

ROTALIGN® Ultra iS

Vibration Acceptance Check – Getting started



Vibration Acceptance Check – Getting started

Thank you for acquiring Vibration Acceptance Check, an additional application within the ROTALIGN Ultra Shaft Expert platform. In addition to the numerous useful functions available within **ROTALIGN Ultra iS** [or **ROTALIGN Ultra**], this professional system can now be used in conjunction with VIBTOOL to measure vibration levels according to the ISO 10816-3 international standard.

Comprehensive information on VIBTOOL and ROTALIGN Ultra iS [or ROTALIGN Ultra] is to be found in the respective operating handbooks VIB 9.497.G, DOC 40.200.en [or ALI 9.855.G]. The intention of this guide is to provide an overview on how to carry out vibration measurements using VIBTOOL together with ROTALIGN Ultra iS or ROTALIGN Ultra.

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Vibration Acceptance Check package

Vibration Acceptance Check

ROALIGN Ultra Expert

add-on module with VIBTOOL

ALI 4.005/2-30

VIB 2.760 EU/UK/US

VIBTOOL package includes:

VIB 2.700 EX VIBTOOL (including rechargeable battery)

VIB 2.720 Charger (region-dependent)

VIB 2.729 Case

VIB 9.497 Operating instructions

ALI 4.743

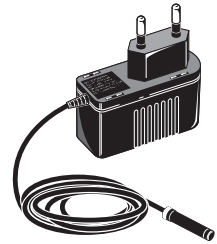
ROALIGN Ultra Shaft Expert firmware voucher (not shown)

ALI 4.451

USB memory stick for ROALIGN Ultra firmware update

DOC 04.104.en

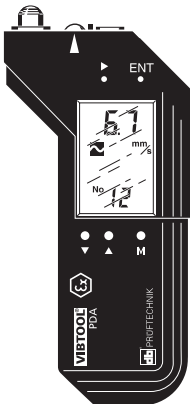
Vibration Acceptance Check Getting started (this guide)



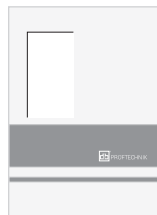
VIB 2.720



ALI 4.451



VIB 2.700 EX



VIB 9.497



VIB 2.729



DOC 04.104.en

Safety and operational notes

Note symbol

- ▶ This symbol denotes general information and tips regarding operation of ROTALIGN Ultra / ROTALIGN Ultra iS].



Notes for intrinsic safety

- ▶ The intrinsically safe VIBTOOL (VIB 2.700 EX) can be used in explosive atmospheres. The intrinsic safety notes outlined in the VIBTOOL operating instructions must be observed.
- ▶ ROTALIGN Ultra [or ROTALIGN Ultra iS] computer is **NOT** to be used in explosive atmospheres.



Notes regarding data storage

With any data processing software, data may be lost or altered under certain circumstances. PRÜFTECHNIK strongly recommends that you keep a backup or printed records of all important data.



PRÜFTECHNIK assumes no responsibility for data lost or altered as a result of improper use, repairs, defects, battery replacement/failures or any other cause.

PRÜFTECHNIK assumes no responsibility, directly or indirectly, for financial losses or claims from third parties resulting from the use of this product and any of its functions, such as loss or alteration of stored data.

Note that saving measurement data is possible only when VIBTOOL is used in combination with the ROTALIGN Ultra / ROTALIGN Ultra iS computer and data is transmitted to the ROTALIGN Ultra / ROTALIGN Ultra iS computer during measurement.

VIBTOOL may be used in a stand-alone capacity to carry out RPM and temperature measurements. To conduct then record, save and evaluate machine vibration measurements, VIBTOOL should be used in combination with the ROTALIGN Ultra iS [or ROTALIGN Ultra] computer.

For information on saving, naming and printing measurement files, please refer to the respective operating handbook.

This quick guide assumes that the user is fully conversant with the operation of both VIBTOOL and ROTALIGN Ultra iS [or ROTALIGN Ultra] computer. It is recommended to refer to the respective operating handbook, if and when necessary.



Activating Vibration Acceptance Check


The application Vibration Acceptance Check runs on ROTALIGN Ultra iS [or ROTALIGN Ultra] computer ALI 4.202 using the add-on module with VIBTOOL ALI 4.005/2-30 or sensALIGN sensor. For both alternatives, the following conditions must be fulfilled:

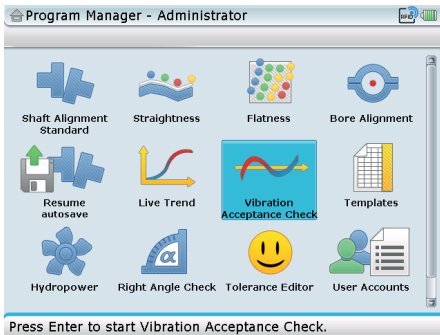
- ▶ The ROTALIGN Ultra Shaft firmware must be licenced to the Advanced level.
- ▶ The application Vibration Acceptance Check will run only on ROTALIGN Ultra / ROTALIGN Ultra iS computers ALI 4.202 with black faceplate and serial number greater than 43213000.
- ▶ Use the latest ROTALIGN Ultra Shaft firmware version which is saved in the USB memory stick ALI 4.451 and delivered with the add-on module. The latest ROTALIGN Ultra Shaft firmware version may also be downloaded from the official PRÜFTECHNIK website – www.pruftechnik.com. Detailed instructions on how to update the firmware is found in the respective operating handbook.

Upgrading to Shaft Advanced and Shaft Expert

To be able to use Vibration Acceptance Check, ROTALIGN Ultra Shaft firmware must be licenced to Advanced level. For this upgrade, the Shaft Advanced firmware registration certificate ALI 4.741 must be purchased. The add-on module with VIBTOOL ALI 4.005/2-30 contains the ROTALIGN Ultra Shaft Expert firmware voucher ALI 4.743. This voucher is used to acquire the licence code to activate the Shaft Expert alignment platform. This platform is necessary for Live Trend [refer to DOC 04.100.en] and Multiple Coupling [refer to DOC 04.805.en].


Getting started

Press and hold  the 'On/Off/Enter' key briefly. The opening screen below appears.



Use the navigation keys to highlight the 'Vibration Acceptance Check' icon.

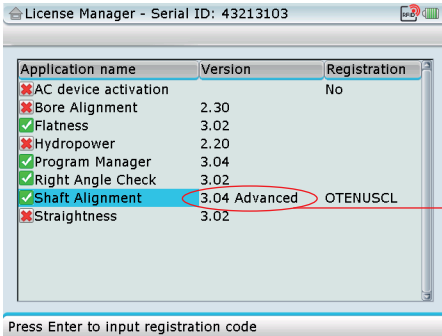


With the icon 'Vibration Acceptance Check' highlighted, press  to start the application. If the application has not yet been licenced, a hint appears as shown in the next figure.




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When the hint above appears, select 'Configuration' -> 'Licence Manager' and proceed to enter the registration key (licence code) contained in the ROTALIGN Ultra Shaft Advanced registration certificate ALI 4.741. After successful registration, the suffix 'Advanced' appears next to the version number.

