

PRINTED CIRCUIT DESIGN & FAB CIRCUITS ASSEMBLY

CURRENT ISSUE

SETTING UP THE KAIZEN PROGRAM

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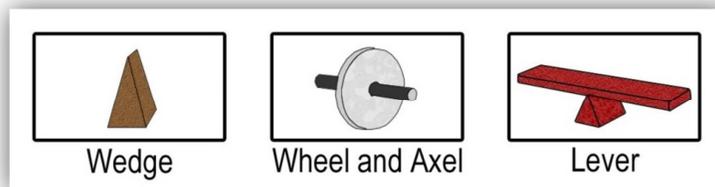
As a contract manufacturer do you want more results with less effort? The simplest of tools could be the most effective.

How could you, your department, and your entire company produce greater output, at a lower cost, and with higher profits? There is a simple but profound technique, proven over decades of testing. Kaizen: it's not just about your manual push line – it is about every aspect of your business. This efficiency will allow you to bid low and still maintain profit. Perhaps it deserves your second look.



Kaizen is a Japanese word that is applied to a technique the US brought to Japan to aid their rebuilding after the Second World War. It was the basis of Japan's resurgence in the electronics and transportation industries. The word kaizen morphed from meaning any favorable change into a methodology of continuous incremental improvements. From the C-level paneled offices to the production floor and from bookkeeper to broom pusher, everyone in your company participates in kaizen by adopting the same attitude and understanding that the situation as it stands, the status quo, could always be improved. In this improvement lurks efficiency and money – and lots of it. There are no gimmicks: it is a simple tool, and one that works.

Simple Tools Work Best



Wasted time, wasted materials and wasted space are the key targets in a kaizen process. Everyone in the electronics industry needs only to look around our own offices, stockrooms, shipping and receiving, and production floor to find ways of

increasing efficiency and doing more with less. Hard work is not lauded in a kaizen evaluation. Rather, the presence of hard work focuses the kaizen on areas that should be addressed first. If we believe we are working too hard and not getting the results we want then let us take a fresh look at ways to do better.

If you are or you encounter a person who feels valued only when working under a heavy load, then a kaizen that makes that person's environment more efficient would allow him or her to do even more and become even more productive. Another person who is under too much work stress might yield poor results, with work that would have to be repeated, and with diminishing physical and mental health. A kaizen evaluation would help here too by making that person's job easier – they would perform better and would be more likely to remain a healthy and productive employee.

Work load should be tailored to ensure that jobs are done in the time allotted while adhering to a standard procedure – the “takt” time. The kaizen goal is not to change the person but rather the person's environment.



Who initiates a kaizen and how? This first part of the question has an easy answer – anyone – even you. As business grows procurement could come to the conclusion that they cannot keep up with their workload and call for a kaizen. Your shipping supervisor could become over-burdened and initiate the request. A production line worker could think of a better way to do their job and request a full evaluation.

The kaizen team is often composed of people from all departments. These fresh eyes see the situations from different perspectives and often yield previously unexplored avenues for improvement. Office admins working on a stockroom kaizen, grounds keepers in the boardroom, salespeople on the SMT assembly line – all could make a difference.

The person in charge of a kaizen is not a boss but rather a facilitator, someone who assembles the kaizen team and together with the team sets a goal, e.g. a 10% reduction in cost of materials to package product, a 5% decrease in the time to process an purchase order, a 15% increase in output from the prototype shop without increasing time spent.

These improvements need to be translated into real cost savings. If you desire a specific dollar figure then multiply it out: $10\% \times \text{package cost} \times \text{packages per year} = \XXX,XXX savings that go right to the bottom line. That calculation should motivate your team to succeed and your management to support you.



At this point you see the need, you have a goal, you know the team, and you have defined a general technique to get the job done. It's time to flesh out the program. Avoid hiring a kaizen specialist at big bucks, at least until you have started on this journey. There is enough free or inexpensive information available for you to launch your first kaizen.

Initially some books to read include those on the theory *Kaizen* by Masaaki Imai (\$150 new or \$25 used), and on the practical side *The Toyota Way* by Jeffrey Liker (less than \$20 for hardcover, e-book, or audio).

The international Kaizen Institute offers numerous seminars and publications – see US.KAIZEN.COM/. Also check KAINNEXUS.COM for its kaizen software tools and LEANMANUFACTURINGTOOLS.ORG/625/PLANNING-AND-RUNNING-KAIZEN-EVENTS/ for kaizen event tools.

There are numerous online blogs where a bit of browsing will uncover useful tips from experienced kaizen participants. And here are few kaizen forms to download and use: USTEK.COM/WP-CONTENT/UPLOADS/2013/03/KAIZEN-FORMS.PDF.

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