# SKF Stroboscope TKRS 41

High performance hand-held stroboscope for machine inspections

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The SKF TKRS 41 is a high performance stroboscope for visually inspecting running machines and for determining the machine speed. The stroboscope is robust and characterised by its excellent brightness, allowing usage in challenging industrial environments. The built-in laser speed measurement and simple controls help users to quickly set the correct flash rate and obtain clear "frozen" images for inspection.

The SKF TKRS 41 is designed for general maintenance tasks and with its standard operating mode, it is streamlined for fast and straightforward usage. The professional mode can be activated for more demanding applications, for example when enhanced input signal modification is needed to trigger the stroboscope with machine signals. For more convenience during inspections, the "SLOW" function can be used to examine all parts of the rotating machine in slow-motion.

- **High brightness & operating time** - Powerful array of 118 LEDs delivering up to 8 000 lux of luminescence for usage in almost any environment
- **Slow mode** - Frozen images rotate in slow motion and support convenient inspection
- **Portable and sturdy** - Lightweight aluminium housing with integrated battery and rubber bumper strips for use in industrial environments
- **Easy operation** - Ergonomic and intuitive controls allow quick setting of the correct flash rate
- **Automatic laser synch** - Build-in laser speed measurement, with automatic synchronization of the flash rate, eliminates the need to search for the right frequency
- **Professional input signal modulation** - Machine input signals can be used and modulated to trigger the stroboscope


**Typical applications**

The SKF TKRS 41 is a portable, high-performance stroboscope for visual inspections. It is suitable for general maintenance in challenging industrial environments and the input trigger can be used for advanced inspections in production processes and testing equipment.

- **General maintenance** - Inspection of running machines for visible damages, such as fan blades, shafts, couplings, belts, chains, gears, etc.
- **Paper production** - Setup and control of paper production quality during operation
- **Textile industry** - Installation and inspection of production processes such as spindles or weaving patterns
- **Printing industry** - Check of printing quality during production
- **Test equipment** - Analysis of materials and components during fast movements such as analysis of resonance behaviours

**High performance**

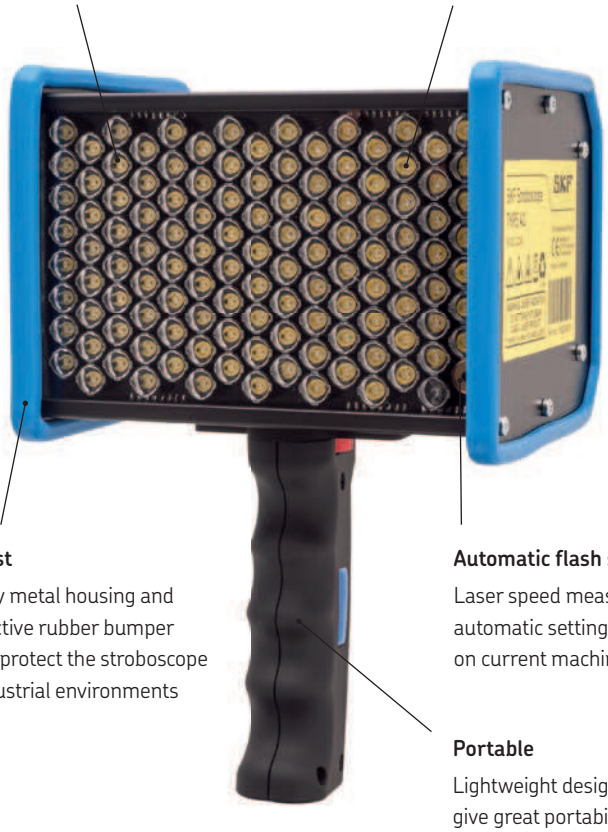
118 high-performance LEDs deliver up to 8000 lux brightness

**Flash rate**

Flash frequency from 30 to 300000 flashes per minutes

**Professional applications**

External trigger, input signal manipulation and continuous operation with external power, allow the stroboscope to be used for advanced inspections




**Robust**

Sturdy metal housing and protective rubber bumper strips protect the stroboscope in industrial environments

**Automatic flash synchronisation**

Laser speed measurement allows automatic setting of flash rate based on current machine speed.

**Backlight display**

Excellent readability with large, backlight LCD display

**Portable**

Lightweight design and ergonomic handle give great portability and up to 7 hours of continuous use with integrated battery

**Technical data**

| Designation | TKRS 41 | | |
|---|---|---|---|
| Flash rate range | 30 to 300 000 flashes per minute (f/min) | Display | Multi-line backlight LCD |
| Flash rate accuracy | ±0,02 % (±1 digit / ±0,025 µs) | Controls | Mode selector switch and rotary/push knob |
| Flash setting and display resolution | ±0,1 (30 to 999.9 f/min)<br>±1,0 (1 000 to 9 999 f/min)<br>±10 (10 000 to 300 000 f/min) | External trigger input | 3–30 V / max. 5 mA (potential-free optocoupler) via DIN 41524 5-pin plug (included) |
| Tachometer range | 30 to 300 000 r/min | External trigger range | 0 to 300 000 f/min |
| Tachometer accuracy | ±0,02 % or ±1 digit, whichever is greater | Case dimensions | 345 x 165 x 270 mm *(13.6 x 6.5 x 10.6 in)* |
| Flash source | 118 LEDs | Unit weight | 1,15 kg *(2.53 lb)* |
| Flash duration | adjustable, 0,025° – 3,0° | Total weight | 2,4 kg *(5.3 lb)* |
| Light power | 8 000 lux at 1° flash duration and 0,3 m *(12 in)* distance | Operating temperature | 0 to 40 °C *(32 to 104 °F)* |
| Power source | Li-ion battery (rechargeable); continuous operation with power supply | | |
| Run time per charge | ca. 2:30 h @ 0,50° (~4000 lux)<br>ca. 5:00 h @ 0,25° (~2000 lux) | | |
| Charger and power supply | 110-230V, 50/60Hz, EU/US/UK/AUS plugs | | |

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**PUB MP/P8 18004 EN** · October 2018