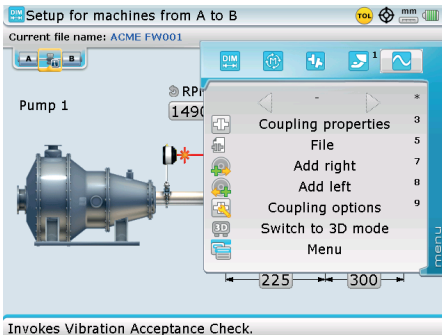



Shaft feature level

The application 'Vibration Acceptance Check' can now be started. The 'Vibration Acceptance Check' wizard may be opened directly from the "Program Manager" screen or directly from within a shaft alignment file.

From the "Program Manager" screen, highlight the 'Vibration Acceptance Check' icon then press  to open the 'Vibration Acceptance Check settings' wizard.

Alternatively, as the application Vibration Acceptance Check is fully integrated in the Shaft application, the wizard may be opened directly from within a shaft alignment file.



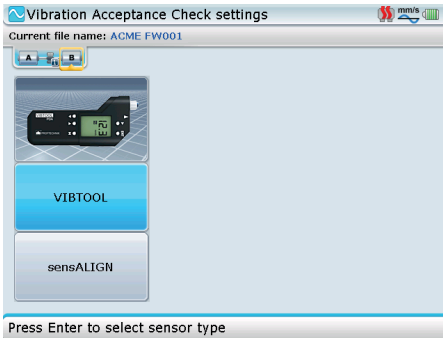
To open the Vibration Acceptance Check wizard from a shaft alignment file, use the navigation keys to highlight the vibration icon [the sine wave] then press .






After confirming selection, the wizard opens, showing the two measurement options available:

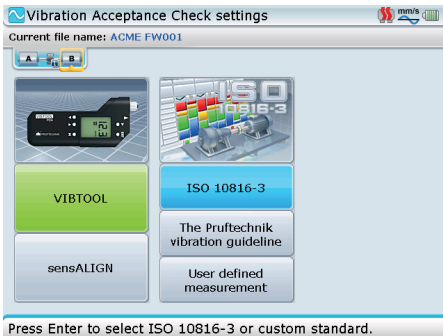
- › Measurement using VIBTOOL
- › Measurement using sensALIGN sensor

Measurement using VIBTOOL



In this example, the VIBTOOL option has been highlighted for selection.

Use  /  and highlight the measurement option to be used then press  to confirm selection.






The 'Vibration Acceptance Check settings' wizard is used to select type of measurement to be carried out and set the appropriate machine classification.

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When using the VIBTOOL option, three measurement standards are available:

- ▶ The first is measuring vibration severity according to ISO 10816-3
- ▶ The second standard is based on PRÜFTECHNIK vibration guidelines
- ▶ The third option is a user-defined measurement




Applying ISO vibration monitoring standard


Use  /  and highlight 'ISO 10816-3' [see previous screen] then press  to measure vibration severity according to ISO 10816-3., highlighting the option and confirming selection opens the wizard screen below.

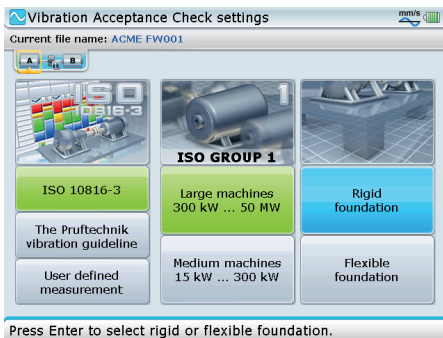






The appropriate machine classification may also be set by pressing  to open the machine power and foundation columns.



ISO 10816-3 classification in imperial units:
 15 kW [20 HP]
 300 kW [400 HP]
 50 MW [67000 HP]

Use  /  to highlight the power of the machine to be measured confirming selection by pressing . The foundation selection column opens.

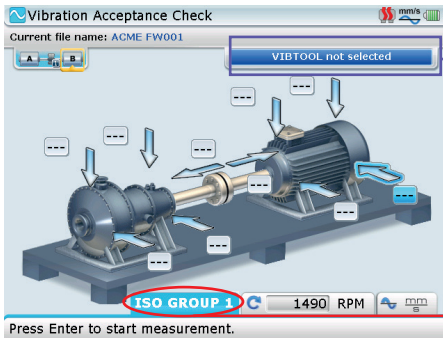
Alternatively, pressing  after highlighting the machine power opens the foundation column as shown below.



Use  /  to highlight type of foundation then proceed to the measurement screen by pressing either  or .

After completing the machine classification by selecting the type of foundation used, pressing either  or  opens the measurement screen as shown next.

Getting started with Vibration Acceptance Check

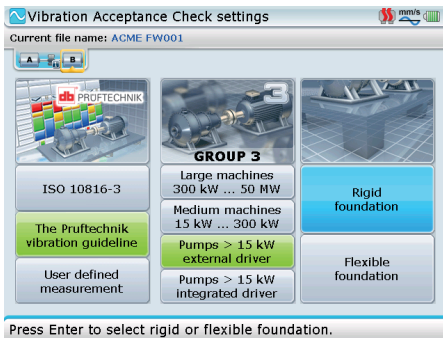


Indicates that VIBTOOL has not yet been activated

Indicates that measurement option is according to ISO vibration standard.

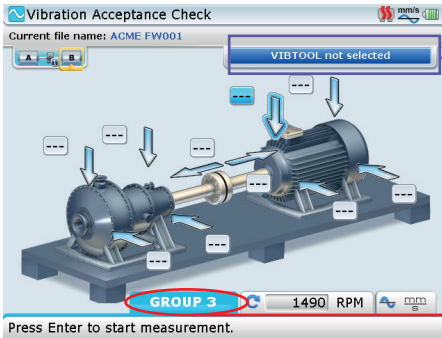
Applying PRÜFTECHNIK vibration guidelines

If taking measurements based on PRÜFTECHNIK vibration guidelines, machines are classified into four groups. Any of the four groups may be selected by using / to highlight 'The PRÜFTECHNIK vibration guideline' then pressing or . The required machine group is then selected using / .



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After selecting the type of foundation used, press either or to open the measurement screen as shown next.

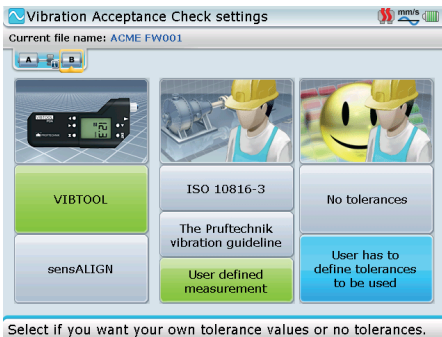




Indicates that VIBTOOL has not yet been activated



Indicates that measurement is based on PRÜFTECHNIK vibration guidelines.

Applying customer-defined tolerances

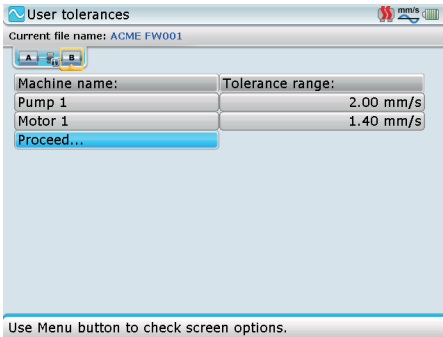
If a user-defined measurement is selected, the possibility to define customized tolerances is available. After highlighting 'User-defined measurement', press either  or  to open the tolerances column, then use  /  to highlight tolerance definition.



