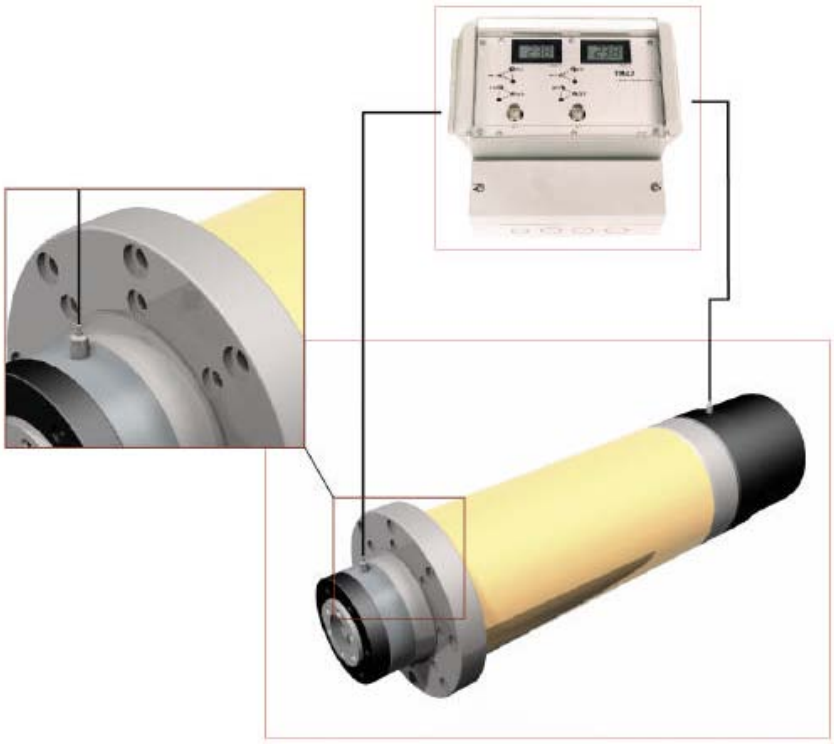
Spindle Vibration Monitoring system



SPINDLE VIBRATION MONITORING

The EIV.0120 vibration monitoring system allows you to constantly monitor your machine spindle under working conditions. The EIV.0120 can be used to give early warning signs of vibration that may be contributed to by a number of factors, by eliminating the cause of the vibration you will considerably increase the life of your spindle, increasing productivity and quality of the work piece.
We have listed some of the variations for your reference below.

Spindle vibration monitoring:

Spindle vibration offers a good indication of the condition of spindle and bearings, the EIV.0120 allows you to both manually or automatically monitor the condition of the spindle, by either taking a direct reading from the display or monitoring the mA-output, we recommend this test is carried out using a highly balanced tool or test arbour. If the EIV.01120 is integrated into the machine tool the system can be set-up to automatically check and continuously monitor the spindle during use, the system can further be pre-programmed to automatically load the test arbour and check values against previous readings. Alarm limits are also set to notify of abnormalities or possible service requirements.

Tool imbalance/damage monitoring:

Tools can be grouped according to weight and maximum spindle speed the control can then be used to automatically monitor tooling prior to and after use. The machine control is programmed to spin the tools at its predetermined / maximum speed while reading the mA-output of the EIV.0120 unit. If vibration levels then exceed the alarm limit for a particular tool / group the machine can then automatically be stopped for investigations.

Milling vibration monitoring:

The EIV.0120 can be used to monitor vibration levels during the machining process, this is used to identify unsatisfactory machining conditions such as (Broken/Damaged Tooling, Heavy Cutting Conditions, Unstable Work Piece, etc). The control is set to a predetermined vibration level for a particular operation plus a suitable margin, should the unit measure values in excess of the predetermined level an alarm is triggered for further investigation.

Maximum vibration levels can also be set to detect dangerous vibration levels on the spindle/machine tool causing the machine to immediately stop and prevent further damage or unsafe conditions.

No. 9 Hinchley Way, Hinchley Wood, Surrey, KT10 0BD.
Tel 020 8398 7733 Fax 020 8398 0716 info@emmaco.co.uk www.emmaco.co.uk