

SKF Shaft Alignment Tool TKSA 41

The advanced laser shaft alignment system with enhanced measuring and reporting capabilities



Free measurement allows alignment measurements to start at any angle and finish with an angular sweep of just 90°.

Machine library gives an overview of all machines and alignment reports.

The TKSA 41 is an advanced laser alignment solution for achieving accurate shaft alignments. With two wireless measurement units, large sized detectors and powerful lasers, the instrument performs precise measurements in even the most challenging conditions.

The ergonomic display unit with intuitive touch screen navigation makes your alignments fast and easy, whilst innovative features, like the “free measurement”, increase the alignment performance. With the focus on improving alignment practices, the SKF Shaft Alignment Tool, TKSA 41, is one of the industry’s best value alignment solutions.

- Wireless communication improves instrument handling and allows alignments of difficult to reach applications from a safe position.
- Automatic measurement enables hands-free measurements by detecting the head position and taking a measurement when the heads are rotated into the right position.

- Automatic reports are generated after each alignment. The reports can be customised with notes and pictures from the built-in camera for the most comprehensive overview. All reports can be exported as pdf files.
- Live view supports intuitive measurements and facilitates horizontal and vertical alignments.
- The simplicity of the TKSA 41 provides greater confidence for the performance of alignment tasks on all types of horizontal rotating machines.
- QR codes can be used to further simplify machine identification and improve the alignment workflow.

Technical data

| Designation | TKSA 41 | | |
|---------------------------|---|------------------------------------|---|
| Sensors and communication | 29 mm (1.1 in.) CCD with line laser Class 2 Inclinometer $\pm 0.5^\circ$; Bluetooth 4.0 LE and wired, USB cables | Fixture | 2 x V-brackets with chains, width 21 mm (0.8 in.) |
| System measuring distance | 0,07 to 4 m (0.23 to 13.1 ft) | Shaft diameters | 20 to 150 mm (0.8 to 5.9 in.) 300 mm (11.8 in.) with optional extension chains (not included) |
| Measuring errors | < 0,5% $\pm 5 \mu\text{m}$ | Max. coupling height ¹⁾ | 105 mm (4.2 in.) with standard rods 195 mm (7.7 in.) with extension rods (included) |
| Housing material | 20% Glass filled Polycarbonate | Power adapter | Input: 100V-240V 50/60Hz AC power supplier Output: DC 12V 3A with EU, US, UK, AUS adapters |
| Operating time | Up to 16 hours Rechargeable LiPo battery | Operating temperature | 0 to 45 °C (32 to 113 °F) |
| Dimensions | 120 x 90 x 36 mm (4.7 x 3.5 x 1.4 in.) | IP rating | IP 54 |
| Weight | 220 g (0.5 lb) | Carrying case dimensions | 530 x 110 x 360 mm (20.9 x 4.3 x 14.2 in.) |
| Operating device | 5.6" colour resistive touchscreen LCD display. High Impact PC/ABS with overmould | Total weight (incl. case) | 4.75 kg (10.5 lb) |
| Software/App update | via USB stick | Calibration certificate | Supplied with 2 years validity |
| DU Operating time | Up to 8 hours (100% backlight) | Case content | 2 measuring units (M&S); display unit; 2 shaft brackets with chains 400 mm (15.8 in.) and threaded rods 150 mm (5.9 in.); chain tightening rod; 4 threaded extension rods 90 mm (3.5 in.); power supply with country adapters; 2 micro USB to USB cables; measuring tape; printed certificate of calibration and conformance; printed quick start guide (EN); SKF carrying case; 2x A5 sheets with 6x QR code stickers per sheet (total of 12x stickers) |
| Dimensions | 205 x 140 x 60 mm (8.1 x 5.5 x 2.4 in.) | | |
| Weight | 640 g (1.4 lb) | | |
| Alignment method | Alignment of horizontal shafts, 3 position measurement 9 -12 -3, automatic measurement, measurement (with min. 90° rotation), soft foot | | |
| Live correction values | Vertical and horizontal | | |
| Extra features | Machine library, QR code reading, screen orientation flip, automatic .pdf report | | |

¹⁾ Depending on the coupling, the brackets can be mounted on the coupling, reducing the coupling height limitation.



Shaft alignment is recommended for almost every industry, as it enables machine uptime to be significantly improved and maintenance costs to be reduced. The simplicity of the TKSA 41 provides greater confidence for the performance of alignment tasks on all types of horizontal rotating machines.

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