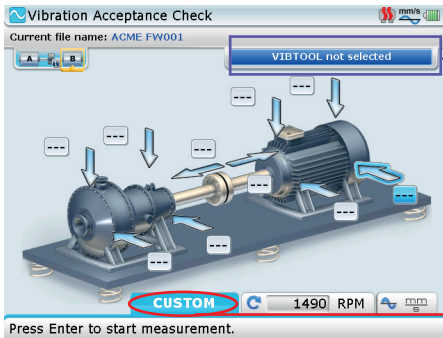
If 'No tolerances' is selected, confirming selection by pressing  or  opens the measurement screen.

With tolerance definition highlighted, press either  or  to open the "User tolerances" screen. Edit the tolerance range as required, then use the navigation keys and highlight the 'Proceed' button (refer to next screen).

Getting started with Vibration Acceptance Check






Confirm selection by pressing . The measurement screen opens.

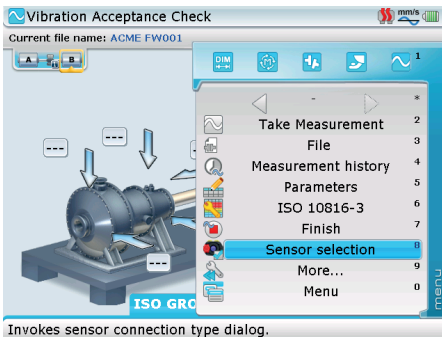


Indicates that measurement option is according to ISO vibration standard.

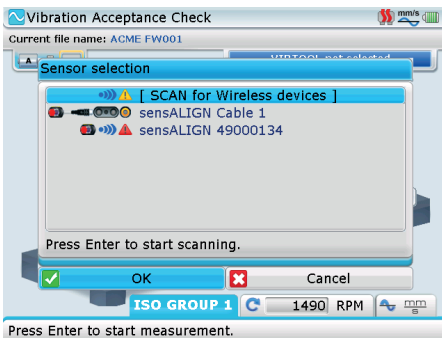
Indicates that measurement option is user-defined.




Establishing communication between VIBTOOL and ROTALIGN Ultra / ROTALIGN Ultra iS computer

Transfer of measurement data between VIBTOOL and ROTALIGN Ultra/ ROTALIGN Ultra iS computer is via Bluetooth®. For measurement to be received on the ROTALIGN Ultra/ROTALIGN Ultra iS computer, communication between the two devices must be established. When in the measurement screen, press  to open the context menu then use  /  and highlight the item 'Sensor selection'.

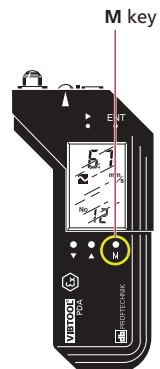


Confirm selection by pressing . The "Sensor selection" window appears.

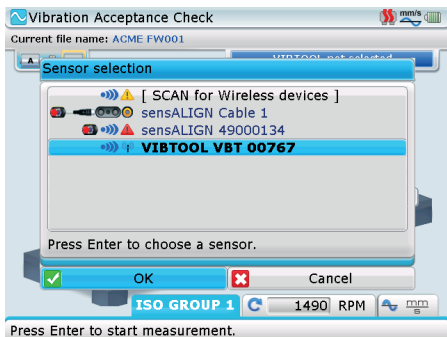





Use  /  to highlight 'Scan for wireless devices', then press  to confirm selection.

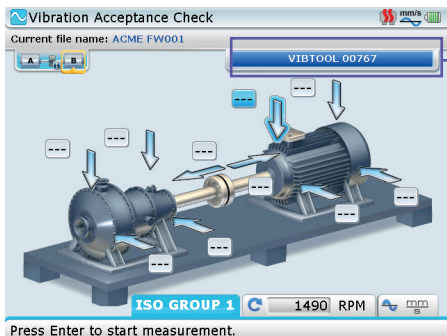
Switch VIBTOOL on by pressing its **M** key. It will then be detected automatically by the ROTALIGN Ultra/ROTALIGN Ultra iS computer and listed in the selection screen.



Getting started with Vibration Acceptance Check



Use   and select the active VIBTOOL then confirm selection by pressing  and proceed with measurement.



The measurement status bar shows the active VIBTOOL.

- 14 Use the navigation keys to highlight the required measurement locations. The actual measurement location is denoted with the tip of the highlighted arrow.

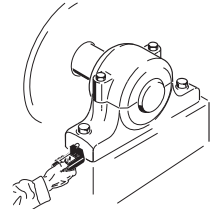
Where to measure?

To obtain sufficient data for vibration analysis in compliance with ISO 10816-3, following measurements should be made for each individual machine: four radial readings (offset from each other by 90°) and one axial reading.

In practice, non-critical machines may require only two radial measurements. If however, vibration increases the other locations should be measured as well.

Ideal measurement position

When taking vibration measurements using VIBTOOL, care must be taken to position the vibration sensor head correctly. If VIBTOOL is not held correctly against the machine, unreliable measurement values and damage can occur. The measurement surface must be metallic, flat and clean.



Press sensor firmly to the measurement location.

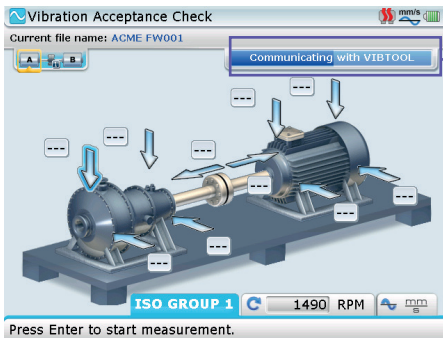
Vibration sensor head



Taking measurement

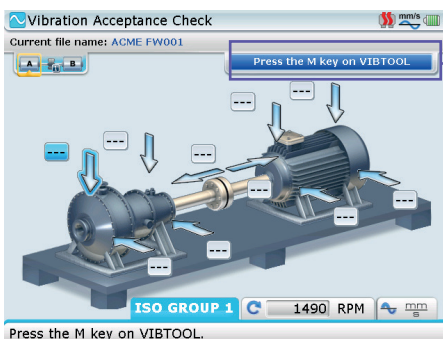
Having established Bluetooth® communication, measurement can now be started.

1. If off, switch VIBTOOL on by pressing its **M** key.
2. Place and hold the VIBTOOL sensor head against the first measurement location.
3. Use the ROTALIGN Ultra/ROTALIGN Ultra iS computer navigation keys and highlight the location to be measured, then press the ROTALIGN Ultra/ROTALIGN Ultra iS computer **Enter** key to start measurement.



The measurement status bar indicates that communication between ROTALIGN Ultra/ROTALIGN Ultra iS computer and VIBTOOL has been established.

4. Now press the VIBTOOL **M** key to take measurement at the selected location, making sure that the direction of measurement and the contact pressure to the VIBTOOL vibration sensor head is correct.



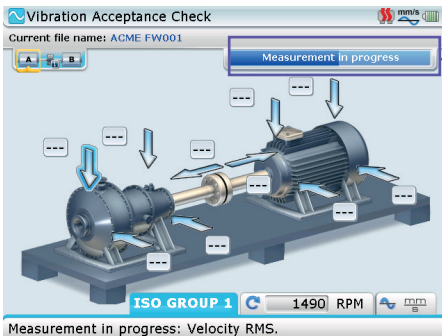
The measurement status bar shows the hint to press the VIBTOOL 'M' key.

Getting started with Vibration Acceptance Check

Pay special attention and follow the on-screen hints that appear during measurement.

