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 × 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

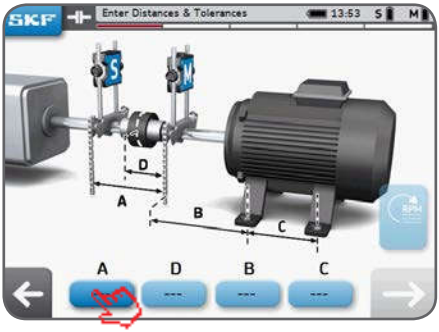
- Adjust the “S” unit vertically so that its laser faces the “M” unit in the centre of the detector
- Rotate the knob on the “M” units to adjust the laser in the centre of the “S” unit detector
- Firmly tighten the MUs on the rods

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

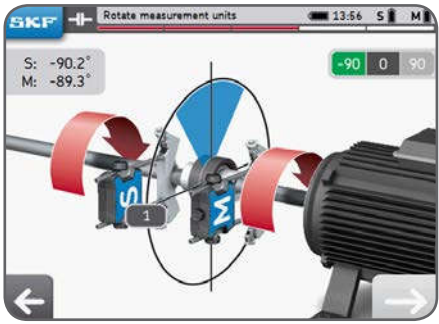


- Click the **A** box to enter the **A** dimension
- **D** is filled in automatically
- Use next arrow to move between boxes and enter the dimensions **B** and **C**.
- Choose an existing misalignment tolerance or create a custom tolerance.

TIPS:

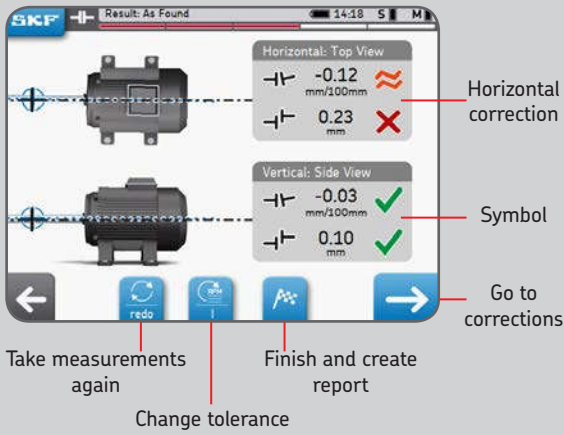
- Click on the left arrow to go back
- Click on the next arrow to go to the next step
- Imperial Units can be selected in the Settings before starting the alignment

7. Take a measurement



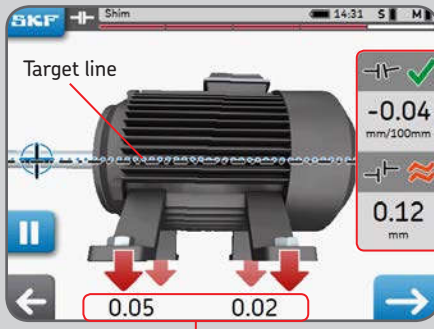
1. Turn the shafts to the blue wedge at the 9 o'clock position (-90°)
2. When positioned within the blue wedge, the wedge becomes green
3. Click on the "next" arrow to take a measurement
4. Turn the shafts to the blue wedge at the 12 o'clock position (0°)
5. Click on the "next" arrow to take a measurement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

EC 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

has been designed and manufactured in accordance with:
EMC DIRECTIVE 2004/108/EC as outlined in the harmonized norm
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

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,
November 2014



Sébastien David
Manager Product Development and Quality









SKF Maintenance Products

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