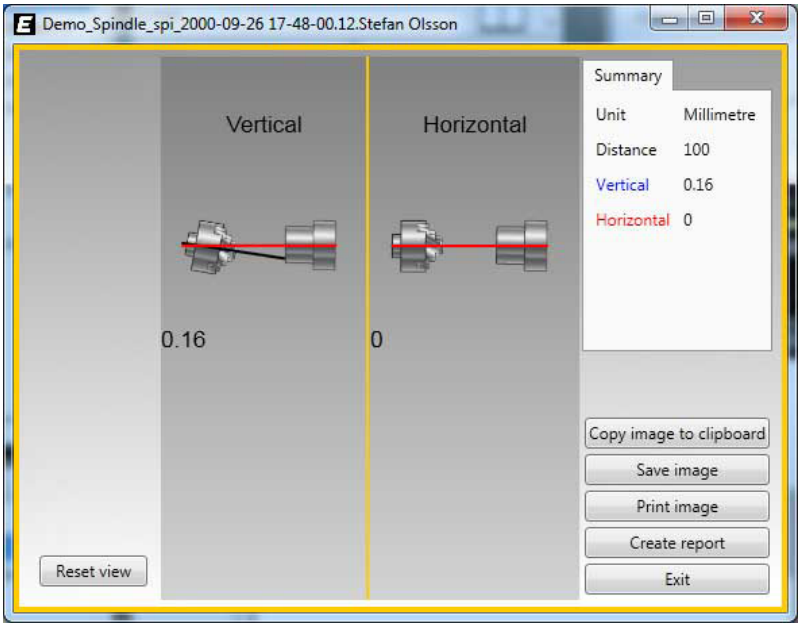
Click tabs to see more information

Click to select reference points

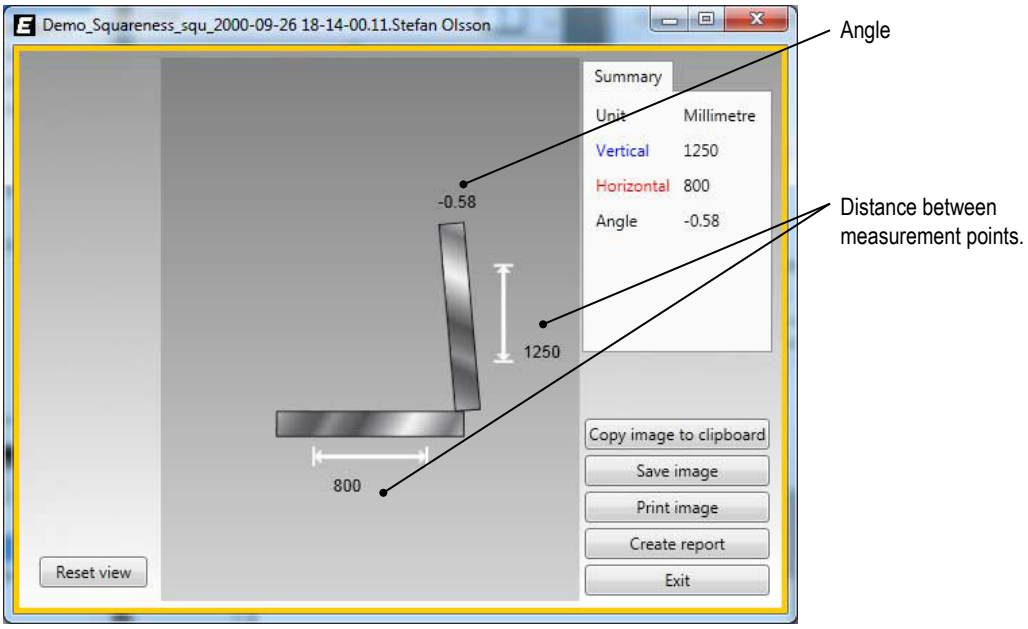
Spindle

The laser beam projects concentrical circles. A line through two centre points will show the pointing direction of the spindle.

