



Cut maintenance costs and extend MTBF on pumps

Benefits

- Extends Mean Time Between Failures (MTBF)
- Reduces maintenance costs
- Reduces vibration and noise
- Easier, safer, and more accurate mounting of bearings
- Single-source responsibility

Typical applications

- Crude charge
- Reflux and tops
- Intermediate reflux
- Gas oil
- Tops crude
- Naptha, paraffin and diesel
- Flasher bottom
- Slurry

SKF packaged solutions “pump up” uptime



Hydrocarbon processing pumps battle hot, corrosive conditions that eventually defeat bearings and cause premature failure. The resulting downtime costs the industry hundreds of millions

of euros a year in maintenance and lost productivity. While you can't change the harsh operating environments in your facility, you can change the way you defend your pumps – and your operating budget.

The SKF pump solution

SKF® offers a “systems approach” of products and services to overcome the heat, contaminants, inadequate lubrication, and shaft misalignment that contribute to bearing failure and pump downtime.



Drop-in replacement with SKF Explorer bearings – which can outlast conventional bearings by as much as 300% – is a simple, cost-effective way to extend pump life.



Advanced SKF alignment and mounting services help achieve longer bearing life and quieter, smoother pump operation. And SKF automatic lubrication systems and condition monitoring services

add another line of defense against pump downtime.

Combined with the expertise of the SKF reliability specialists who will help you implement it, this “systems approach” of products and services offers an optimum means of extending Mean Time Between Failure (MTBF) and cutting maintenance costs for your facility's pumps.

SKF pump solution components include:

- SKF Explorer bearings
- Laser shaft alignment tools
- SKF induction heaters
- SKF seals
- Condition monitoring tools and services



Increase the return on your plant machinery 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 the petrochemical industry.

Refinery realises significant maintenance cost savings with SKF pump solutions

Using a combination of SKF Explorer bearings, laser shaft alignment, and improved mounting and lubrication methods, a major refinery was able to increase the Mean Time Between Failure (MTBF) among a large percentage of their pumps from 18 months to 54 months, over a period of 10 years. The positive financial impact of this for the refinery is shown below.



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

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Return On Investment (ROI) summary

Pump population	523
Reduction in pump failures (increased MTBF from 18 to 54 months).....	1 046 (fewer failures)
Cost of failures:	
Components (8 970 € per pump x 1 046).....	9 382 620 €
Labour (4 staff x 7.5 hours per pump x 28.65 € hour x 1 046).....	899 037 €
Total value	10 281 657 €
SKF solution investment (bearings, training, alignment tools, condition monitoring)	1 722 000 €
Net benefit	8 559 657 €
SKF solution ROI over 54 months	497%

All numbers are rounded off and based on customer estimates. Your particular cost savings may vary.

