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.
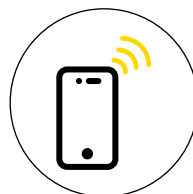
DIGITIZATION

Entry into digitization through transparent data collection, real-time monitoring on a tablet, and automatic process recording using predefined limits.
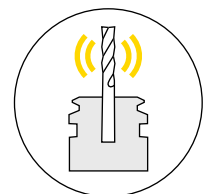
Real-time detection of cutting data
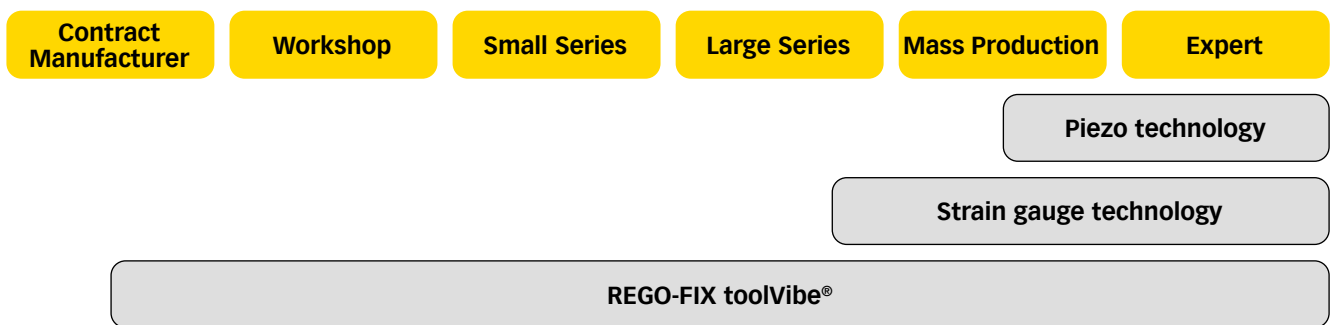
Easy operation and data interpretation

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	10 h
//	Maximum rpm	30,000 rpm
//	Each toolVibe® is finely balanced	G2.5 at 25,000 rpm
//	Maximum coolant pressure (internal)	80 bar
//	Maximum coolant pressure (external)	20 bar
//	Operating temperature range	+ 20 °C bis + 60 °C
//	Frequency band for wireless transmission	ISM-Band, 2.4 GHz

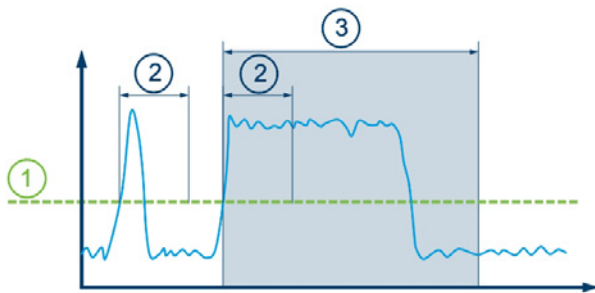# Functions of the toolVibe® Software

// Automatic recording

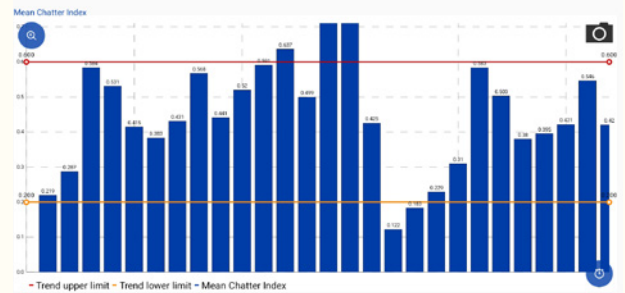Enables the setting of process parameters for automatic recordings.

