SKF Shaft Alignment Tool TKSA 31 & TKSA 41

Quick Start Guide







1. Case content



- 1. 1 × TKSA 31/41 Display unit
- 2. 1 × TKSA 31/41 S Measuring unit
- 3. 1 × TKSA 31/41 M Measuring unit
- 4. 2 × Shaft V-Brackets with chains
- 5. 90 mm Extension rods (TKSA 41 only)
- 6. 1 × Chain tightening rod
- 7. 5 m (16 ft) metric and imperial measuring tape
- 8. $1 \times 12V$ DC 3A Power supply
- 9. Country adapters (US, UK, EU, AUS)
- 10. 2 × Micro USB to USB cables*
- 11. Printed Quick Start Guide (EN)*
- 12. Printed certificate of Calibration and conformance*
- 13. 1 × Page of QR code stickers (TKSA 41 only)*
 - * not shown

2. Mount the Measuring Units (MU)

- Mount the "S" MU on the Stationary machine side
- Mount the "M" MU on the Moveable machine side
- Brackets are symmetric and can be mounted either way
- Make sure the brackets are firmly tightened on the shaft

3. Switch On

- Press the On/Off button on the display unit (DU) for >1 second
- Press the On/Off button on both MU until the LED is on

4. Adjust the lasers

- Adjust the "S" unit vertically so that its laser faces the "M" unit in the centre of the detector
- Rotate the knob on the "M" units to adjust the laser in the centre of the "S" unit detector
- Firmly tighten the MUs on the rods

5. New alignment



New alignment

Quick way to start a new alignment job

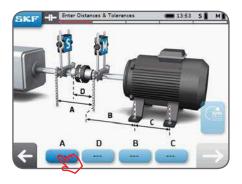
QR Code

Scan a QR code sticker to create a new machine or retrieve an existing machine and start a new alignment

Machine library

Manually create a new machine or select an existing machine and start a new alignment

6. Enter dimensions

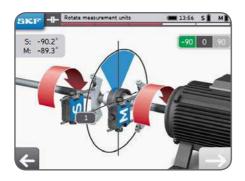


- Click the A box to enter the A dimension
- D is filled in automatically
- Use next arrow to move between boxes and enter the dimensions B and C
- Choose an existing misalignment tolerance or create a custom tolerance

TIPS:

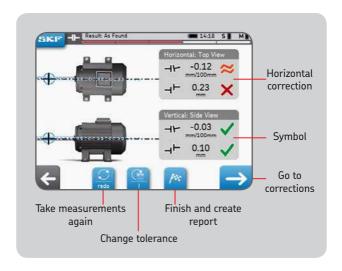
- Click on the left arrow to go back
- Click on the next arrow to go to the next step
- Imperial Units can be selected in the Settings before starting the alignment

7. Take a measurement



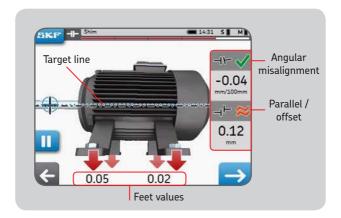
- 1. Turn the shafts to the blue wedge at the 9 o'clock position (-90°)
- 2. When positioned within the blue wedge, the wedge becomes green
- 3. Click on the "next" arrow to take a measurement
- 4. Turn the shafts to the blue wedge at the 12 o'clock position (0°)
- 5. Click on the "next" arrow to take a measurement
- 6. Turn the shafts to the blue wedge at the 3 o'clock position (+90°)
- 7. Click on the "next" arrow to take a measurement

8. Results



9. Live vertical correction - Shimming

- Rotate the MU to 12 o'clock (0°)
- · Correct the alignment by following the arrows
- The arrows indicate the direction the motor has to go



- Add or remove shims to achieve the selected tolerance
- The symbols become green when the chosen tolerance is reached
- Within tolerance
- Close to tolerance

X Out of tolerance

10. Live horizontal correction

- Rotate the MU to 3 o'clock (+90°)
- Up arrow means the motor has to go to the right
- Down arrow means the motor has to go to the left
- Tighten the bolts when the correction is complete
- It is recommended to remeasure the alignment after correction

11. Create a report



Report name is mandatory

12. Declaration of conformity

EU Declaration of conformity

We, SKF Maintenance Products, Kelvinbaan 16, 3439 MT Nieuwegein, The Netherlands herewith declare that the following products:

SKF Shaft Alignment Tool TKSA 31 & TKSA 41

TKSA 31 has been designed and manufactured in accordance with: EMC DIRECTIVE 2014/30/EU as outlined in the harmonized norm for EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use – Part 1: General Requirements, EN 55011: 2009 +A1:2010, EN 61000-4-2: 2009,

EN 61000-4-3: 2006 +A1:2008 +A2:2010,

EN 61000-4-4: 2004 +A1:2010, EN 61000-4-5: 2006,

EN 61000-4-6: 2009, EN 61000-4-11: 2004

TKSA 41 has been designed and manufactured in accordance with: RADIO EQUIPMENT DIRECTIVE 2014/53/EU as outlined in the harmonized norm EN 61010:2010, EN 61326-1:2013,

EN 55011: 2009 +A1:2010, EN 61000-4-2: 2009,

EN 61000-4-3: 2006 +A1:2008 +A2:2010,

EN 61000-4-4: 2004 +A1:2010, EN 61000-4-5: 2006,

EN 61000-4-6: 2009, EN 61000-4-11: 2004,

EN 301 489-1 v2.1.1, EN 301 489-17 v3.1.1, EN 300 328 v2.1.1

EUROPEAN ROHS DIRECTIVE 2011/65/EU

The laser is classified in accordance with the EN 60825-1:2007. The laser complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

TKSA 41 only: The enclosed device complies with Part 15 of the FCC Rules. 47CFR: 2011 Part 15 Sub Part B Unintentional Radiators Contains FCC ID: 0C3BM1871, QDID: B020997.

Manufacturer's Name, Trade Name or Brand Name: NovaComm. Model Name: NVC-MDCS71.

Nieuwegein, The Netherlands, August 2017



Sébastien David Manager Product Development and Quality



WARNING
LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
Ps 1mW A=635nm





SKF Maintenance Products

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