A paper manufacturer in the UK was experiencing repeated bearing failures within a Tinting Machine. The machine is operated once a month and each time fails to function due to seized bearings from the previous run. The bearings required changing before a new run could take place, resulting in four hours of lost production. An Application Review by NSK determined the failure was caused by ingress of ink. NSK recommended replacing the standard bearings with Stainless Steel Molded-Oil bearings with DDU seals, which are designed to perform well in wet applications. During testing, regular monitoring of the application showed the bearings operated for 12 months without seizure, resulting in reduced maintenance and no lost production costs.
**PRODUCT FEATURES**

› Stainless steel for corrosive environments
› Molded-Oil provides continuous supply of lubrication oil
› Grease-free property with no oil refilling keeps operating environments clean
› Operating life more than twice as long as grease lubrication, in water or dust-contaminated environments
› Contact-seal type available in standard inventory for ball bearings
› Achieves extended maintenance-free performance as Molded-Oil provides a continuous supply of lubricant
› Available for high speed applications
› Available in ball bearing, spherical roller bearing and tapered roller bearing types

---

**COST-SAVING BREAKDOWN**

<table>
<thead>
<tr>
<th>BEFORE</th>
<th>COST</th>
<th>NSK SOLUTION</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearing Replacement: Standard bearings</td>
<td>$225</td>
<td>Bearing Replacement: Molded-oil bearings</td>
<td>$195</td>
</tr>
<tr>
<td>Engineering fitting: Initial fitting, planned replacement &amp; breakdown</td>
<td>$1,665</td>
<td>Engineering fitting</td>
<td>$139</td>
</tr>
<tr>
<td>Lost Production</td>
<td>$53,283</td>
<td>Lost Production: No incidents reported, bearings still running after 12 months in operation</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td><strong>$55,173</strong></td>
<td><strong>NSK SOLUTION</strong></td>
<td><strong>$334</strong></td>
</tr>
</tbody>
</table>

---

**YOUR PARTNER FOR MACHINE OPTIMIZATION**

Our AIP Added Value Program is based around a simple proposition: ‘improvement pays’. By working with you throughout the AIP Value Cycle, we will help you achieve improvements in machine reliability, productivity and performance, all of which carry a tangible and measurable cost benefit – and we have the tools to prove it! That’s what we mean by improvement pays.