VIBRATION DIRECTION

Vibrations in machinery can be measured in radial, axial, and tangential directions. The intent is to detect the direction of the largest signal. Generally, the strongest signals are in the radial direction. Machine mountings can affect vibration readings. A machine mounted on isolators such as spring isolators may have strong vertical vibration signals. Bent shafts and loose bearings can sometimes cause large axial vibration signals. Therefore it is best to take vibration readings in all three directions when possible.

MEASUREMENT POINTS

The following diagrams provide suggested vibration monitoring points. Generally, it is best to take readings on, or as close as possible to the bearings of the rotating machinery being tested. Vibration signals are strongest around bearings and tend to get weaker farther away from the bearings. Caution must be taken when working around rotating machinery, belts, pulleys and shafts.