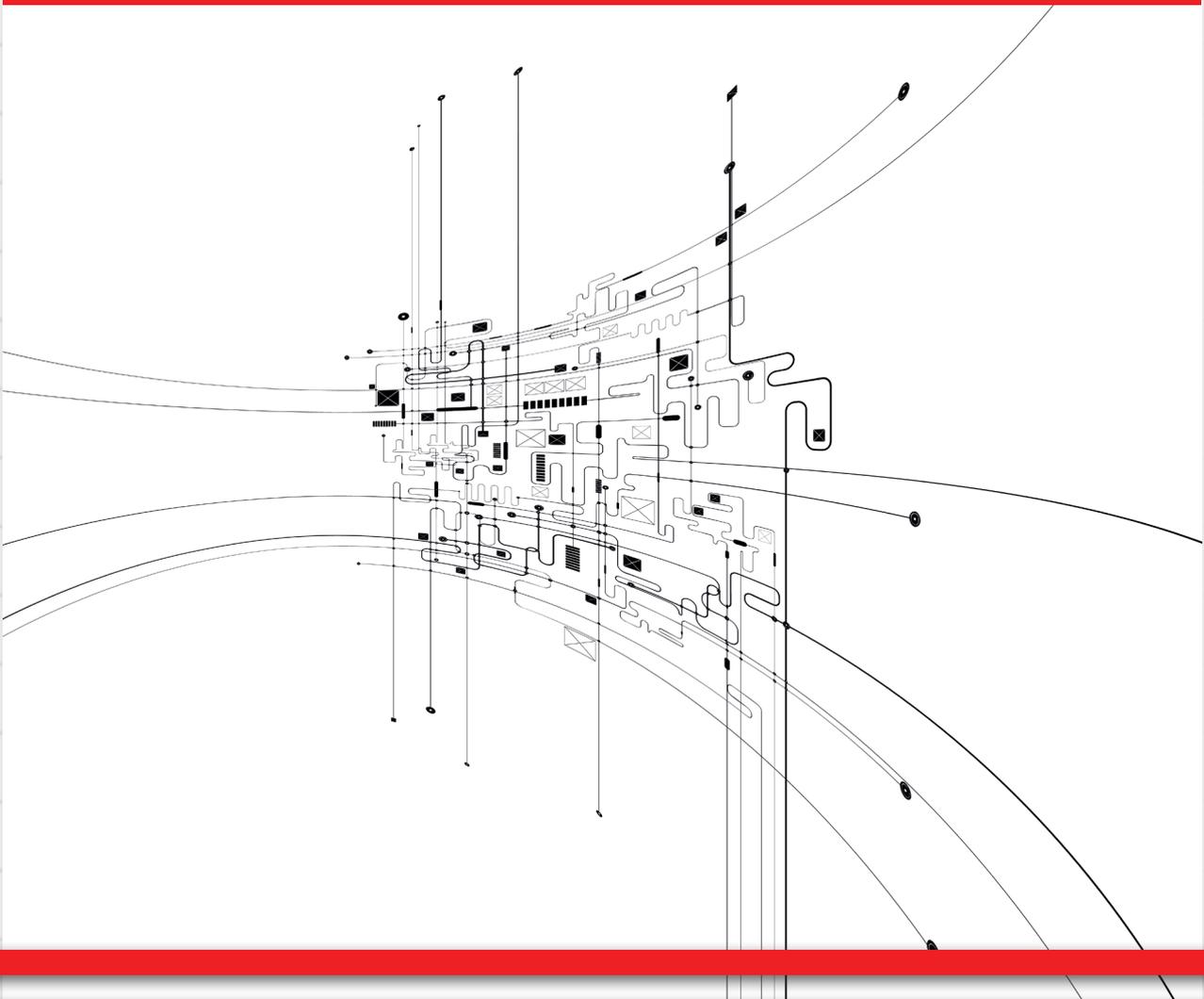


Tenkay

10 ways to improve your profits through great

Design, Procurement
& Manufacturing



Design better, Buy better, Manufacture better



Here at Tenkey, our mission is to help our customers increase their profits and enhance their reputations by designing better, buying better and manufacturing better.

Nowadays, outsourcing is seen as a viable and sensible business strategy for a whole range of services – from HR to manufacturing. By bringing in outside expertise, you can access a vast array of experience and equipment at a fraction of the cost of building the infrastructure internally.

But whether you are insourcing or outsourcing your electronics manufacturing, you need to make sure that your production process is as efficient and cost effective as possible. Only then can you be confident that you are maximising profits while maintaining quality standards and delivery schedules every step of the way.

As Dieter Rams said in his 10 principles of good design:

“Nothing must be arbitrary or left to chance. Care and accuracy in the design and manufacturing process show respect towards the consumer”.





Here are our 10 top tips for building a world-class manufacturing process for your product or components.

