PRO-3200 : Vibration Measure Procedures

Important Notes :

- Surface of a motor or other machine usually is curved and sometimes with uneven spot-holes, the installation of the vibration gauge must be very secured, otherwise the vibration of the gauge body itself will cause unreasonably high readings. When this happens, check the firmness of the contact and may use TECOM's selectable magnet Foot Stands to fit the surface better.
- 2. Due to the strong magnetic force, please be careful avoiding direct contact of the two magnets. In case the two magnets contact each other, use screw-driver-like tools to separate them.

Follow the ISO-10816 procedures, use the two vibration gauges to measure the vertical and horizontal vibrations RMS data at the specified locations. (Fig. 2)

1-1. Vertical measurement

- Install the 1stVB-200 ST at the location shown as Fig. 2
- Take Z-axis readings (Fig.1)

1-2. Horizontal measurement

- Install the 2nd VB-200ST at the location shown as Fig. 2
- Take Z-axis readings (Fig.1)
- 2 With the parameters of the motor being entered, the ISO 18016 RMS limits are already in the gateway. The measured vertical and horizontal RMS readings are to compare against the limits. Any one or both readings exceed the ISO 10816 limits, the monitor is considered not normal.
- 3 Get into the diagnosis procedures of the Five most-likely defects. Just follow the interactive prompts between the Gateway and your smart-phone. Step by step, until diagnosis is complete.



3 Axial X/Y/Z Position

Figure 1



Figure 2

※ Note: even if the RMS values are not over the limits, you can still get into the diagnosis procedures, and record the results. These can be used as crucial references for future maintenance.

4 All reports of measure, analysis and diagnosis are automatically generated, distributed electronically and can be printed on hard copies as well.

Remarks:

- a. VB-200 is a tri-axial sensor, while the Z-axis data is used for limit comparison and diagnosis, the X/Y axial data are related to moving trajectory, can be used for advanced analysis.
- b. In case the diagnosis of some items result in "remain tracking", TECOM's "Trend tracking instrument" can be used to gain trending data, for maintenance suggestions.