The Kaltec ROI report

ROI in high-performance manufacturing

Kaltec worked with 30 high-performance manufacturers in aerospace and defense, semiconductors and batteries, shipbuilding, power and more to study what choosing and managing industrial chemicals to fit the process changes in speed, quality and total cost of ownership. Here is what 42 production, maintenance, quality and purchasing leads told us.

Get the full report



Who responded

47%

Production and maintenance engineers

Role

60%

Annual revenue over KRW 100 billion

Company revenue

57%

Over 300 employees

Company size

About the research

Chemical management on the factory floor is changing. Sites that choose products and manage their use on process data are holding quality and uptime while lowering total cost of ownership, and sites that buy on unit price keep repeating the same trial and error. Kaltec has helped drive this change on customer sites from the start, and this time we measured its effect in our customers' own words.

Why did we do this research, and why now?

The more demanding the manufacturing, the more industrial chemicals such as lubricants, metalworking fluids, cleaners and rust preventives decide quality and equipment life. Yet their effect never shows on a price list. We wanted to confirm what actually changed for customers working with Kaltec, and what it is worth.

Who did we interview?

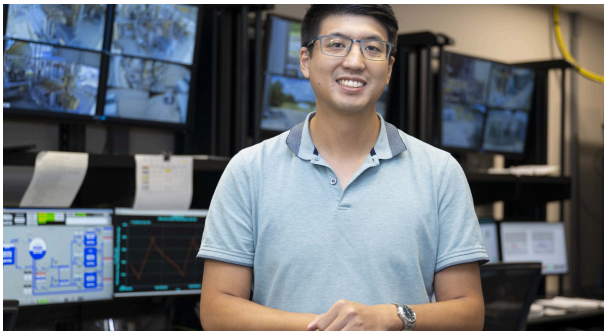
42 people in production, maintenance, quality and purchasing at 30 customers across nine industries, including aerospace and defense, semiconductors and batteries, shipbuilding, power, rail and precision machining.

What kind of companies?

All have worked with Kaltec for more than two years, ranging from large makers of finished systems to mid-sized suppliers of critical components.

KALTEC IS NOW PART OF DAILY OPERATIONS

87% of respondents say losing Kaltec would disrupt daily operations on site





01 KEY FINDING

The impact of Kaltec on speed

Sites working with Kaltec get answers to problems faster and start trials sooner. One aerospace parts maker cut the time from reporting a metalworking fluid problem to receiving a trial plan for a replacement from three weeks to 72 hours, because the process conditions and earlier test records were already in the site database and nothing had to be researched from scratch. With that time back, engineers look after more lines, and agreeing with purchasing and quality has become easier.

Speed

84%

say the time from product selection to trial has shortened

77%

get a first answer to a site problem within a day

64%

of customers have extended use to other processes

“When a metalworking fluid problem came up, we used to take samples from three suppliers and run them for a month. Now a trial plan with the reasoning behind it arrives within three days.”

Head of Production Engineering, aircraft parts manufacturer

02 KEY FINDING

The impact of Kaltec on quality and risk

In demanding manufacturing, chemicals are often the hidden cause of defects and equipment failures. Before choosing a product, Kaltec looks at materials, equipment, operating conditions and downstream steps together, and after it goes in we record concentration, contamination and change intervals to watch the trend. So we catch the signals before a problem grows, and leave control limits so that a solved problem does not come back. Customers say these records also serve as evidence in quality audits and customer inspections.

Get the full report



Quality and risk

92%

of customers say the same problem has not come back

85%

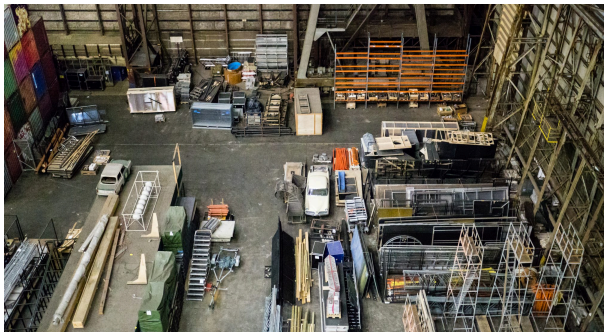
of site workers say they are more satisfied with their work environment

46%

caught a specification or compatibility problem before application

“Kaltec's engineers look at our line before they look at products. Not having to live through the same problem twice is the biggest difference.”

Head of Quality, battery equipment manufacturer



03 KEY FINDING

The impact of Kaltec on cost and total cost of ownership

Unit price is only part of total cost of ownership. Add consumption, change intervals, waste disposal, downtime and rework, and the cheaper product often turns out to be the more expensive one. Kaltec calculates these items together from site records to choose the product, and measures them again on the same basis after it goes in. Responding customers saw total cost of ownership fall by 15% on average, and by consolidating purchases that had been spread across several suppliers, they also spend less time on purchasing and inventory.

Cost and TCO

15%

Average reduction in total cost of ownership

Product, consumption, change intervals, waste disposal and downtime combined

68%

look after more lines and equipment with the same headcount

59%

of customers have reduced the number of chemical suppliers they deal with

> “When we compared unit prices only, we never saw it. Once change intervals and disposal costs were counted too, what we spend in a year dropped noticeably.”
>
> Head of Purchasing, marine equipment manufacturer



Closing notes

High-performance manufacturers are seeing a clear, measurable return from working with Kaltec. Across 30 customers in nine industries the pattern holds: work moves faster, quality is steadier, and total cost of ownership comes down.

These are still early days. As records build up in the site database, baselines will sharpen and the ways we measure the effect will mature. The sites that start measuring now will see that change first.

The full report sets out the method and the total cost of ownership items you can apply to your own process right away.