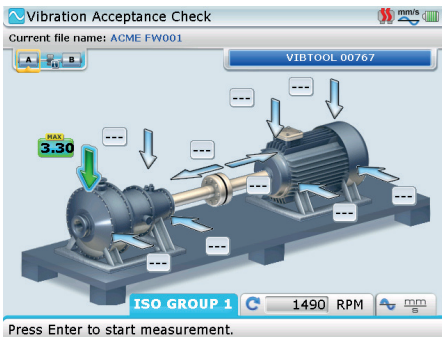


During measurement keep the sensor head firmly pressed against the measurement point and hold it still. Measurement duration depends upon signal strength and stability. The stronger and more constant the measurement signal is, the quicker the display response will be.



The measurement status bar indicates that measurement is in progress.

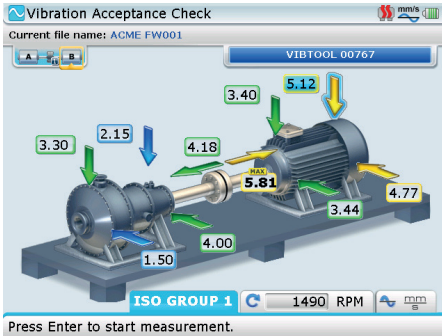
5. After VIBTOOL has carried out the measurement, it automatically transmits the measurement result to the ROTALIGN Ultra/ROALIGN Ultra iS computer. The measured results being displayed on both VIBTOOL and ROTALIGN Ultra/ROALIGN Ultra iS computer screens.



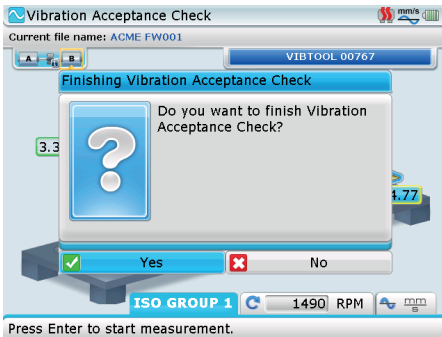
The position arrow and the perimeter of the value box for any measured location darkens to indicate the position has been measured. Note that the colour of the arrow indicates the vibration severity.




6. Use the navigation keys to highlight the next measurement position and repeat steps 2 to 5 for all required measurement locations.

According to ISO 10816-3 10 stipulated measurements must be taken for a machine set [e.g. motor-pump combination].

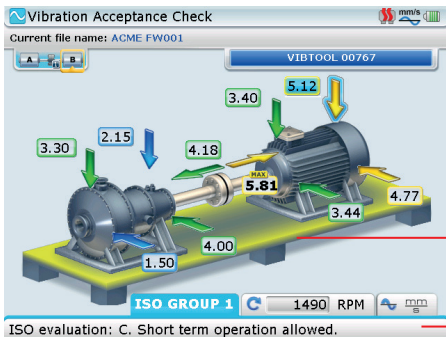


After measurement is completed, a hint appears requesting whether “Vibration Acceptance Check” should be finished.



Use  /  to highlight ‘Yes’ then confirm selection by pressing . The evaluation is displayed in both the status line and by the colour of the machine foundation.

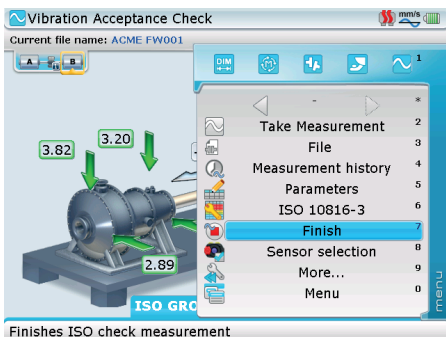
Getting started with Vibration Acceptance Check



Machine foundation coded yellow

Status line indicating ISO evaluation C

Should it be necessary to end measurement before taking all 10 stipulated locations [if all locations are not necessarily required], press **Menu** to open the context menu. Use **▲**/**▼** to highlight the item 'Finish'.




Finishes ISO check measurement

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Press **Enter** to confirm selection. The 'Finishing Vibration Acceptance Check' hint appears.



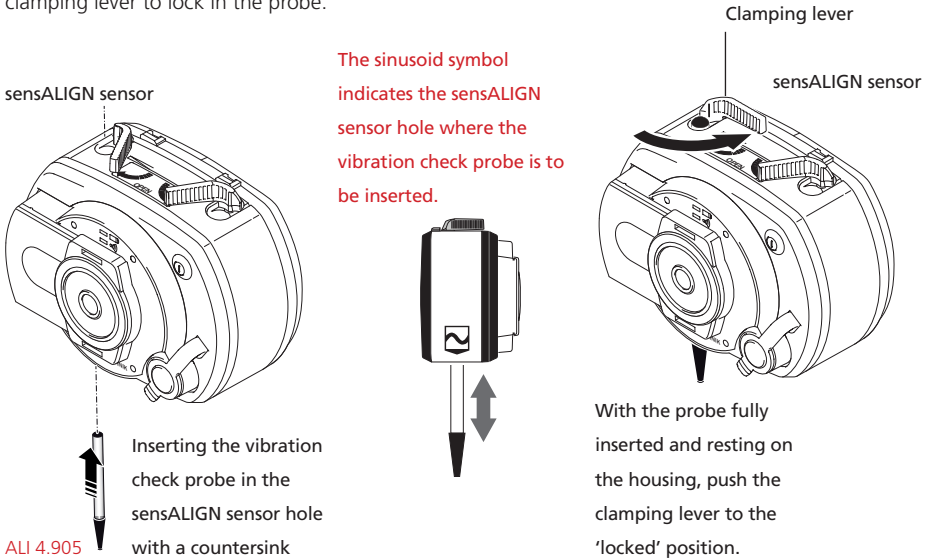
Press Enter to start measurement.

Measurement is stopped when 'Yes' is highlighted and  pressed to confirm selection.



Measurement using sensALIGN sensor

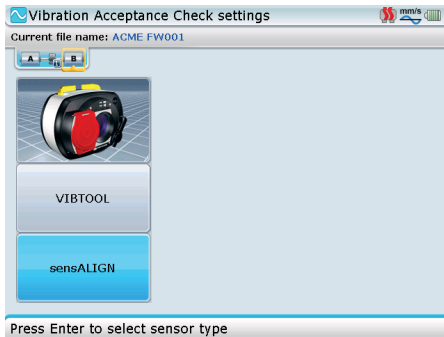
Applying the vibration check probe


Vibration velocity measurement is also be carried out using sensALIGN sensor ALI 4.900 used together with the vibration check probe ALI 4.905. Insert the probe in the sensALIGN sensor hole with a countersink such that the black base of the probe tip rests firmly on the sensor housing. Use the clamping lever to lock in the probe.

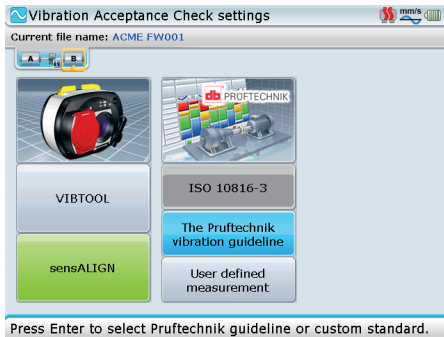


Selecting the sensALIGN sensor option

From the “Vibration Acceptance Check settings” screen, use  /  and highlight the measurement option sensALIGN



With sensALIGN highlighted, press  to confirm selection.



