Are you experiencing frequent machine downtime due to maintenance? A proactive reliability maintenance programme helps you eliminate recurring machine failure through four key elements.

1. **Predictive maintenance**
   
   Predictive maintenance is aimed at detecting a machine condition that will eventually lead to failure, as well as indicating the severity and consequences of the failure. To do this, sophisticated condition monitoring technology is used to collect data, such as machine vibration, thermography, lubricant condition, motor current analysis, and process parameters.
   
   Most predictive maintenance programmes stop at detecting a problem and making a residual life prediction. In contrast, we use the collected data as the basis to diagnose the problem, on site or via a central SKF diagnostic centre, and determine which proactive tasks are necessary to increase machine availability.

2. **Diagnostics and root cause failure analysis**
   
   An SKF Proactive Reliability Maintenance programme draws on our engineers’ experience of extending machine life. After a thorough diagnosis of the collected data, our machine specialists make recommendations for actions such as precision alignment, precision balancing, alterations in lubrication management, and improvements or redesigns of machines or critical components. To complement the knowledge derived from the diagnosis of data, we conduct detailed machine and component diagnostics; on site or at a centralized SKF diagnostic centre.
   
   We subject damaged or failed components to a thorough root cause failure analysis. We then use the results to prevent a recurrence of the problem or, in some cases, to assist your original equipment manufacturer partners in a redesign of the machine.

3. **Key performance indicators**
   
   Key performance indicators are performance improvement targets established jointly between us and your plant management. Typically, these cover a range of areas, from unplanned mechanical downtime and product quality to plant efficiency, maintenance costs and bearing performance. We also use key performance indicators to determine the skills personnel need to maintain machine performance. Where possible, once a key performance indicator is achieved, we set new targets to facilitate the continuous improvement of your operation.

4. **Operational review**
   
   Through a periodic operational review, we monitor that the SKF Proactive Reliability Maintenance programme achieves the established key performance indicators. We document the results and present them at performance review meetings with your plant management. These meetings also help continually refine the process to achieve optimal machine performance.