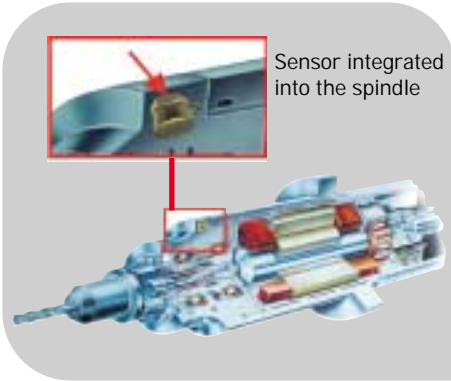
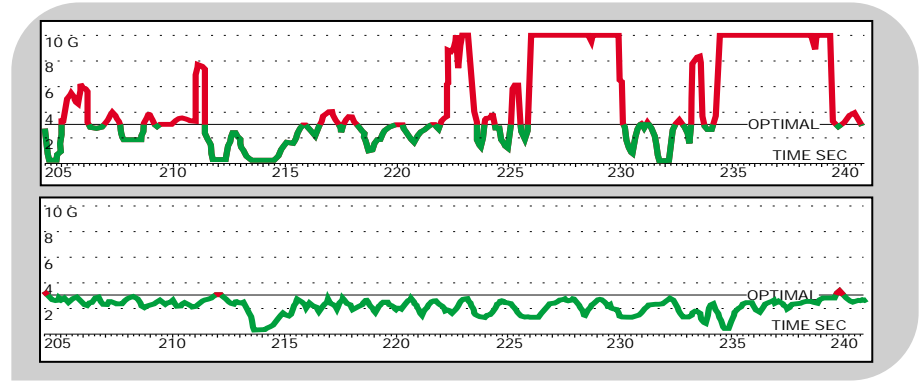


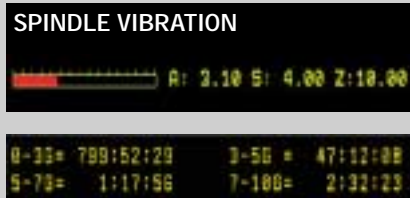
GB



Sensor integrated into the spindle



Display window of the measured vibrations during machining.



This overview can be used to monitor the accumulated duration per G-load category.

The functional principle

Vibrations can occur during the milling process as a result of an interrupted cut and various chip cross-sections, or simply as a result of poorly balanced tools. During the milling process, vibrations are displayed and recorded from the limit value onwards by means of an acceleration sensor integrated into the spindle.

Technical data

Measuring range of G-loads: 0 to 10 G
Sensitivity: 0.1 G
Time interval of recording: 1 to 60 s

The unique vibration monitoring system

Advanced Process System, a module of smart machine, is a monitoring system which opens up new possibilities for the user to observe and control the milling process. With the help of this system, vibrations that occur during a milling process can be made visible as a "G-load". In this way, it is possible to intervene selectively in the process and optimise it.

APS Extended

Extended functions have been integrated into this module that make it possible to find what is causing the vibrations. Limit values can be set on the G-load. The two different types of limit values are called "Warning" and "Stop". When a "Warning" is reached, a message is displayed. The "Stop" limit value indicates a critical situation in the machining process and interrupt operation immediately. In both cases, the resulting message can be forwarded to the operator by means of RNS, another smart machine module. This offers the operator the opportunity to react adequately to the given situation.

Your benefit

- Increase in the service life of the spindle (reduction in the machine's hourly rate)
- Recognition of critical machining strategies
- Increased tool service life (reduction in tool costs)
- Improvement in process safety
- Inspection of the balance quality of the tool
- Increase in the workpiece quality