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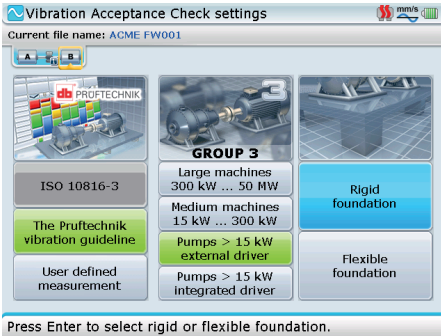
It is NOT possible to measure vibration according to ISO 10816-3 if using the sensALIGN sensor option.



The two available measurement standards are:

- ▶ PRÜFTECHNIK vibration guidelines
- ▶ User-defined measurement

After selecting the desired measurement standard, proceed to classify the machine appropriately by selecting the machine power and type of mounting foundation. [Please refer to descriptions given under ‘Measuring using VIBTOOL starting on page 8.]



In this example, PRUFTECHNIK vibration guidelines are applied to a group 3 machine mounted on a rigid foundation.

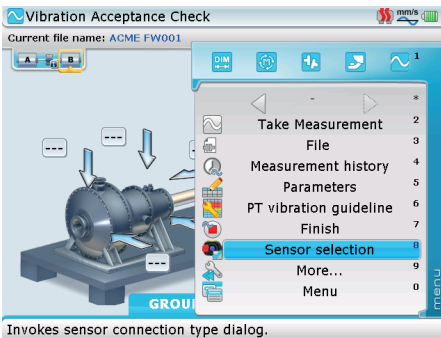
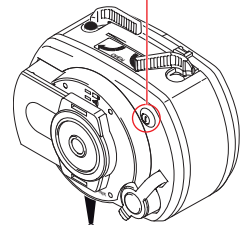
After completing the machine classification by selecting the type of foundation used, pressing either or opens the measurement screen.

Establishing communication between sensALIGN sensor and ROTALIGN Ultra / ROTALIGN Ultra iS computer

Switch sensALIGN sensor on by pressing its On/Off push button switch.

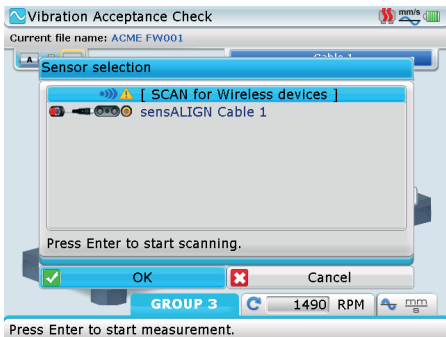
With the measurement screen open, press then use / and highlight the item 'Sensor selection'.




On/Off push button switch






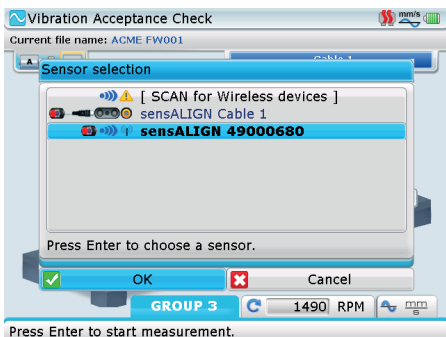
Confirm selection by pressing . The sensor selection window opens.

Getting started with Vibration Acceptance Check






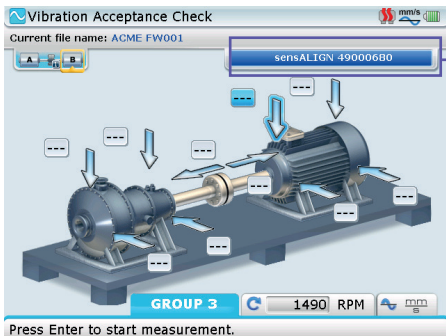
Note: If the active sensALIGN sensor is already listed in the “Sensor selection” screen, use / and select this particular sensor, then confirm selection by pressing .

Use / to highlight ‘Scan for wireless devices’, then press  to confirm selection. sensALIGN sensor will be detected automatically by the ROTALIGN Ultra/ROALIGN Ultra iS computer and listed in the selection screen.



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Use / and select the active sensALIGN sensor then confirm selection by pressing  and proceed with measurement.



The measurement status bar indicates that communication between ROTALIGN Ultra/ROALIGN Ultra iS computer and the active sensALIGN sensor has been established.

Use the navigation keys to highlight the required measurement locations. The actual measurement location is denoted with the tip of the highlighted arrow.

Taking measurement


With the probe securely locked in, place it on the appropriate measurement location while holding the sensALIGN sensor firmly.

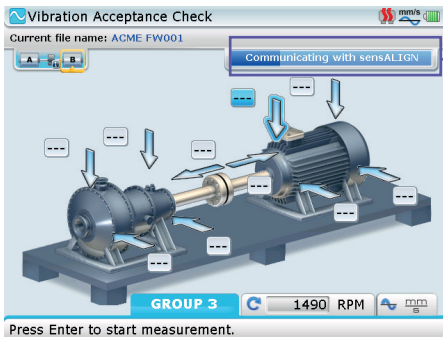


Exercise CAUTION when carrying out vibration measurement using the vibration check probe.



Transferring vibration measurement results via Bluetooth to ROTALIGN Ultra/ROTALIGN Ultra iS computer.

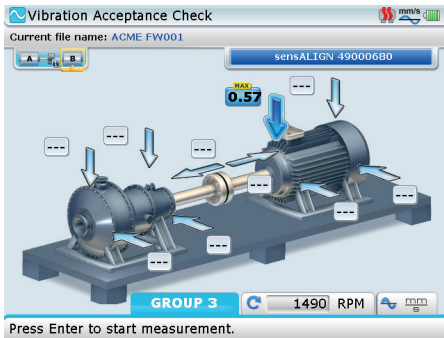
Press  to start measurement at the location where the tip of the vibration check probe is placed. Hold sensor firmly until measurement is completed. The time taken depends on the severity of the vibration, and can take up to 15 seconds.



The measurement status bar indicates that measurement is in progress.

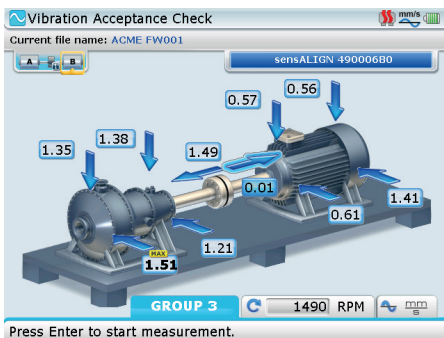
When measurement is completed, it is displayed on the ROTALIGN Ultra/ROTALIGN Ultra iS computer screen.

Getting started with Vibration Acceptance Check

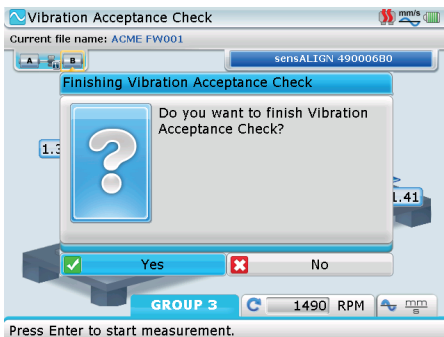


The position arrow and the perimeter of the value box for any measured location darkens to indicate the position has been measured. Note that the colour of the arrow indicates the vibration severity.

