



Comprehensive and intuitive shaft alignment utilising tablets and smart phones

SKF Shaft Alignment Tool TKSA 51

The TKSA 51 shaft alignment tool provides high measurement flexibility and performance suitable for entry-level to expert alignment jobs. Designed to work with the shaft alignment for TKSA 51 app on a tablet or smart phone, this intuitive tool is easy to use and requires no special training. The included accessories enable use of the TKSA 51 for a wide range of alignment applications, such as motors, drives, fans, pumps, gearboxes and more. The tool's mobile app includes tutorial videos to show operators how to perform accurate measurements.

- **Measurement flexibility** - The well-known, three-position measurement gains additional flexibility as measurements can start at any angle and require a total minimal rotation of only 40 degrees. This enables operators to perform alignments of applications with limited space.
- **Automatic reports** - Alignment reports are generated automatically and can be customised with notes, a machine picture and a signature via touchscreen. These reports can be exported as PDF files and shared with other mobile apps.
- **Comprehensive and compact** - A range of included components, such as magnetic mounting brackets and extension rods and chains, increase the TKSA 51's versatility, yet it remains compact, lightweight and easy to carry.
- **3-D live view** - This feature enables intuitive positioning of heads for quick alignment measurements and displays live when horizontal/vertical alignment correction is achieved. The app enables 3-D rotation of the virtual motor to correspond with the actual machine position.
- **Disturbance compensation** - Measurement values are averaged over time to provide accuracy in presence of vibration or other external disturbances.
- **Fully functional demo mode** - The app can be downloaded easily, and its demonstration mode allows the shaft alignment process to be experienced before purchasing the TKSA 51.





Technical data

Designation	TKSA 51
Sensors and communication	20 mm (0.8 in.) PSD with red line laser Class 2; electronic inclinometer $\pm 0,1^\circ$; Bluetooth 4.0 LE
System measuring distance	0.07 to 5 m (0.23 to 16.4 ft)
Measuring errors / displayed resolution	<1% + 1 digit
Operating device	Galaxy Tab Active and iPad mini recommended. iPad 3rd generation, iPod touch 5th generation, iPhone 4S, Galaxy S4 or above (all not included)
Operating system requirements	Apple iOS 8 or Android OS 4.4.2 (and above)
Software / App update	Apple AppStore or on Google Play Store
Shaft diameters	20 to 150 mm (0.8 to 5.9 in.), up to 450 mm (17.7 in.) with extension chains supplied
Max. recommended coupling height	170 mm (6.7 in.) with extension rods
Alignment measurement	3 x positions free measurement (min. 40° total angle), automatic measurement
Alignment correction	Live values for vertical and horizontal machine position correction Adjustable shocks compatible (Vibracons)
Soft foot correction	Available with separate "Soft Foot for TKSA 51" app
Alignment report	Automatic pdf report exportable via email/cloud services
Display orientation	Landscape (plus portrait on tablets)
MU battery	Up to 10 hours continuous operation (2 000 mAh rechargeable Li-ion battery)
Carrying case dimensions	355 x 250 x 110 mm (14 x 9.8 x 4.3 in.)
Total weight (incl. case)	2,9 kg (6.4 lbs)
Operating temperature	0 to 45 °C (32 to 113 °F)
IP rating	IP54
Calibration certificate	Supplied with 2 years validity



Of the TKSA family of products, the TKSA 51 shaft alignment tool is suitable for the broadest range of applications. Its compact, lightweight design, high measurement flexibility and included accessories enable use of the instrument on virtually any machine, even in difficult-to-reach locations. Protective cases can be used on tablets and smart phones and do not affect the functionality of the TKSA 51.

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