



SeTAC - Basic

The “Black Box” for Machine Tools

The SeTAC Basic kit is the ideal, simple solution to monitor and record all significant vibrations and collision events on machine tool during its entire life.

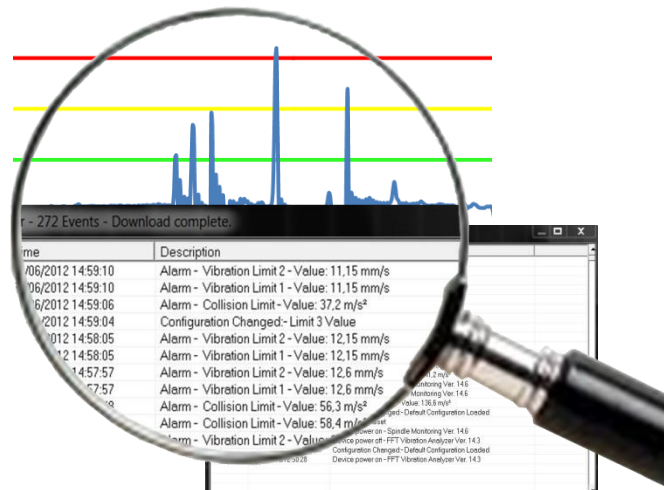
Able to store up to 12.000 events within the internal memory, perfectly categorized in terms of type, value and event time, the SeTAC Basic is perfect for:

- **Checking the correct utilization of the machine**

Assuring that no excessive vibration level or collisions are present during the working process.

- **Optimizing the spindle maintenance**

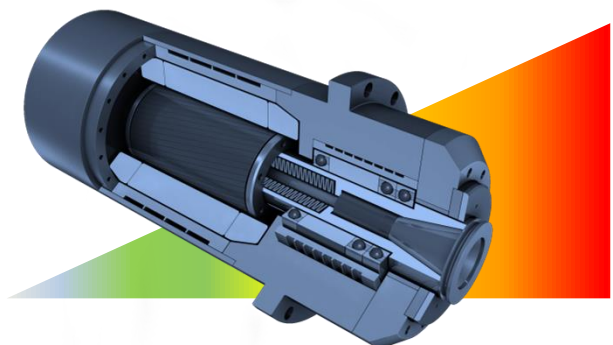
By monitoring the total spindle exposure to vibrations, SeTAC calculates the actual spindle residual life, granting therefore that spindle overhaul is performed at the right time.



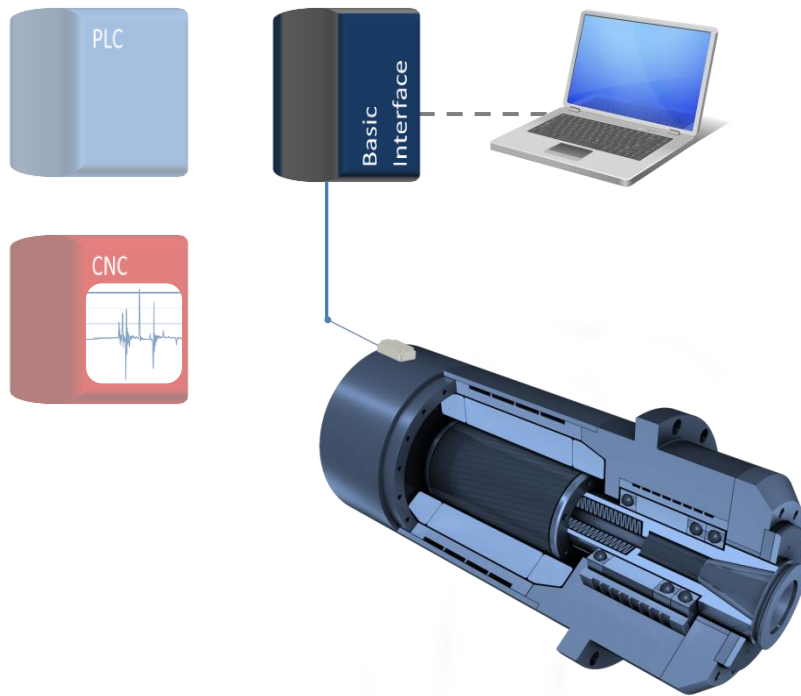
$$Spindle\ Life \propto \left(\frac{C}{P}\right)^k$$

Where P are Dynamic Loads:

SeTAC, by direct measuring actual dynamic loads on spindle, ensures optimization of maintenance plan.



Configuration Example on Machine Tool



With the basic interface, SeTAC works as a “Black Box” independent from the machine tool electronics.

The configuration and the retrieving of the registered data in the sensor memory is done via PC through USB connection with dedicated software.

A standard M12-8 poles extension cable is used to connect the sensor to the interface

Technical Specifications

Sensor

Full scale	$\pm 18g$
Bandwidth	$0 \div 2500 \text{ Hz}$
Resolution	$0,00075g$
Dimension	$30 \times 55,5 \times 15 \text{ mm}$
Weight	$55g$
Supply Voltage	$18-26 \text{ V}_{DC}$
Protection grade	IP67
Shock Resistance	10.000 g
Temperature Range	$0 \div 70^\circ\text{C}$

Interface

Communication	USB
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ORDERING INFORMATION

SeTAC is usually sold as a Kit (Sensor + Interface). Anyway, it is possible to purchase both items separately. Connection cables are standard M12.

Part Number	Description
SS-TK-0001	Sensor
SI-0-0-000	Basic Interface
SSI-TK-0-0-000	Kit Sensor+ Basic Interface

SEQUOIA IT SRL

Via Einaudi 25, 10024, Moncalieri (TO), Italy

Phone: +39 011 640 2992

Fax: +39 011 640 2985

E-Mail: info@sequoia.it

www.sequoia.it