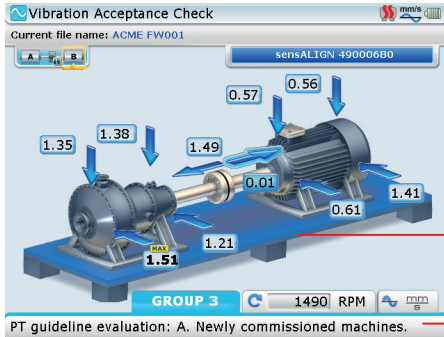
Use the navigation keys to highlight the next measurement position and repeat the measurement procedure as described previously for all required measurement locations.



- 24 After measurement is completed, a hint appears requesting whether “Vibration Acceptance Check” should be finished.



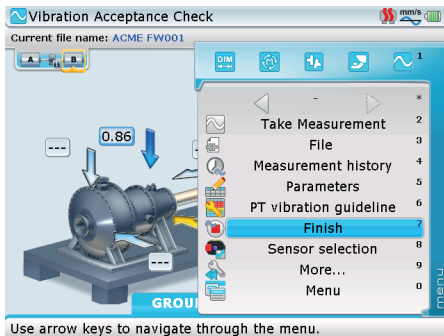
Use / to highlight 'Yes' then confirm selection by pressing . The evaluation is displayed in both the status line and by the colour of the machine foundation.



Machine foundation coded blue

Status line indicating PRÜFTECHNIK vibration guideline evaluation A


Should it be necessary to end measurement before taking all 10 stipulated locations [if all locations are not necessarily required], press to open the context menu. Use / to highlight the item 'Finish'.



Use arrow keys to navigate through the menu.

Press to confirm selection. The 'Finishing Vibration Acceptance Check' hint appears.



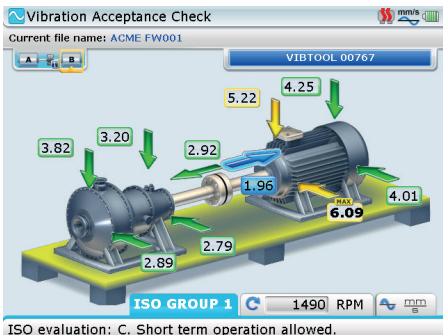
Measurement is stopped when 'Yes' is highlighted and  pressed to confirm selection.

Evaluation

According to ISO 10816-3

The resulting colour of the machine foundation illustrates the vibration evaluation scale. The displayed foundation colour corresponds to the highest measured vibration value.


26

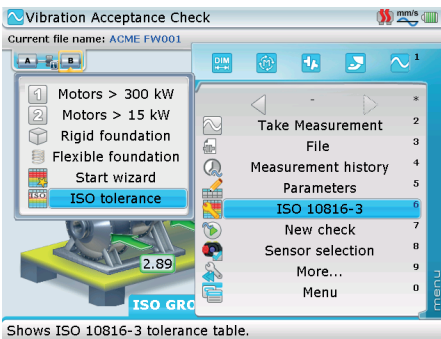


In this example, the highest noted value is 6.09 mm/s and its corresponding position arrow is yellow. The machinery foundation is therefore displayed with the colour yellow.

ISO 10816-3 separates the working conditions into four colour zones – here also the colour of the foundations:


New machine	Blue	Newly commissioned
Long-term	Green	Indefinite continuous operation
Short-term	Yellow	Short-term operation allowed
Damaged	Red	Vibration is causing damage

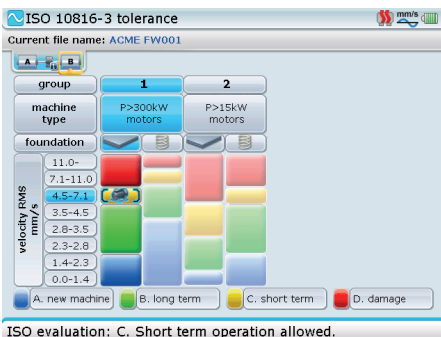
The ISO 10816-3 evaluation scale displayed in tabular format may also be accessed via the evaluation screen context menu. Open the context menu by pressing  while in the evaluation screen.



Use the navigation keys to highlight 'ISO 10816-3' -> 'ISO tolerance'.

Shows ISO 10816-3 tolerance table.

With the item 'ISO tolerance' highlighted, press  to open the tabular evaluation scale.

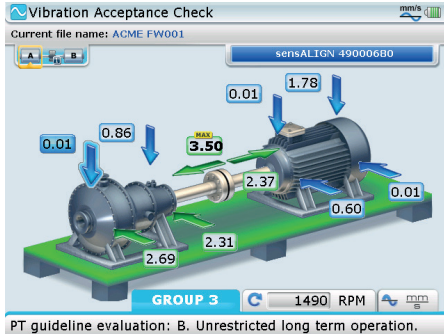


Note that the highlighted classification are those of the machine file currently open.

ISO evaluation: C. Short term operation allowed.

According to PRÜFTECHNIK vibration guidelines


In this case, the displayed foundation colour corresponds to the highest measured vibration value.

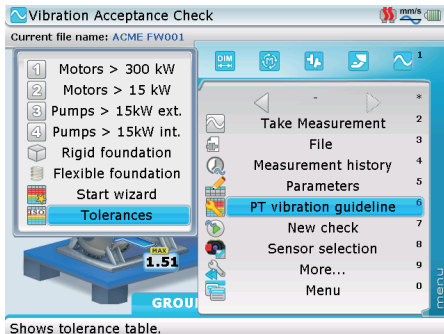


In this example, the highest noted value is 3.50 mm/s and its corresponding position arrow is green. The machinery foundation is therefore displayed with the colour green.

PRÜFTECHNIK vibration guidelines also separate the working conditions into four colour zones:


New machine	Blue	Newly commissioned
Long-term	Green	Indefinite continuous operation
Short-term	Yellow	Short-term operation allowed
Damaged	Red	Vibration is causing damage

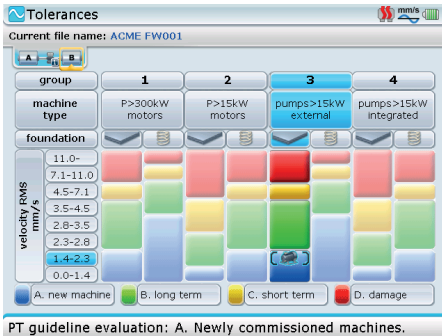
- 28 The PRÜFTECHNIK vibration guidelines evaluation scale displayed in tabular format may also be accessed via the evaluation screen context menu. Open the context menu by pressing  while in the evaluation screen.



Use the navigation keys and highlight 'PT vibration guideline' -> 'Tolerances'.

Shows tolerance table.

With the submenu item 'Tolerances' highlighted, press  to open the tabular evaluation scale.




Note that the highlighted classification are those of the machine file currently open.

