

1.8.13. PORTABLE VIBRATION DIAGNOSTICS SYSTEM A4900

Bojko A., Sglunda R., “ADASH”, Chez Republic

A4900 Vibrio III instrument is able to do cost effectively all required basic vibration diagnostic measurements. It is actually Machine Condition Expert System. Above means somebody could find bearing condition, lubrication and mechanical faults, like misalignment, unbalance, mechanical looseness and resonance. The instrument performs a lot of operations automatically. It's possible to connect ear phones to listen vibration signal, which is very useful for gearbox and slow running roller bearing diagnosis. The instrument is able to measure machine vibration very precisely, to determine condition, its source and level of damage. The instrument is designed to be a standard technicians and maintenance staff equipment.

Here is a short list of the A4900 futures will be presented and disused in the paper:

- FASIT – Fault Source Identification Tool (see details inside);
- Spectrum FFT analysis;
- Measurement of time signals;
- Built-in stroboscope lamp;
- Determination of machine and bearing conditions;
- Detection of speed;
- Wideband measurements RMS or PEAK acceleration (g) and velocity (mm/s) values;
- Measurement in frequency bands for bearing diagnostics;
- Color display;
- Simultaneous display of two measured values;
- External piezoelectric accelerometer with 100 mV/g sensitivity;
- Overload indicator, sensor fault and cable fault indicators;
- Possibility of connecting headphones for “listening of vibration”;
- Built-in torch;
- Simple operation by three buttons.