1. DESIGN FOR MANUFACTURE

Involve your manufacturer at the earliest possible stage in the design of the product. An experienced manufacturer will be able to guide you on design improvements and component selection that will not only make the manufacturing process more efficient and cost effective; they may also improve the performance and reliability of your product.

Sometimes maintenance and parts replacement in a product is unavoidable, so your product needs to be designed with repair in mind. With improved access to replaceable components, the repair will require less labour and therefore less cost.

Where possible, design for the environment too. Good design and manufacturing makes an important contribution to the preservation of the environment: it conserves resources and minimises pollution throughout the lifecycle of the product.

2. KEEPING IT SIMPLE, KEEP IT PURE

The world is more complex than ever before and yet what customers often respond to best is simplicity — in both form and function. Taking complex projects and distilling them down to their simplest components allows suppliers and customers to better understand and buy into your vision.

Challenge yourself on every component: does your product need it? Often things are put in 'just to be sure'. If it works well without that part, you may well not need it. Saving on time & parts can also mean saving on costs.

3. SCARCITY COSTS

Always design with the availability of components in mind. Avoid 'single sourcing' and hard-to-find components, these introduce risks to your production and can lead to wild fluctuations in price too. Designing in obsolete or 'end of life' products, either through unfamiliarity or a belief that it is a way of saving money, can cause production headaches further down the line.

There is often a case for designing with parts you already have, or already use in other products. As long as these parts are the right ones, dealing with a known quantity reduces risk and you may also be able to achieve economies of scale in your purchasing.

An experienced electronics manufacturer like Tenkay will be able to help you in all these areas and avoid the pitfalls.

4. PROTOTYPING

Using prototypes allows you to address any issues prior to the first production run and helps prove the design prior to the commitment of labour and equipment. Finding faults or opportunities for improvement when you have a warehouse full of completed products is at best frustrating and, at worse, ruinous.

A lot can be achieved at the drawing stage. Internal drawing approval allows you to verify internal documentation before releasing to production.

Another advantage of a prototype is that it allows the product to be prepared for production, by breaking down the requirements into easily identifiable skills.

5. GET AN ACCURATE QUOTE

Make sure that you are given accurate prices for new products or projects and, where possible, secure a fixed-price agreement from your manufacturer.

A fixed-price agreement may not always be possible, but an experienced contract manufacturer should be able to fix the majority of the costs and give you a very clear understanding of where the variable costs lie.

6. IF YOU CAN AUTOMATE IT, AUTOMATE IT

Using machines to improve the efficiency of production, results in repeatability, consistency, improved quality and lower cost. Automation is also invariably safer for employees.

7. BATCHING IS BEST

Determining the production times and methods using historic or projected order and build quantities allows the production process to be set up to produce in batches.

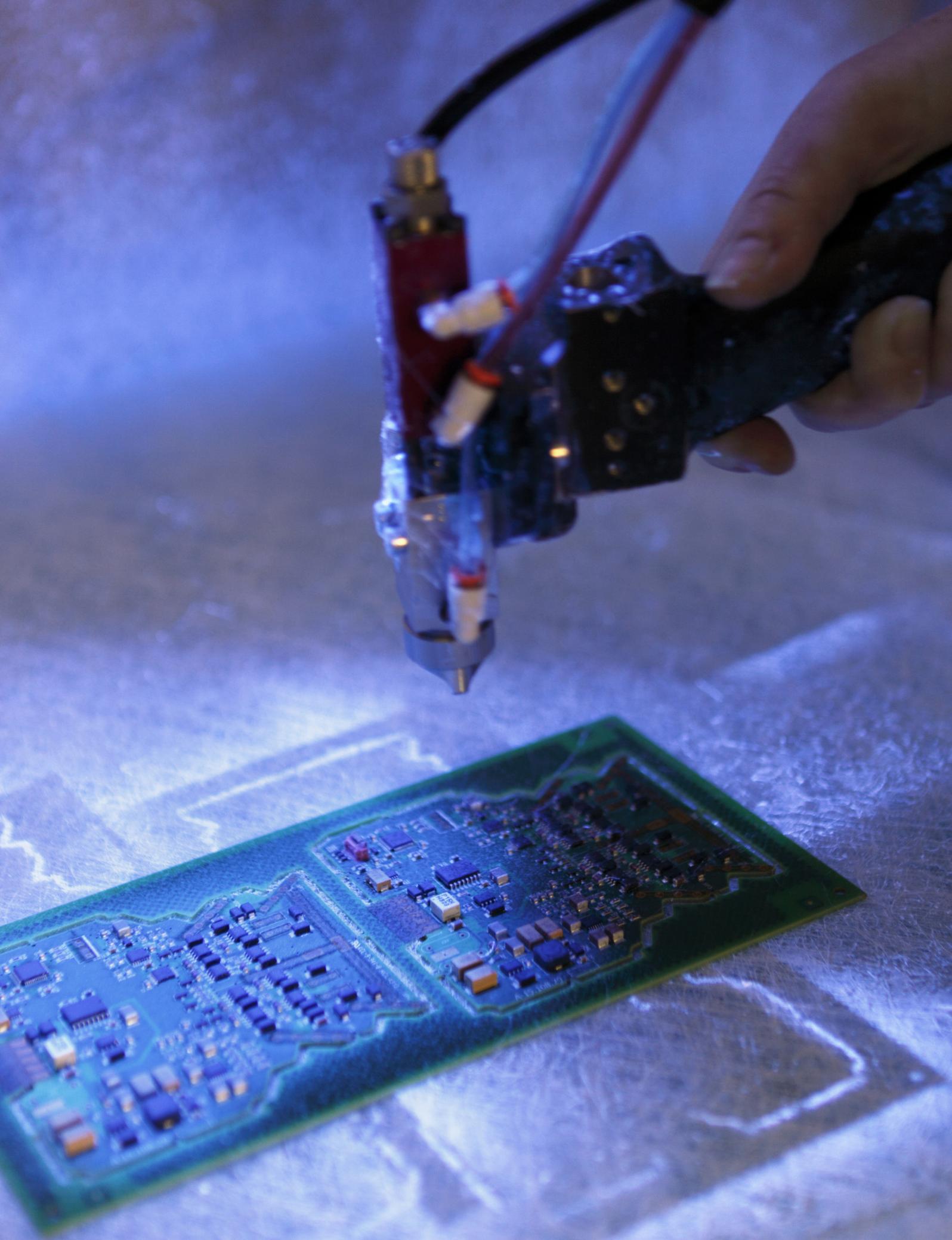
Sometimes, batch production will mean needing storage facilities, but it's invariably more cost effective to produce in batches rather than short-runs.