Measurement options

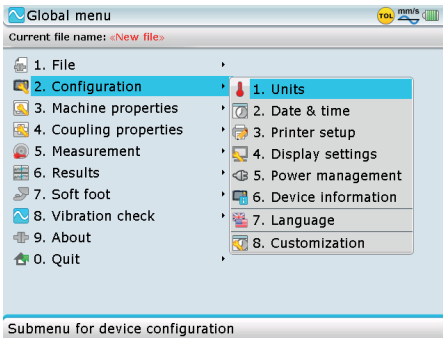
The following measurement options are described below:

- ▶ Unit settings
- ▶ Measurement of rotational speed (RPM) and temperature – measurement of RPM is only possible when using VIBTOOL
- ▶ Manual entry and display of measurement values and parameters
- ▶ Changing application from Shaft Alignment to Vibration Analysis
- ▶ Editing machine properties
- ▶ Measurement history

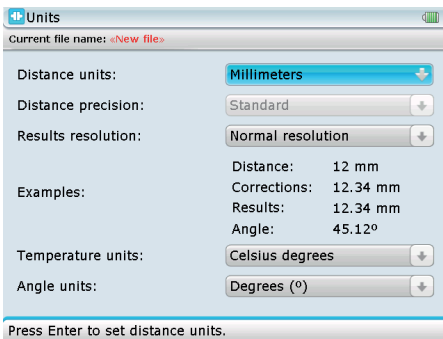
Unit settings

Vibration velocity is measured in either mm/s or in inch/s. The units are set within ROTALIGN Ultra/ ROTALIGN Ultra iS computer for use with VIBTOOL. Access units using the global menu item 'Configuration'. The global menu may be opened from any screen by pressing  twice. With the global menu open, use the navigation keys to highlight 'Configuration' -> 'Units'.

Getting started with Vibration Acceptance Check




Confirm selection by pressing . The "Units" screen opens.

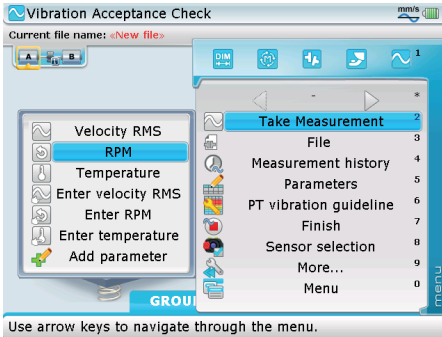


The "Units" screen is used to set the required units.

Measuring rotational speed (RPM) and temperature using VIBTOOL

RPM and temperature measured using VIBTOOL can be displayed on the ROTALIGN Ultra/ ROTALIGN Ultra iS computer.

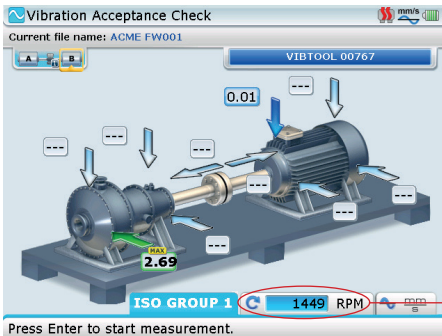
While in the "Vibration Acceptance Check" screen, press  to open the context menu. Use the navigation keys to highlight either item ('RPM'/'Temperature').



To select RPM use the navigation keys and highlight 'Take measurement' -> 'RPM'.

Press  to confirm selection.

If VIBTOOL is switched on and Bluetooth® communication activated, the measured RPM is transmitted and automatically displayed on the ROTALIGN Ultra computer.




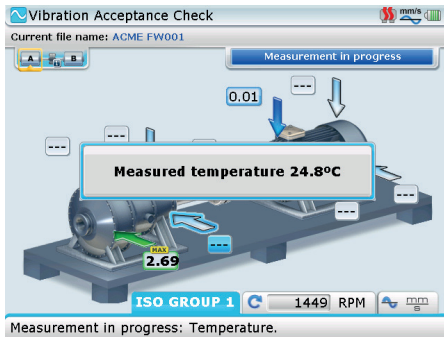
For further information regarding RPM measurement and the related measurement sensors please refer to the VIBTOOL operating instructions VIB 9.497.G.

The machine RPM is an important factor in determining the correct vibration values. For machines with an RPM > 600, measurement is carried out with a frequency range of 10-1000 Hz as compared to those with a lower RPM where the frequency range is 2-1000 Hz. Therefore, the machine RPM must be established before taking any vibration measurements.

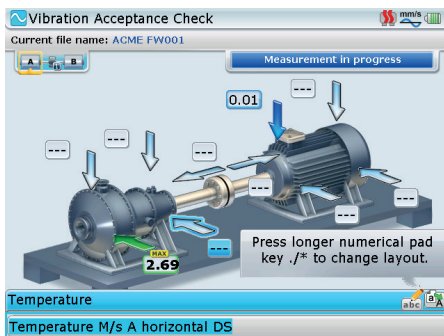


Getting started with Vibration Acceptance Check


To carry out temperature measurements, use the navigation keys to highlight the location where temperature is to be measured. Use the screen context menu to highlight 'Take measurement' -> 'Temperature' then press  to confirm selection. Follow the on-screen hints to carry out and record the measurement.



After the temperature has been measured using VIBTOOL, the measured value is transferred via wireless Bluetooth® communication and displayed on the ROTALIGN Ultra/ ROTALIGN Ultra iS computer.




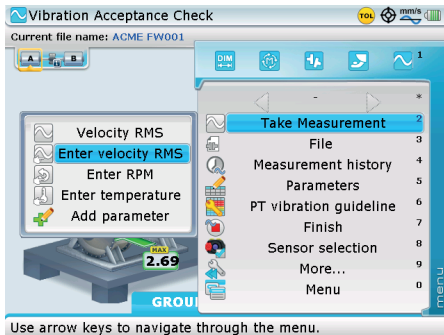
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The editing box then appears with the hint to the location measured [e.g. "Temperature M/s A horizontal NDS" – M/s stands for machine and NDS stands for 'Non-Drive Side'. The 'Driver Side' is denoted using DS]. If required, the parameter name may be edited within the editing box and confirmed by pressing . The accepted parameter name will appear on the measurement table alongside the measured temperature.

Manual entry of measurement values and parameters

When using either VIBTOOL or sensALIGN sensor, known measurement values and parameters may be manually entered.

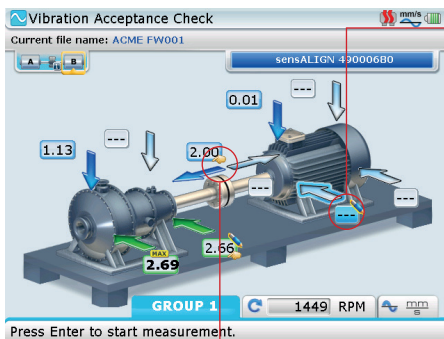
While in “Vibration Acceptance Check” screen, press  then use the following ‘Take measurement’ submenu items: ‘Enter velocity RMS’, ‘Enter RPM’, ‘Enter temperature’ and ‘Add parameter’ to enter desired parameter.



This example uses sensALIGN sensor.




Use arrow keys to navigate through the menu.

The “Vibration Acceptance Check” screen displays vibration values. Recorded temperature values or any other parameters are indicated as present through use of a pencil icon. Note that the hand icon denotes that the displayed vibration value has been manually entered.

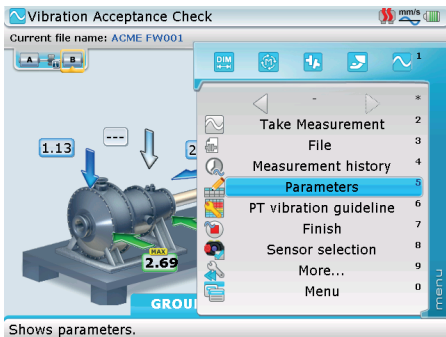


The pencil icon at any measurement location denotes the presence of a none vibration measurement such as temperature. The parameters are displayed using the context menu item ‘Parameters’.

