



SKF alignment solutions save money, cut downtime

Benefits

- Versatile tools for widespread use throughout your facility
- Inexpensive means of avoiding unplanned downtime
- Extends bearing and shaft service life to provide greater return on your investment in equipment
- Enhances the efficiency of your maintenance personnel
- Reduces energy consumption

Typical applications

Shafts, pulleys and other rotating components on a variety of machinery and equipment.

SKF shaft and belt alignment tools increase productivity and avoid premature machine failure

As much as 34 % of premature bearing failures and associated downtime are the result of misalignment. SKF® laser-guided tools accurately and efficiently align belts and shafts to prevent machine breakdowns.

SKF Shaft alignment tool: TMEA 2

Shaft alignment is quick and easy with a high degree of accuracy.

3-step process: measure, align and document

Easy to attach: measuring units are attached to the shafts using magnetic brackets or chains

Accurate: each unit emits a precise laser line, projected on the detector of the other unit

Eliminates rechecking: display unit simultaneously provides clear, real-time coupling and feet values during the alignment process



Operator-friendly: display unit can be held in one hand, freeing the operator to perform alignment

SKF Belt alignment tool: TMEB 2

Identifies belt misalignments using a laser line, allowing the operator to make adjustments quickly and easily

Simple to attach: comprised of just two components – a laser emitting unit and receiver

Accurate: uses V-guides and powerful magnets to align the grooves of the pulley, allowing alignment of pulleys of unequal width or with dissimilar faces

Easy detection: 3-D target area on receiver identifies the nature of misalignment – horizontal, vertical, parallel or a combination





Increase the return on your maintenance investment with SKF

The SKF 360° Solution programme embodies our goal to help you get more out of your plant machinery and equipment investment.

This means lowering your maintenance costs, or raising your productivity, or both!

Here's an example of the SKF 360° Solution programme at work in a facility's air handling system.

Shopping centre saves €41 256 by correcting fan-belt alignment

To be successful, shopping centres need to provide more than just goods and services. Their shops and restaurants also need to offer a comfortable environment. One of the most basic requirements for doing so is a well-controlled ventilation system.

Air handling systems for shopping centres must have the ability to handle large variations in numbers of visitors, while operating under challenging external conditions, including heat, dust, rain and snow. Many systems are run with belt-driven fans, a solution that is compact and saves valuable space – but can also present challenges in reliability and performance.



A shopping centre employing 45 fans, each equipped with a belt drive, was experiencing continual premature fan failure. The motor size was 4 poles 30 kW, and each fan had three belt pulleys. The facility manager reported that after just six months of operation, vibration and energy consumption increased, leading to the need for belts to be exchanged on an annual basis.

He requested help from his local SKF® distributor, and an SKF engineering team was sent to conduct an on-site analysis.

The SKF engineers found the fan belts were not properly aligned, which in turn led to excessive vibration, energy loss and early fan failure. SKF laser and belt alignment equipment was used to correct the problem, and SKF recommended upgrading to higher quality belts that would use less energy, while providing longer service life.

Equipment reliability and uptime have increased, allowing the maintenance staff to focus their efforts on long-term preventive maintenance, rather than short-term equipment failures.

Return On Investment (ROI) summary

Fan population	45
Reduction in fan failures	68 fewer failures
(increased MTBF from 12 to 30 months)	
Cost of failures: Components (90 € àer fan x 68)	6 120 €
Labour (3 staff x 1,5 hours per fan x 18 € hour x 68)...	1 836 €
Energy savings (45 motors, 1 amp each, 30 months):	43 500 €
Total value	51 456 €



SKF 360° Solution ROI calculations are from the SKF Documented Solutions Programme. Ask your SKF Authorized Distributor for more details.

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SKF solution investment

(SKF Explorer bearings, belt and shaft system alignment)	10 200 €
Net benefit.....	41 256 €
SKF solution ROI over 30 months	405 %

