

The intuitive and affordable laser shaft alignment system

SKF Shaft Alignment Tool TKSA 31

The TKSA 31 is SKF's most affordable solution for easy laser shaft alignment. The ergonomic display unit with touch screen makes the instrument very easy to use and the built-in machine library helps storing alignment reports for multiple machines. Large sized laser detectors in the measuring heads reduce the need for pre-alignments and the embedded soft foot tool helps establish the foundation for a successful alignment. Additional functions such as live view and automatic measurement support fast and effective alignment tasks and make the TKSA 31 an innovative laser shaft alignment tool that is affordable for almost every budget.

- Easy measurements can be performed by using the well-known three position measurement (9-12-3 o'clock) with additional positioning flexibility of 40° around each measurement position.
- High affordability is achieved by focussing on the standard shaft alignment process and essential functions to allow quick and effective shaft alignments.
- "Automatic measurement" enables handsfree measurements by detecting the position of the heads and only taking a measurement when the heads are in the right position.
- Automatic reports are generated after each alignment and can be customised with notes about the application. All reports can be exported as pdf files.
- Live view supports intuitive measurements and facilitates horizontal and vertical machine position corrections.
- The machine library gives an overview of all machines and alignment reports. It simplifies the machine identification and improves the alignment workflow.



Technical data



Designation	TKSA 31
Sensors and communication	29 mm (<i>1.1 in.</i>) CCD with line laser; electronic inclinometer ±0,5°; Wired communication with USB cables (included)
System Measuring distance ¹	0,07 to 2 m (0.23 to 6.6 ft.)
Measuring errors / displayed resolution	<0,5% ±5 μm / 10 μm (0.4 mils)
Display type	5.6" colour resistive touchscreen LCD
Software update	via USB stick
Shaft diameters	20 to 150 mm (<i>0.8 to 5.9 in.</i>) diameter Up to 300 mm (<i>11.8 in.</i>) with optional extension chains
Max. recommended coupling height ²	105 mm (4.2 in.)
Mounting system	2 × V-brackets; 2 × chains 400 mm (15.8 in.); 2 × threaded rods 150 mm (5.9 in.) per V-bracket
Alignment measurement	3 position measurement 9–12–3 3 position automatic measurement 9–12–3
Alignment correction	Live values for vertical and horizontal machine position correction; Laser soft foot tool
Alignment report	Automatic pdf report exportable via USB stick
System battery	up to 7 hours continuous use at 100% backlight (5 000 mAh rechargeable LiPo battery)
Carrying case dimensions	530 × 110 × 360 mm (20.9 × 4.3 × 14.2 in.)
Total weight (incl. case)	4,75 kg (10.5 lb)
Operating temperature	0 to 45 °C (32 to 113 °F)
IP rating	IP54
Calibration certificate	Supplied with 2 years validity

¹ With standard USB cables supplied, up to 4 m (13.1 ft.) possible

² Up to 195 mm (7.7 *in*.) with extension rods (optional)



Shaft alignment is recommended for almost every industry, as it helps to increase machine uptime, decrease production losses and reduce maintenance costs. The TKSA 31 is the ideal solution for entry-level laser shaft alignment. Its intuitive usage helps to achieve accurate alignments while the TKSA 31 remains affordable for almost every budget.

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