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PreCoM

Monitoring wear on power tools

What is PreCoM?

To support the predictive needs of industry 4.0 maintenance needs, CEA-Leti has developed PreCoM, a system that measures vibrations and temperature and is capable of immediately identifying wear on critical components, such as gears, and of determining their remaining life.

Reliable and sturdy, PreCoM offers the following advantages:

- Inductive charging
- Battery life of more than one year
- Water-resistance and ultra-resistant to cutting fluids and molten chips
- Meets industry statutory requirements



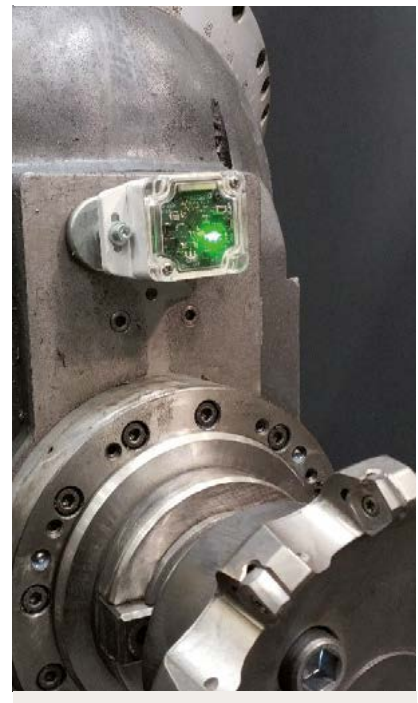
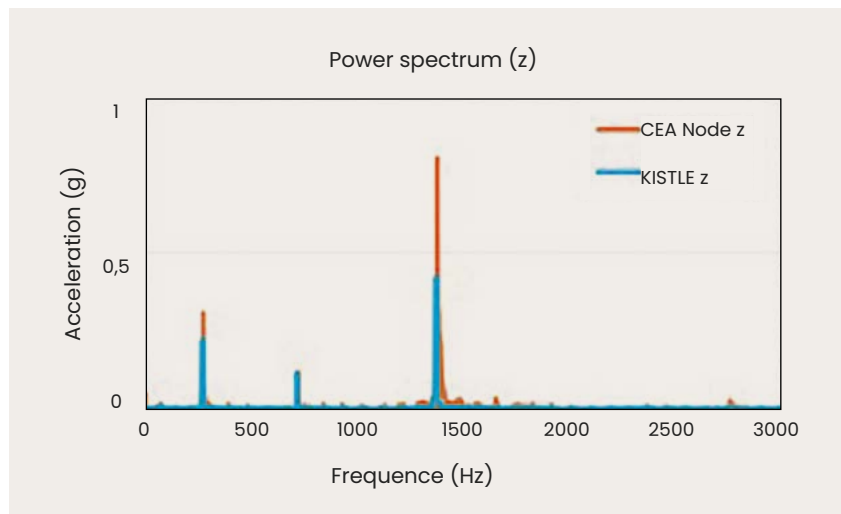
What's new?

For the first time, PreCoM offers resilient wireless communication regardless of the machine-tool environment, with unrivalled life for high-frequency measures, lasting more than one year.

Ultra-sturdy, its wireless communication has been approved in a real machining operation, including with coolants, hot chips, or dynamic cutting.

PreCoM also stands out for its ultra-low consumption components and high speed:

- > 10 μ W in sleep mode
- 10 to 15 mW when processing data and communicating
- Wireless data transfer of up to 180 kbit/s for distances reaching up to 30 m in various workshop environments



**Interested
in this technology?**

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