



# Bearing Condition Analyzer BVT-111

Three Instruments in one

Bearing Condition Monitoring

Machine Vibration Monitoring

Rotational Speed



## **Bearing Condition Analyzer BVT-111**

MCM Presents a small Micro Processor based diagnostic tool for comprehensive condition analysis of rotating machinery.

Objective measurements of machine condition are needed as a reliable base for preventive maintenance. Now maintenance personal can **analyze bearing condition, measure machine vibration** and **check rotational speed** - with a single and easy to use instrument. The best way is to periodically monitor bearing condition and replace the bearing at the right time by least influencing the production efficiency.

### FEATURES

- **Detect Mechanical Condition of bearings**
- **Detect Lubrication condition of bearings**
- **Damage severity readings for rolling bearings.**
- **Non - contact measurements of rotational speed.**
- **Direct indication of machine condition in terms of good - reduced - bad.**
- **Vibration severity measurements according to ISO recommendations.**

## Surface damage in rolling bearings:

Many possible ways in which a bearing can go from good to bad condition. Developing surface damage causes a marked increase of the bearing's delta value. This will cause the bearing status (BS) to change from A to C to D, and produce rising S I Nos.

In a bearing wearing out through metal fatigue, this development normally takes a long time, note, however, that bearings can sustain sudden damage, e.g. through electric current, corrosion and vibration during idle periods, etc.

## Lubrication Condition:

The most important influence on the service life of a bearing is its lubrication, or, to be precise, the lubricant film between the load carrying rolling elements and the raceway. By preventing or inhibiting metallic contact between the loaded bearing parts, the lubricant film reduces the local peak stress in the rolling interface. The greater the lubricant film thickness, the more even the load distribution in the contact area, and the better the fatigue life of the bearing. Irregularities in the bearing surfaces will always cause pressure variations in the contact area, and thus bearing pulses, even when metallic contact is prevented by separating lubricant film. A thinner film will result in an increase of the bearing's LA value. By measuring the variations in the bearing pulse patterns of undamaged bearings, the BVT-111 can evaluate the effect of the lubricant film, and display a LFT No. which is directly proportional to film thickness.

## Technical Specifications:

<b>Bearing Tester Function</b>	
Measuring range	0 to 100dBpv
Resolution	1 dBpv
<b>Vibration Tester Function</b>	
Measuring Range	0.1 to 99.9mm/s RMS
Resolution	0.1 mm/s
Accuracy	+/- (2% + 0.1 mm/s)
<b>Laser Tachometer Function</b>	
Measuring range:	10 to 20000 RPM
Measuring Distance:	10 feet
Resolution:	1 rpm
Temperature range:	0°C to 50°C
Display:	16x4 line Dot Matrix LCD
Keypad:	Sealed membrane
<b>Standard delivery</b>	
* Bearing probe * Head Phone * Accelerometer, Magnetic Base, Hand-held probe, Cable	
* Laser Tachometer Probe * User Manual * Battery 9V * Carry Case	

## **Other Products you might be interested in too:**



Digital Vibration Meter



Electric Motor Checker



Infrared Thermometer



Sound Level meter

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