Success Story
Industry: Woodworking
Application: Table Guide for Woodworking Machines
Cost Savings: 13,333 euros

Introduction

An international manufacturer of woodworking machines repeatedly encountered problems with the failure of guide rollers in their machines. NSK investigated the problem and found that the existing bearings had insufficient bearing tolerance combined with inconsistent bearing assembly methods resulting in the frequent failures. NSK proposed a higher tolerance support roller bearing combined with a training package that allowed consistent assembly of the table guide assembly. This enabled fault-free running of the machine and reduced fitting times for the bearings.

Key Facts

- Table guide for woodworking machines
- Insufficient tolerance for existing bearings
- Failures through complex and often incorrect assembly of bearings and components
- Poor service life and frequent failures
- Trials with NSK rollers
- Trial was successful and this demonstrated superior performance
- Result: reduction of assembly costs and staff deployment

Value Proposals

- NSK's investigation showed that problems arose during installation of the bearings
- NSK training of employees in the installation and removal of bearings
- Proposed use of NSK pulley bearings
- Reduction of assembly costs and staff deployment
- Great improvement in the bearing performance and reliability
- Cost savings of approx. €13,333 per annum
Product Features

- Shields ZR: sheet steel disc
- Seals RSR: made of nitrile rubber reinforced with an embedded steel disc
- Re-greasable through the inner ring
- Outer ring can be cylindrical or crowned
- Contact seals provide excellent protection against the ingress of dirt
- Reduce wear on the raceways and ball surface
- Reduce noise, vibration and the danger of lubricant failure
- Accommodate radial and axial forces in both directions
- Transfer of tilting moment possible

Cost Saving Breakdown

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th></th>
<th>NSK Solution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly costs (conversion)</td>
<td>€3,333</td>
<td>Assembly costs (no failures)</td>
<td>€0</td>
<td></td>
</tr>
<tr>
<td>Personnel required to replace bearings</td>
<td>€10,000</td>
<td>Personnel required to replace bearings</td>
<td>€0</td>
<td></td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>€13,333</strong></td>
<td></td>
<td><strong>€0</strong></td>
<td></td>
</tr>
</tbody>
</table>