



REGO-FIX toolVibe®

Sensory tool holder

OPTIMIZE

The toolVibe® sensory tool holder enables targeted optimization of processes around the machine tool, supporting increased efficiency.

MONITOR

toolVibe® allows comprehensive monitoring of machines, tools, and workpieces to precisely control the entire process in real time.

DIGITIZATION

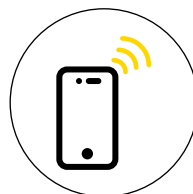
Entry into digitization through transparent data collection, real-time monitoring on a tablet, and automatic process recording using predefined limits.



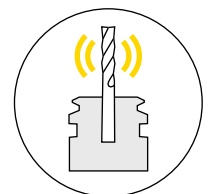
Real-time detection
of cutting data



Easy operation and
data interpretation



Wireless connection to
a tablet computer



Smart powRgrip®
tool holder

Field of application

With the toolVibe® tool holder, machining processes can be analyzed and optimized quickly and with minimal effort. Thanks to clear graphics, the application is intuitive and requires little training. The software allows for the creation of projects with different processes, enabling centralized data storage and documentation within the app. Additionally, alarms can be set, automatic recordings can be created, and comprehensive trend analyses can be conducted to continuously improve processes.



Contract
Manufacturer

Workshop

Small Series

Large Series

Mass Production

Expert

Piezo technology

Strain gauge technology

REGO-FIX toolVibe®

Application area

Optimize

// Workpiece clamping

With the tool-holder and magnet-holder, vibrations in the workpiece clamping can be detected and analyzed.

// Cutting data

By adjusting the cutting data, both productivity can be increased and tool life optimized.

// Machining strategy

Vibrations detected in various process steps can be minimized by optimizing the machining strategy.

Monitor

// Tool

The sensory tool holder can reliably detect tool breakage and tool wear.

// Workpiece

Irregularities during machining, poor surface quality, or chatter marks can be identified early in the process and adjusted accordingly.

// Machine

With toolVibe®, vibrations in the machining process can be captured, and the spindle's fundamental vibrations checked to assess wear.

Technical Information

- // Battery life with active wireless transmission
- // Maximum rpm
- // Each toolVibe® is finely balanced
- // Maximum coolant pressure (internal)
- // Maximum coolant pressure (external)
- // Operating temperature range
- // Frequency band for wireless transmission

- 10 h
- 30,000 rpm
- G2.5 at 25,000 rpm
- 80 bar
- 20 bar
- + 20 °C bis + 60 °C
- ISM-Band, 2.4 GHz



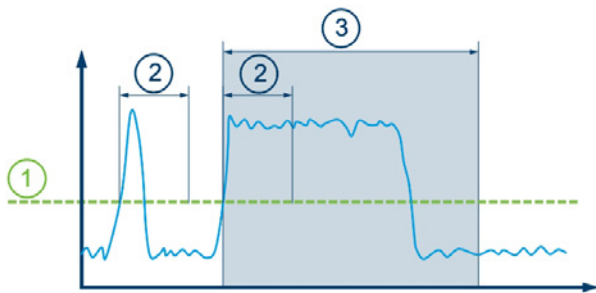
Functions of the toolVibe® Software

// Automatic recording

Enables the setting of process parameters for automatic recordings.

Recording Setup

- 1 Start threshold 0.1
- 2 Attack time (s) 1.0
- 3 Recording length (s) 10.0

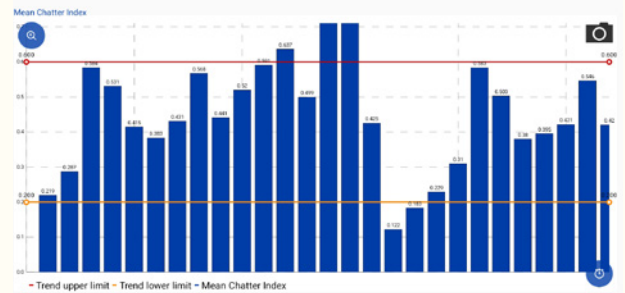


// Define alarms

Allows setting of the alarm threshold for live recordings, displayed as a red line in the chart.

