A full TPM approach helped an Asian dairy producer reduce claims from the market by 74%.

Customer
A large dairy producer in Asia.

Challenge
After two years with an Operational Cost Guarantee (OCG) program for their Tetra Pak filling lines, the customer wanted to expand the continuous improvement activities and improve quality in all plant loss areas.

Solution
A full Total Productive Maintenance (TPM) implementation. The three-year process covered all employees and all equipment.

Results
Overall improved quality performance. Claims from the market were reduced by 74%, and Overall Equipment Effectiveness (OEE) increased from 40% to 79% between 2011 and 2016.
Customer challenge

Back in 2011, the customer faced a number of issues. Their KPI system was weak, claims rate from the market was higher than desired and equipment breakdowns were resulting in many internal quality defects. To address these quality issues, we started the Continuous Improvement Journey by implementing a 2-year Operational Cost Guarantee program. The results, which included an increase in Overall Equipment Efficiency (OEE) from 40% to 65%, were positive. The customer decided to expand the continuous improvement activities to the whole factory, and improve quality in all plant loss areas.

Our solution

We expanded the existing Continuous Improvement activities into a full Total Productive Maintenance (TPM) approach. In short, TPM means that everyone within the organisation, from top management to line workers, endeavors to maximise productivity.

Results achieved

The customer’s Overall Equipment Efficiency increased from 65.1% by the end of 2013 (which in turn was an increase from 40% in 2011) to 78.53% in 2016. Claims from the market were reduced by 73.8% - from 4.2 to 1.1 parts per million (ppm) between 2013 and 2016. Internal failures – defects per 10’000 packages – decreased too: from 0.32 in 2013 to 0.13 in 2016.

The customer continues their TPM journey with our ongoing support.

Customer case

Asian dairy producer

Challenge: Implement continuous quality improvement activities to focus on all plant loss areas.

Solution: A full TPM approach, involving the entire organisation.

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<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th>Change</th>
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<tbody>
<tr>
<td>Internal failures</td>
<td>0.32</td>
<td>0.13</td>
<td>-73.8%</td>
</tr>
<tr>
<td>Claims reduced</td>
<td></td>
<td></td>
<td>65% &gt; 78.53%</td>
</tr>
<tr>
<td>OEE 2013 &gt; 2016</td>
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The key principles when implementing TPM are:

- Secure that the current situation in terms of performance, cost and risk is clearly defined
- High focus on the foundation, to enable deployment of methodologies in a sustainable way
- Use Daily Management System (DMS) to create people empowerment
- Involve the whole organisation, from left to right and top to shop floor
- On-site, hand-in-hand coaching and audits from Tetra Pak

The customer chose a 3-year implementation plan, which included education and training in quality management and safety.

Our solution

We expanded the existing Continuous Improvement activities into a full Total Productive Maintenance (TPM) approach. In short, TPM means that everyone within the organisation, from top management to line workers, endeavors to maximise productivity.

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Tetra Pak® Services cover every aspect of your food production, from daily routines to business insights. Our tailored service solutions improve performance, optimise costs and ensure food safety throughout the lifecycle of your operation. With Tetra Pak as your partner, you get the people, portfolio and presence to achieve your performance goals.

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