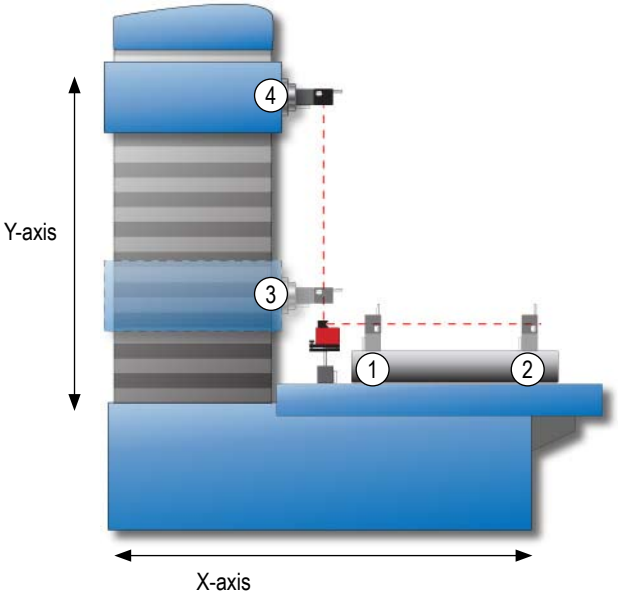


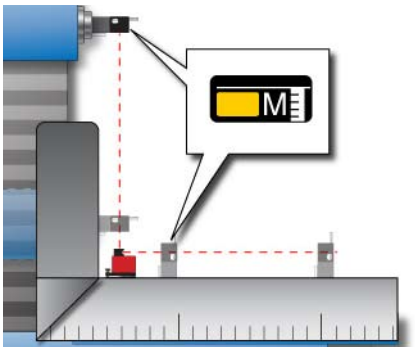


Squareness



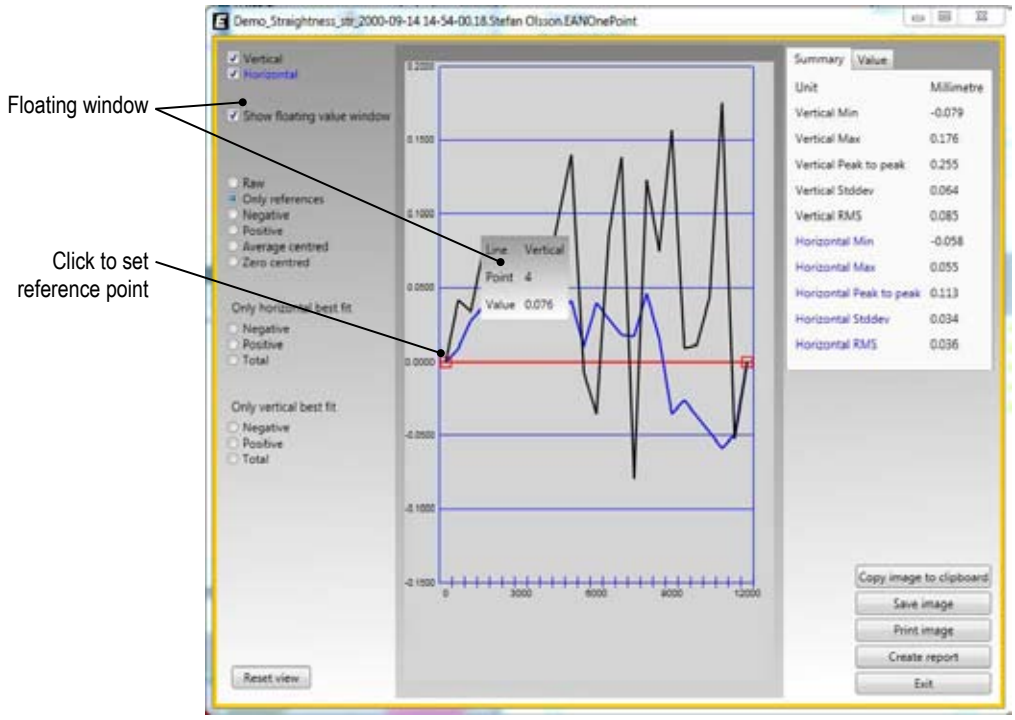
An example showing squareness measurement on a milling machine.
Squareness measurement of the Y-axis movement and machine table.