// Trend analysis

In trend mode, average values of automatic recordings can be determined, compared in the chart, and threshold values set.

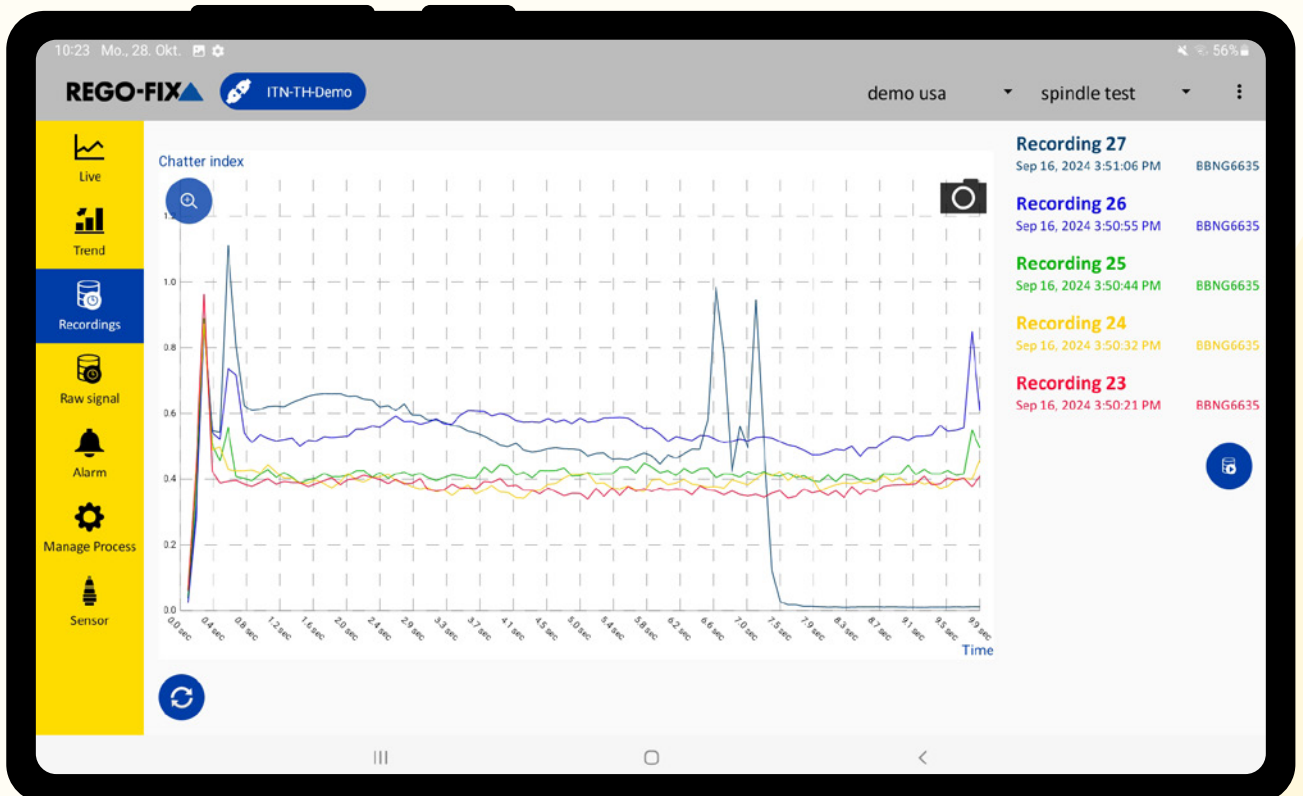


// Monitor

Monitors the vibration index with adjustable alarm limits and corresponding notifications.

