Customer
A leading Asian infant milk producer, their plant where equipment is not from Tetra Pak.

Challenge
Improve plant-wide productivity, secure high quality and extend their peoples’ knowledge and skills so they could increase output and reduce manufacturing costs.

Solution
Tetra Pak designed a Total Productive Maintenance (TPM) programme to meet these challenges and supported staff to improve performance even though the processing and packaging equipment was supplied by other manufacturers.

Results
In the first six months, Overall Equipment Efficiency (OEE) has improved by 12%, manufacturing costs have reduced by 13% and the number of claims received from customers for damaged or poor quality product has reduced by 14%. Coupled with reductions in hand over times, this increased output of tons of milk powder produced per month by 24%.
Customer challenge
The customer, a leading Asian dairy product manufacturer, invited Tetra Pak to help them improve performance at an infant milk production plant. They approached us after seeing how our TPM approach had increased productivity, improved quality and developed the manufacturing management, maintenance and problem solving skills of their people at several of their other sites.

Tetra Pak have helped customers all around the world make similar improvements, but this case stands out as none of the processing, packaging or distribution equipment at this site was supplied by Tetra Pak.

Our solution
We started by developing a deep understanding of current performance by completing a pain break down analysis. Then, working with the site management team and production and maintenance staff, we kicked off fifteen projects that, based on the issues identified during the analysis of current performance, would make the most improvement in a short time. This list included
1. a performance measurement system,
2. improvement to maintenance practices & schedule,
3. training and coaching of key staff in the use of the TPM methodology and tools.

Results achieved
The results were impressive. OEE was improved by 12%, manufacturing cost was reduced by 13% and the number of claims received from customers for poor quality was reduced by 14%. This, when coupled by a reduction in hand over time, delivered a 24% increase in tons of milk powder produced per month already after the first six months.

The next phase has started. Projects to sustain and build on the improvements already made have been kicked off and further training for staff across the site will be conducted. This will be delivered by a mixture of classroom and practical, on the line training and will be reinforced with on-going coaching and support from Tetra Pak specialists.

The key element of the Tetra Pak TPM approach is the engagement and partnership with the customer’s people.

“At the end of the day, the output is down to the hard work of the customer’s team,” said Gary Whitehead, Service and Solutions Manager for Tetra Pak in Asia. “We have explained the TPM methodology, helped make key changes and shown everyone how to use and apply the tools, but the site team has actually delivered the savings. They have have done the lion’s share of the work to improve productivity, enhanced quality and increased output.”

The keys to a successful Tetra Pak Total Productive Maintenance programme implementation:

- Ensure that current performance, cost and risk are clearly understood
- Focus on the fundamentals to ensure TPM is implemented properly and can be sustained
- Develop a Daily Management System to empower employees
- Involve everyone in the organisation
- On-site coaching, continuing support and audits by Tetra Pak specialists
Customer case
An Asian dairy producer

**Challenge:** Improve productivity, quality & develop the people in a plant without Tetra Pak equipment

**Solution:** Plant-wide TPM solution, trained staff with ongoing coaching and support

**Results:** This case demonstrates how Tetra Pak can add value for food and beverage customers at plants where we supplied none or just some of the production equipment.

<table>
<thead>
<tr>
<th>Percentage Change</th>
<th>Description</th>
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<tbody>
<tr>
<td>12%</td>
<td>Efficiency</td>
</tr>
<tr>
<td>-13%</td>
<td>Cost</td>
</tr>
<tr>
<td>-14%</td>
<td>Quality claims</td>
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<tr>
<td>+24%</td>
<td>Output</td>
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Tetra Pak® Services

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.

Find out more about Tetra Pak® Services at tetrapak.com/services