



TECHNOTE 1

Automatic Vibration Analysis of an industrial fan (Cement plant) with the new VSHOOTER+®:



The new unique Auto Vibration Analyzer VSHOOTER+® is able to easily and quickly analyze rotating machine like an electrical motor or a pump or a fan or a bearing housing or a spindle.

With its special dedicated MCP (Machine Condition Picture) firmware, VSHOOTER+® automatically diagnoses the machine excessive vibration causes like the Unbalance, the Misalignment, the Looseness, the Bearing lubrication....

The MCP result is given around the machine picture (embedded visible camera) with an Easy-to-Understand summary table with all vibration problems and color indications.

VSHOOTER+® measures vibration Trending Overall values (ISO RMS-Bearing-T°), FFT spectrums values and Time Signal values.

VSHOOTER+® is also able to automatically focus on UNBALANCE or MISALIGNMENT severity vibration problems with the unique BALISHOOTER® firmware.

Of course, you can store all the measurement data in the memory to download to PC to create your own reports.



VSHOOTER+® NEWS
N° 1- 06/2022

**WITH TOUCHSCREEN
TECHNOLOGY**

**AUTO VIBRATION
ANALYZER FOR
PREDICTIVE
MAINTENANCE**

**WITH VISIBLE &
THERMAL CAMERAS**

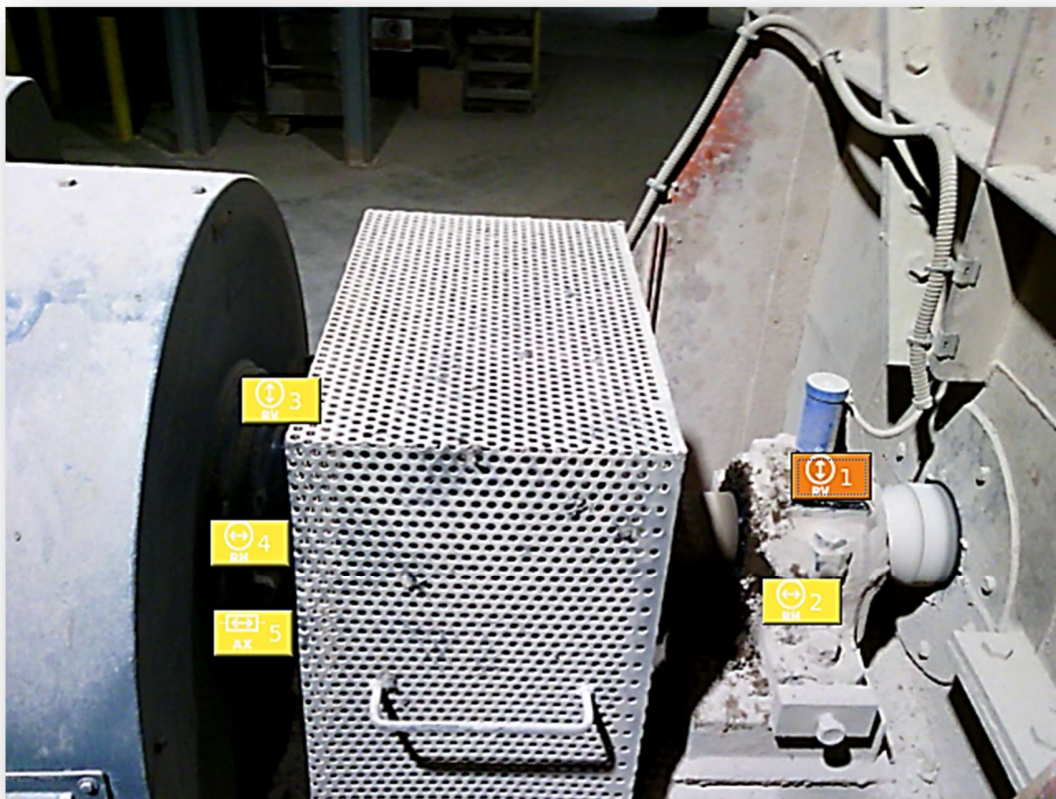
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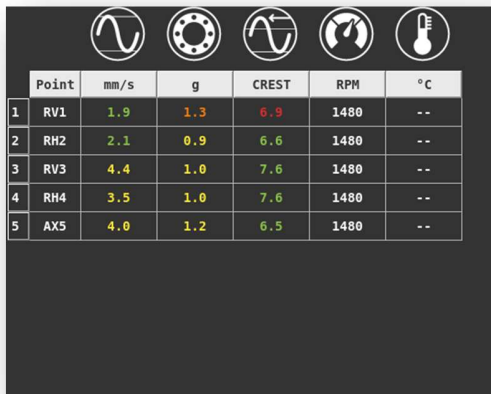
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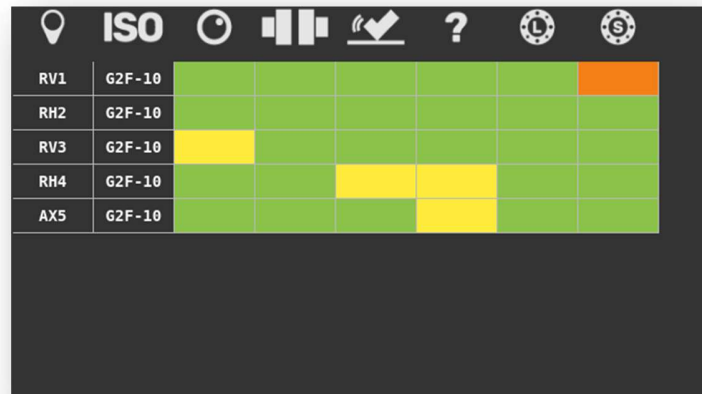
Cement plant industrial smoke exhaust blower/fan (1480 RPM- 650 kW)