// Compare

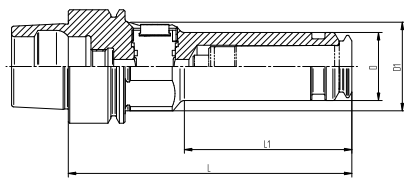
In display mode, all manual and automatic recordings are listed and, if needed, displayed as differently colored graphs in the chart.



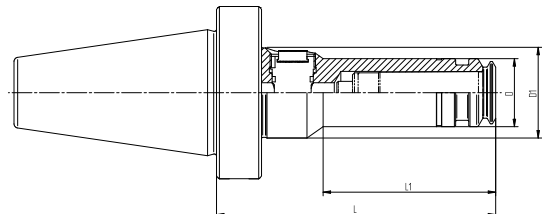
toolVibe® program overview

| Type | Part no. | Balance quality | D [mm] | D1 [mm] | L [mm] | L1 [mm] |
|--|------------|----------------------------|--------|---------|--------|---------|
| toolVibe® Tool holder | | | | | | |
| HSK-A 63/PG 15 × 120 TV | 5563.91560 | balanced G2.5 @ 25,000 rpm | 24 | 32 | – | 42 |
| HSK-A 63/PG 25 × 120 TV | 5563.92560 | balanced G2.5 @ 25,000 rpm | 40 | – | 120 | – |
| HSK-A 63/PG 32 × 120 NL TV ²⁾ | 5563.93260 | balanced G2.5 @ 25,000 rpm | 50 | – | 120 | – |
| HSK-A 100/PG 32 × 125 TV | 5500.93260 | balanced G2.5 @ 25,000 rpm | 50 | – | 125 | – |
| HSK-E 40/PG 15 × 100 TV | 5540.91550 | balanced to 30,000 rpm | 24 | 32 | 100 | 55 |
| SK+ 40/PG 25 × 120 TV ¹⁾ | 5540.92566 | balanced G2.5 @ 25,000 rpm | 40 | – | 120 | – |
| SK+ 50/PG 25 × 105 NL TV ¹⁾²⁾ | 5550.92556 | balanced G2.5 @ 25,000 rpm | 40 | 44.5 | 105 | 60 |
| BT+ 30/PG 15 × 100 TV ¹⁾ | 5130.91556 | balanced to 30,000 rpm | 24 | 32 | 100 | 55 |
| BT+ 40/PG 25 × 125 TV ¹⁾ | 5140.92556 | balanced G2.5 @ 25,000 rpm | 40 | – | 125 | – |
| CAT+ 40/PG 15 × 4" TV ¹⁾ | 5340.91556 | balanced G2.5 @ 25,000 rpm | 24 | 32 | 101.6 | 56 |
| CAT+ 40/PG 25 × 4.3" NL TV ¹⁾²⁾ | 5340.92556 | balanced G2.5 @ 25,000 rpm | 40 | 44.5 | 109.22 | 60 |
| C6/PG 25 × 120 TV | 5806.92560 | balanced G2.5 @ 25,000 rpm | 40 | 44.5 | 120 | 70 |

¹⁾ Also fits standard spindle without dual contact ²⁾ Collets PG-L, PG-MQL and PG-Cryo cannot be used

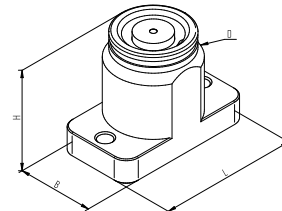


HSK



SK+, BT+, CAT+ (Interface simplified)

| Type | Part no. | L [mm] | B [mm] | H [mm] | D [mm] | Note |
|------------------------------------|------------|--------|--------|--------|--------|--|
| toolVibe® Vibrations Sensor | | | | | | |
| VS 22 × 40 TV | 7581.22400 | 40 | 22 | 30 | 24 | Mounting: Magnets or via 2× M5 threads |



VS – Vibrations Sensor

| Type | Part no. | Description |
|-------------------------------|------------|--|
| toolVibe® Set Contents | | |
| SET toolVibe® | 7580.00000 | Software with tablet including integrated receiving station, charging cable, and hard case |

