

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.

DIGITALIZATION

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



Wireless connection to a tablet computer



Easy operation and data interpretation



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

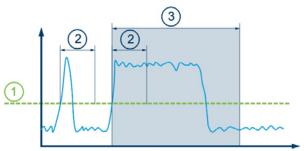


Functions of the toolVibe® Software

// Automatic recording

Enables the setting of process parameters for automatic recordings.

Recording Setup Start threshold 0.1 Attack time (s) 1.0 Recording length (s) 10.0



// Monitor

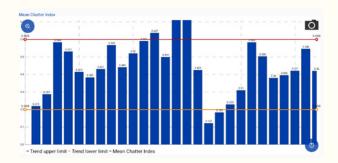
Monitors the vibration index with adjustable alarm limits and corresponding notifications.

// Define alarms

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

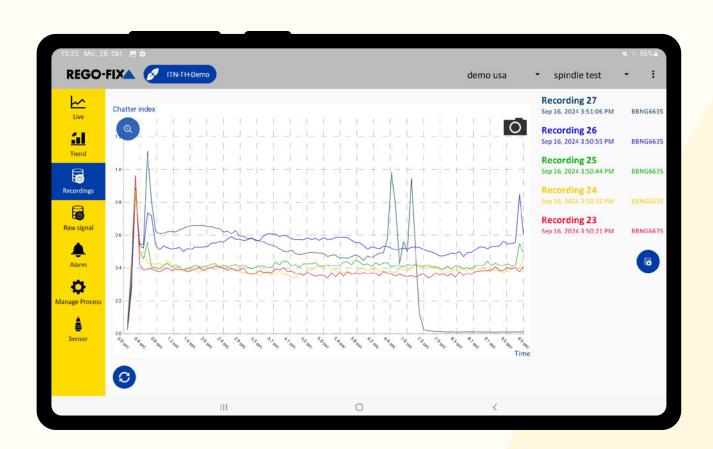
Trend analysis

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



// Compare

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

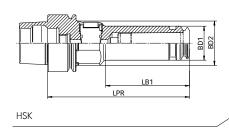


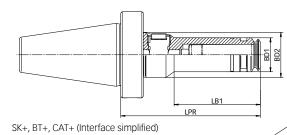
toolVibe® program overview

Туре	Part no.	Balance quality	BD1 [mm]	BD2 [mm]	LPR [mm]	LB1 [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 × 120 TV ¹⁾	5140.92566	balanced G2.5 @ 25,000 rpm	40		120	_
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

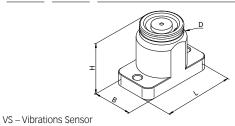






Туре	Part no.	L [mm]	B [mm]	H [mm]	D [mm]	Note
toolVibe® Vibrations Sensor						
VS 22 × 40 TV	7581.22400	40	22	30	24	Mounting: Magnets or via 2× M5 threads





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





© REGO-FIX Group www.rego-fix.com