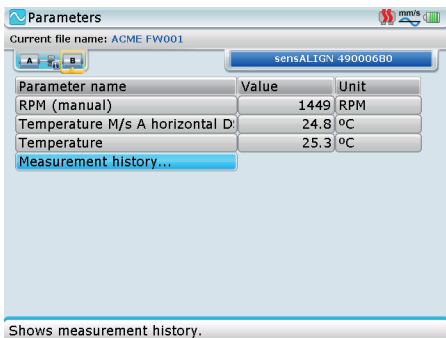
Hand icon - for manually entered vibration values

To establish the type of information recorded for any particular measurement point, press , then use  /  and highlight the context menu item ‘Parameters’.

Getting started with Vibration Acceptance Check

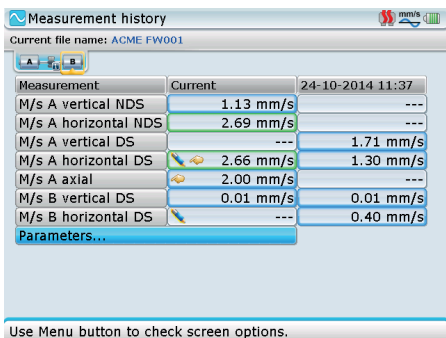


Press **Enter** to confirm selection. The “Parameters” screen opens, displaying all none vibration parameters and values.



The “Parameters” screen displays all manually entered and measured none vibration parameters. The screen may also be used to access the “Measurement history” screen.

34 While in the “Parameters” screen, measurement history may be accessed by highlighting the button ‘Measurement history...’ then pressing **Enter** to confirm selection. The “Measurement history” screen displays the vibration values.







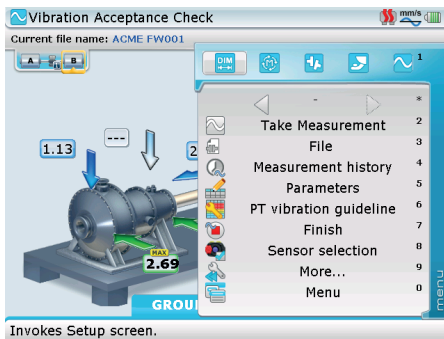
The “Measurement history” screen displays the last two sets of vibration measurements taken. The current measurement set may be deleted by pressing **Menu** then highlighting the menu item ‘Delete measurement set’ and confirming selection by pressing **Enter**.

The “Measurement history” screen may also be used to access the “Parameters” screen.


Switching between the vibration and shaft alignment applications

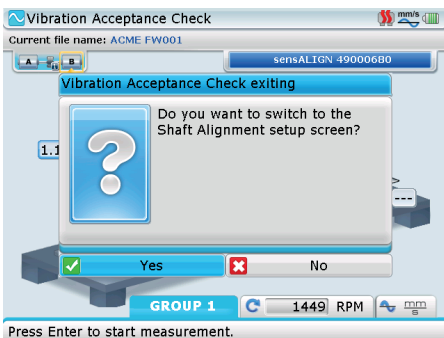
Existing shaft alignment files can be opened and used to carry out vibration measurements. All parameters entered during set-up are taken over for the vibration measurement.




As Vibration Acceptance Check is fully integrated in the Shaft Alignment application, it is possible to revert readily from vibration measurements to shaft alignment measurement. Press  while in the "Vibration Acceptance Check" screen then use the navigation keys and highlight either  or  or .



In this example, the Shaft Alignment icon highlighted is the 'Dimensions' icon.




With the 'DIM' icon highlighted, press  to confirm selection. A hint appears requesting the confirmation to quit Vibration Acceptance Check.




Use  /  and highlight 'Yes' then confirm selection by pressing . You may then proceed with the Shaft Alignment application.

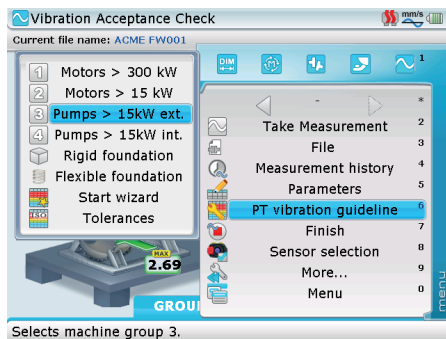
For details on Shaft Alignment, please refer to the respective system operating handbook.

Getting started with Vibration Acceptance Check


When in Shaft Alignment, one may revert back to Vibration Acceptance Check by pressing  then using the navigation key to highlight  the 'Vibration Acceptance Check' icon, and confirming selection by pressing .

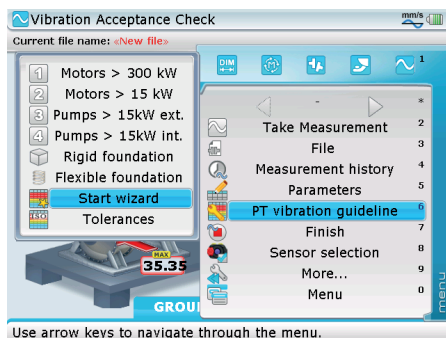
Changing machine classification or foundation characteristics during or after measurement


If necessary, the machine classification or foundation characteristics may be changed during or after measurement. To do this, press  while in the "Vibration Acceptance Check" screen. The context menu appears. Use the navigation keys and highlight the applied vibration monitoring standard – this could be either 'ISO 10816-3' or 'PT vibration guideline', followed by the required machine classification or type of foundation.

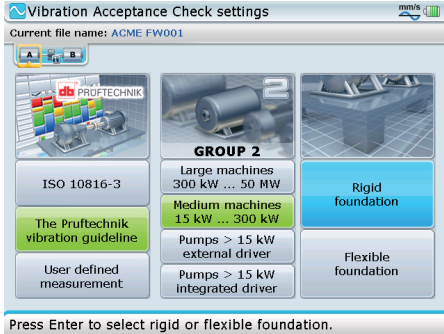


In this example, the applied vibration monitoring standard is PRÜFTECHNIK vibration guidelines.

- 36 After highlighting the required characteristic, press  to confirm selection. The submenu item 'Start wizard' is used to start the 'Vibration Acceptance Check settings' wizard. This function may be used during and after measurement to classify machines and define the foundation.



Use the navigation keys and highlight the submenu item 'Start wizard' then press  to confirm selection.



The applied vibration monitoring standard, the machine classification and the foundation characteristic may be changed using the 'Vibration Acceptance Check settings' wizard.

Saving measurement files

Measurement files may be saved in the same manner as described in the respective ROTALIGN Ultra/ROTALIGN Ultra iS Shaft operating handbook.


Saving report as PDF

File measurement reports may be saved directly from the system as a PDF copy. To do this please follow the procedure described in the respective ROTALIGN Ultra/ROTALIGN Ultra iS Shaft operating handbook.

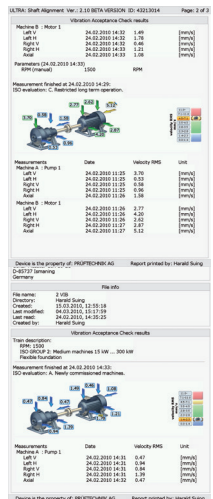
A printout of the measurement report saved as a PDF file.

How to turn VIBTOOL ON or OFF

Turn on VIBTOOL by pressing the 'M' key until the LCD lights up. After about one second, the device enters Bluetooth mode, signified by the text 'bt' at the bottom of the screen.

Turn off VIBTOOL by pressing [>] the DOWN key and [>] the UP key simultaneously.

For detailed operation of VIBTOOL please refer to the VIBTOOL operating instructions VIB 9.497 G.



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