// 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.
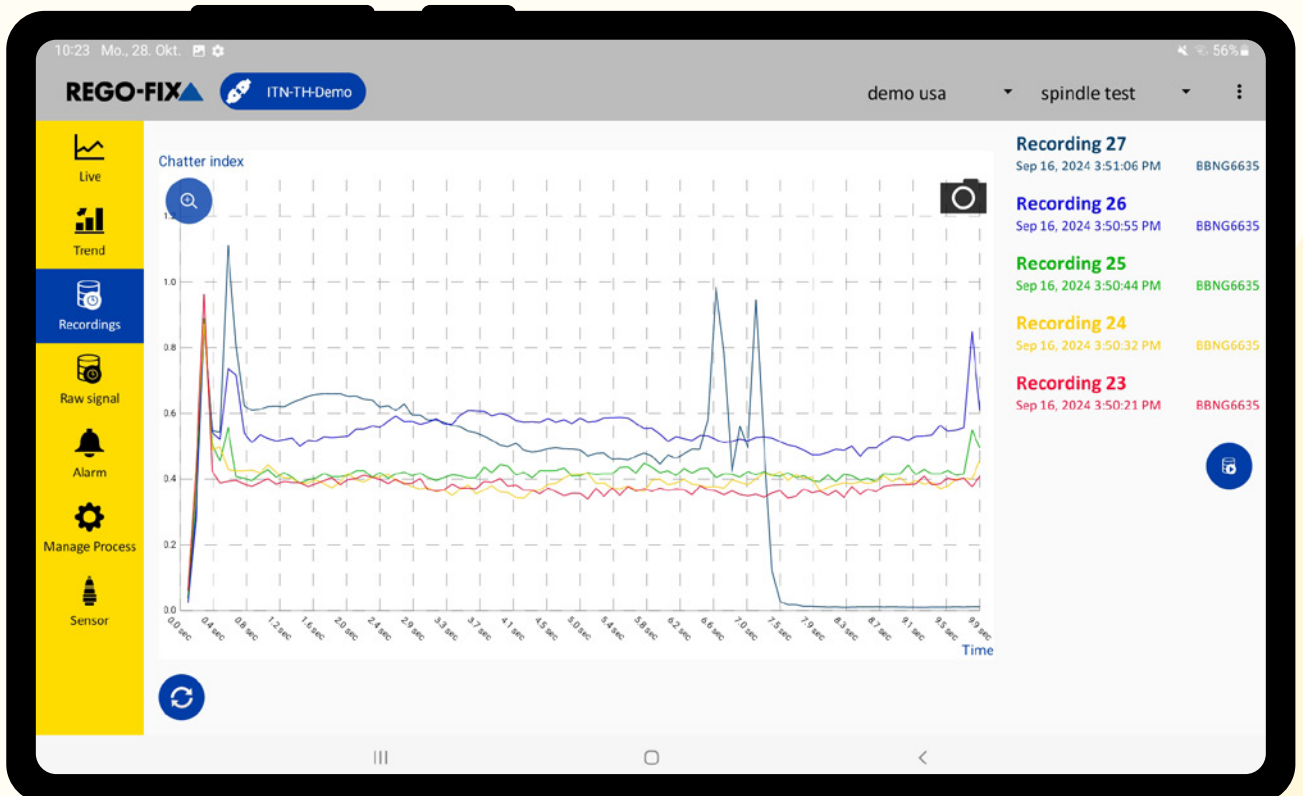

// Monitor

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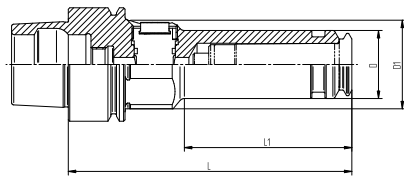
// Compare

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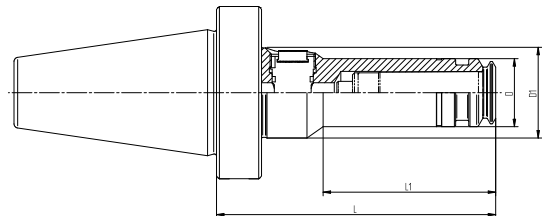
toolVibe® program overview

toolVibe® Tool holder

Type	Part no.	Balance quality	D [mm]	D1 [mm]	L [mm]	L1 [mm]
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	5540.91540	balanced to 30,000 rpm	24	32	100	55
SK+ 40/PG 25 × 105 TV[1]	5540.92556	balanced G2.5 @ 25,000 rpm	40	–	105	–
SK+ 50/PG 25 × 105 TV[1]	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

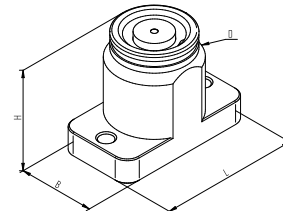[1] Also fits standard spindle without dual contact   [2] Collets PG-L, PG-MQL and PG-Cryo cannot be used

HSK

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

toolVibe® Vibrations Sensor

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

VS – Vibrations Sensor

toolVibe® Set Contents

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