



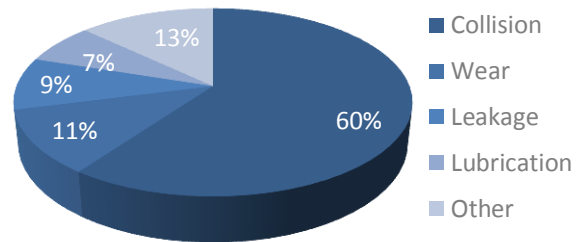
SeTAC- Advanced

The “Airbag” for Machine Tools

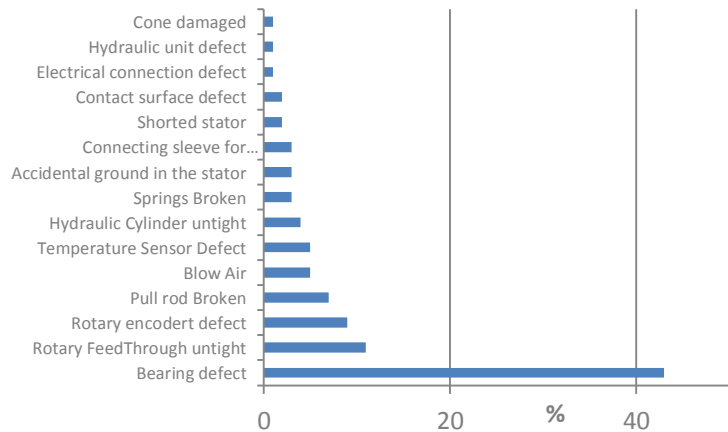
The advanced interface adds to the “Black Box” features of the basic interface the relays output that can be directly connected to the machine PLC to protect machine against:

- **Collisions**
They are the major cause of spindle failures, even if not catastrophic.
- **Process Overloads**
They could damage the machine as well as reduce the quality of the machined parts

Failure causes on motor spindles



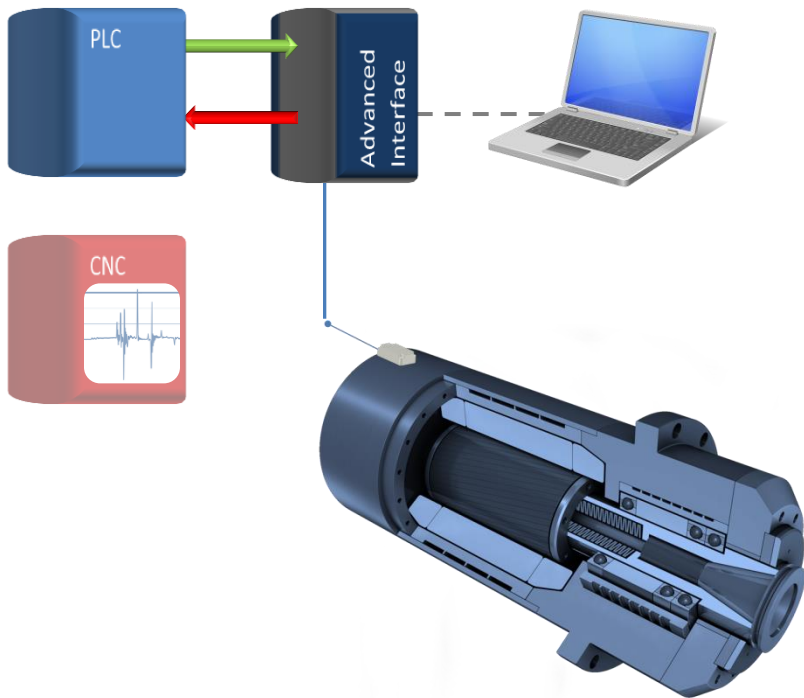
Typical failures on motor spindles



Damage level increase with time after collision



Configuration Example on Machine Tool



With the advanced interface up to 3 relay alarms can be sent to PLC. One of the alarms is linked to collision events while the other two are linked to RMS vibration velocity thresholds exceeded during working process. Digital input is available to activate the system only during working process.

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

SeTAC can memorize up to 12.000 events categorized in terms of type, value and events time. The **Black Box** functionality, therefore, is maintained.

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

Technical Specifications

Sensor

| | |
|-------------------|-----------------------|
| Full scale | ±18g |
| Bandwidth | 0÷2500 Hz |
| Resolution | 0,00075g |
| Dimension | 30x55,5x15 mm |
| Weight | 55g |
| Supply Voltage | 18-26 V _{DC} |
| Protection grade | IP67 |
| Shock Resistance | 10.000 g |
| Temperature Range | 0÷70°C |

Interface

| | |
|---------------|-----------------------|
| Communication | USB |
| Output | 3 Fast (< 1ms) relays |
| Input | One digital input |



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-1-0-000 | Advanced Interface |
| SSI-TK-1-000 | Kit Sensor+ Advanced Interface |

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