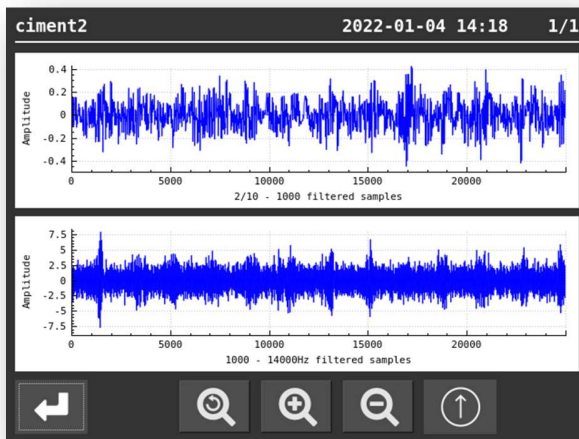
MCP (Machine Condition Picture) with 5x measured points (2xV, 2xH, 1xAX) created from the *VSHOOTER+®* capacitive touch screen.



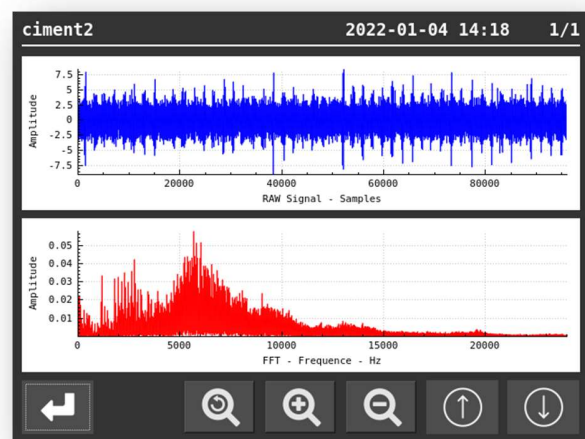
a)



b)



c)



d)

You can see all overall vibration measurements (a) with severity color indications (Green (New) / Yellow (Acceptable) / Orange (Abnormal) / Red (Dangerous)).

mm/s is the ISO 10(2)-1000 Hz velocity vibration measurement (RMS), g is the 1000-14000 Hz acceleration bearing measurement (RMS + CREST (useful for lubrication or shock problem detection)).

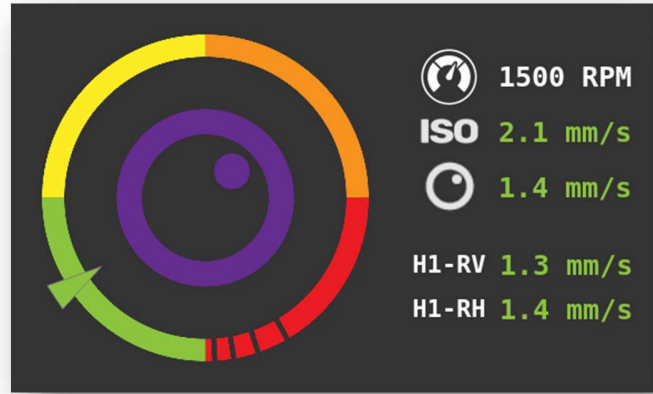
You can see summary table (b) with default problem severities. Here we can see a presence of non-negligible shocks (orange color) in the bearing housing near the fan. It is recommended to follow this bearing to see trending evolution on this shock condition before failure.

For people who have vibration knowledge, they can access to FFT (d) and TIME SIGNAL (c).

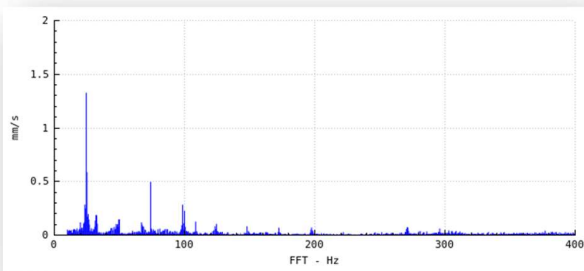
You can measure the machine several times in time, you will then have TRENDING curves.



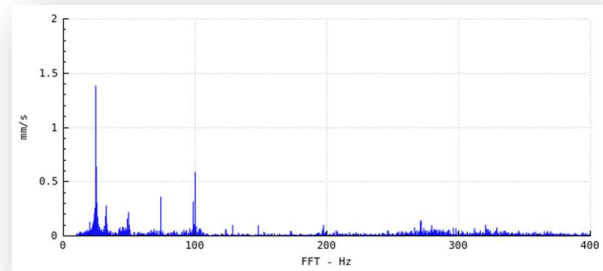
e)



f)



g)



h)

If you only need to check UNBALANCE or MISALIGNMENT severity situation, you should use the new and unique BALISHOOTER® firmware. It will help you to check the situation in a few seconds!

Take a picture of the location you want to measure (e) – Collect both RV and RH measurements – See the UNBALANCE severity result (f) – FFT are also available for details (g) & (h).

Here on this machine, UNBALANCE is OK (GREEN). MISALIGNMENT will add AX measurement.

EASY TO USE – EFFICIENCY – VERSATILE – WITH TRACEABILITY



VSHOOTER+®

AUTO VIBRATION ANALYZER