Imagine the two axis as a set square.
Mount the M-unit with the label (M) facing into the angle. If using a D5 detector; top connector facing into the angle.

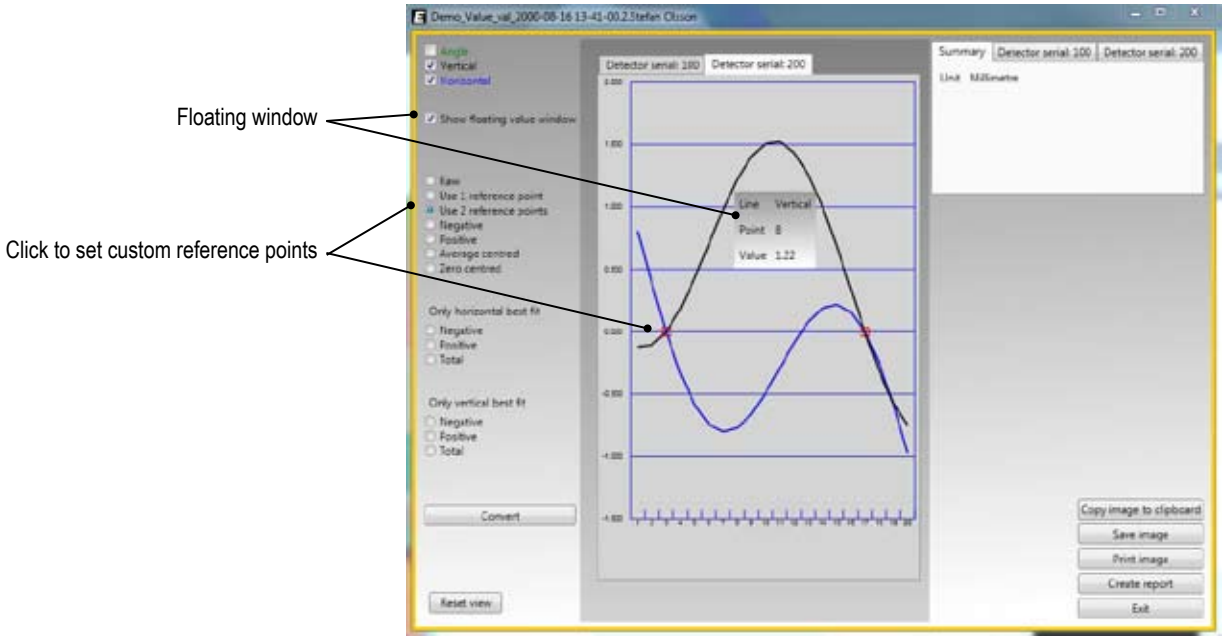
Straightness



Set custom reference points

1. Select “Only reference”.
2. Click where you want to set the reference points.

Value

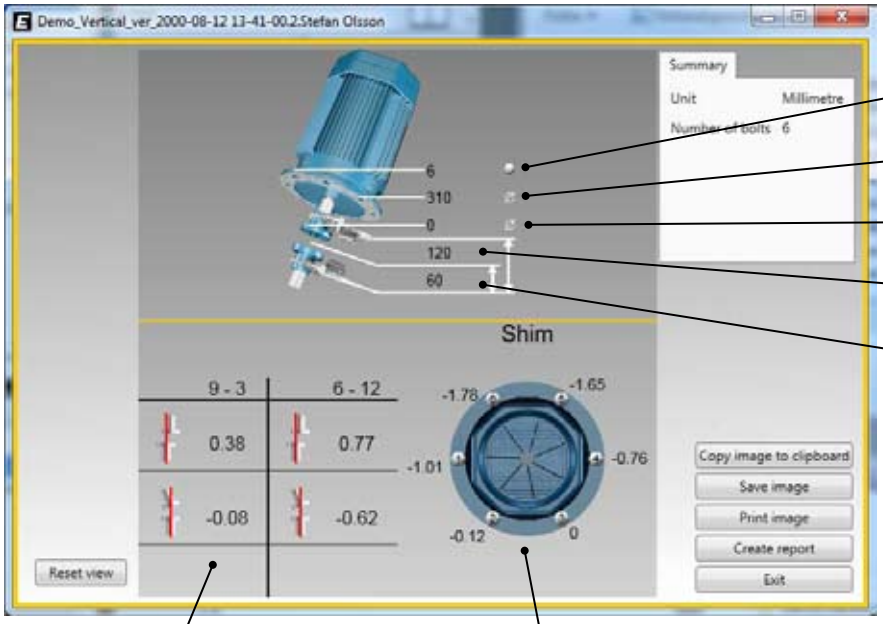


Convert

With the program Values, it is possible to make flatness and straightness measurements. The Convert function is used to transform these values measurements into straightness and flatness measurements.