Ask your contract manufacturer about the help they can provide with managing, monitoring and maintaining stock levels to ensure continuity of production and supply. Also ask about schedule deliveries, call-off deliveries, just-in-time deliveries and stock option deliveries.

8. FEEDBACK IS THE BREAKFAST OF CHAMPIONS

Listening to feedback from the shop floor on how to improve documentation and production methods can be the difference between a great product and a disastrous one. These are the people that work on the product day-in and day-out and they will often spot valuable improvements that weren't identified at the design or prototyping stage.

Your customers are great sources of feedback too. Encourage feedback and listen to complaints - treat them as opportunities to improve. Having constant dialogue with your customers increases confidence and builds trust in your products and company as a whole.



9. MEASURE, MONITOR AND IMPROVE - CONSTANTLY

Continually monitoring volumes, quality, labour time and component costs will ensure that you are driving maximum value out of the manufacturing process and selling products for the correct price – neither over charging nor under charging.

10. QUALITY ASSURANCE – TESTING RELIABILITY

Quality assurance procedures help to assure the customer and the whole supply chain that manufacturing and purchasing controls have been fully conformed with. Likewise you need to be able to demonstrate that you conform with legislation relating to the environment and health and safety.

A Test Engineer should be integrated within the manufacturing process to make sure that potential weaknesses in the process are acknowledged and tested for. This will mean that that the final product is reliable and properly verified.

Always select a manufacturer that has verifiable quality standards. These include ISO9001 Quality Standard; ISO14001 Environmental Standard and OHSAS18001 Health and Safety Standard.

AND FINALLY...

Never overlook the importance of customer services and 'after sales' support. 70% of people are willing to spend an average of 13% more with companies they believe provide excellent customer service.

Good account management and clear lines of communication with your manufacturing partner will allow you to provide quick responses to negative comments or attitudes, give clarity to specific issues and lay down a truthful company position. Reputations can be enhanced and built by turning your customers into brand advocates who talk enthusiastically about you to their network.



ABOUT US

Tenkay started in 1982 as an independent component distributor. By 1984 it had formed a strategic alliance with a local sub-contract assembly company, Prototype Electronic Services (P.E.S) and in January of 1996, the two companies merged to trade solely as Tenkay Electronics Ltd.

We served O.E.M markets across Sussex with a comprehensive range of manufacturing services; manufacturing printed circuit boards, cable harnessing and wiring looms, control panel and box build assemblies, along with providing full product build.

The company has continued to evolve through a combination of organic growth and acquisitions, taking Tenkay into markets in the UK and across the world.

Located in Lancing, Sussex, Tenkay operates from a purpose built 18,000 sq.ft. facility located just 5 minutes from the A27 and the A259.

We provide dependable, electronic manufacturing support to a variety of industries including simulation, texture analysis, and safety.

Working to engineering standards IPC610 for P.C.B. population and IPC620 for all wiring assemblies, and accredited to ISO9001, EN14001 and OHSAS18001, Tenkay provides continuity of service and quality across the board.

Tenkay

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Tenkay

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