

Stable Micro Systems Case Study

Tenkay Electronics

Analysing Electronic Manufacturing

Stable Micro Systems produces scientific testing equipment which has applications in a wide variety of industries around the world. Sectors include food manufacturing, pharmaceuticals, cosmetics, automotive – even aerospace, where some of its equipment is used by NASA.

The company offers full design, manufacture and product support facilities for high quality texture analysis, measurement and powder characterisation assemblies.

The need

While Stable Micro Systems build and engineer their products and accessories themselves, they approached Tenkay early on to manufacture and supply all of their electronic assemblies.

The management needed a partner that could understand, build and supply electronic components to the exacting standards required for precision measurement and analysis equipment.

The solution

As Stable Micro Systems' main production facility, Tenkay is one of its principal suppliers. We build all of their PCAs and individual looms, which are then assembled by Stable Micro Systems to make their final products. We also manufacture their main product, XTPlus, to a sub-assembly stage.

Products are ordered as required on a weekly basis, typically over a 12-18 month period. We monitor and manage stock levels, delivering direct for final assembly. We are able to proactively advise the team at Stable when they need to reorder, eliminating any last minute rush orders for us and enhancing peace of mind for Stable. This means our customer can concentrate fully on its manufacturing processes and meet its order deadlines.

Around 5 years ago, we showed Stable Micro Systems our SMT line and suggested we move their main boards, which already used



mixed technology (some SMT and some PTH), to our new SMT line. The results were impressive, seeing the build time decrease from 6 minutes to 1 minute, reducing the labour time and therefore cost of production to Stable.

From there, we suggested moving more components to SMT, reducing labour time and improving quality, which in turn brought about even greater cost savings. This led to the next re-design of their main boards and moved them from being heavily PTH, to predominantly SMT.

We also JTag test which has resulted in improved pass rates and fault diagnosis.

Looking forward

We have been working with Stable Micro Systems for 22 years. During this time, both companies have grown and developed in parallel.

We work closely together on product design and, with higher capacity silicon products now being used, the functionality of Stable's products is greater than ever before. The size of PCAs, and therefore their housing units, have been reduced and production has been 'future-proofed' as the future of components such as silicon products is more likely to be SMT.

We look forward to continuing this collaborative relationship and playing a pivotal role in the growth and development of the Stable Micro Systems business.

“ The two businesses have grown up together and we know each other very well – we have helped each other out on numerous occasions and tend to solve any major problems together. Tenkay are very good at predicting likely outcomes.

This is a very competitive sector. We have seen companies come and go over the years so Tenkay must be doing something right!

We are being approached by other suppliers all the time, but for us at any rate, the difference is that Tenkay's people are really interested in what we are doing – not just in their own bottom line. They genuinely want to understand our business and are always prepared to 'walk the extra mile'.

We have seen Tenkay grow from modest beginnings to become a highly structured business: it has been nice to watch. ”

Andy O'Donnell
Production Manager