Vertical

The program Vertical is used for vertical and/or flange mounted machines. The result is displayed as sideways offset in the coupling and angular error between shafts.



Number of bolts (4, 6 or 8 bolts)

Bolt circle diameter (centre of the bolts)

Coupling diameter

Distance between S-unit and M-unit

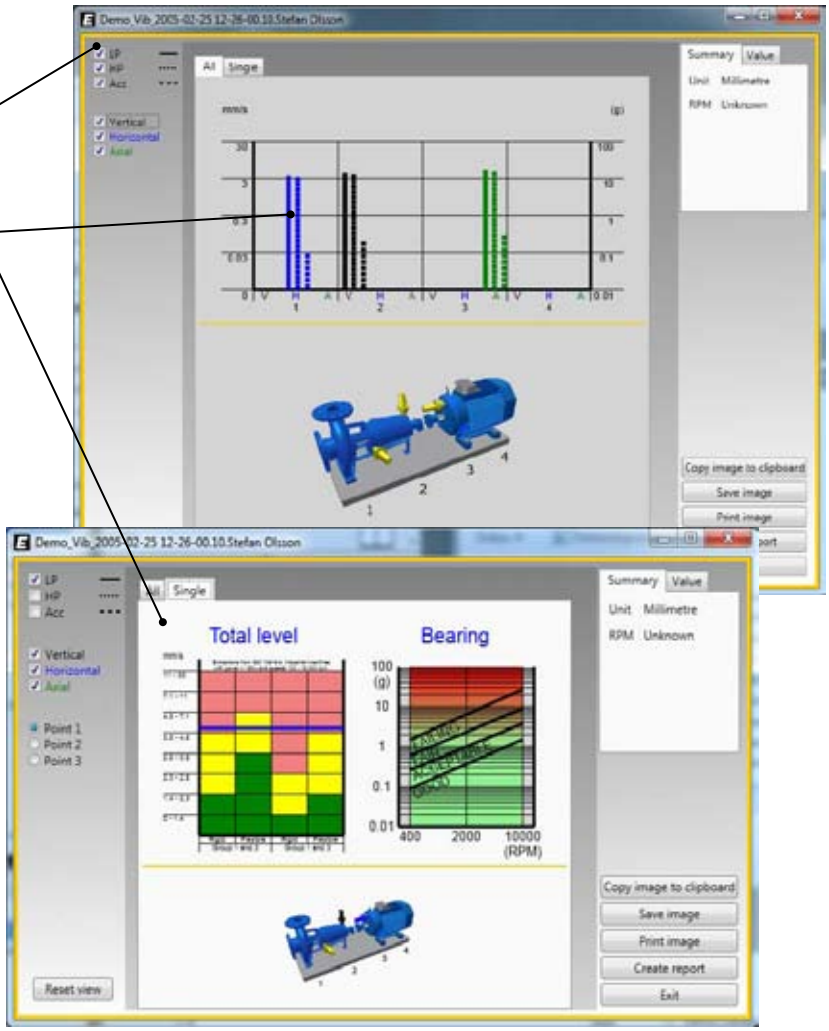
Distance between S-unit and centre of coupling.

Offset and angle values in direction 9-3 and direction 6-12

Shim values for all bolts

Vibration

Easy-Laser® Vibrometer is used in preventive as well as active maintenance work on rotating machinery. It measures the vibration level and bearing condition of machinery. Bearing condition value is used for trend analysis.

LP: Low frequency (2–3200 Hz)
HP: High frequency (10–3200 Hz)
Acc: Acceleration

Click to view more information regarding this specific measurement point