

CLIENT: **Scientific Instrument Manufacturer**

PROJECT SCOPE: **New Product Introduction**

PROJECT TARGET: **Reduce time-to-market; reduce cost; improve manufacturability**

RESULTS: **28% reduction on ex-works cost**

Normally we'd hope to be involved early in the design phase. In fact it's preferable to get involved before a project has started, as critical decisions that influence the end-cost are committed in the earliest stages. But that wasn't the case here...

We were asked to manage the final stages of the design and smooth the release to production, as well as help sales and manufacturing to plan the phase-out of old products. Some issues were immediately apparent and the project was some months behind schedule (launch dates had already been delayed twice).

Of more concern was that some versions of the product just weren't viable at the manufacturing cost-price. The client was desperate to recover from this position as he was on the verge of abandoning the project, thinking that a common 'platform' approach just wasn't possible with low-volumes and wide variety. We believed that should be feasible and were given the chance to "show us how".

It quickly became clear how this position had been reached – the design brief had been for a modular system that would replace six old models. That is normally a wise move, but the old models had far too wide a range of specifications to bring them into one. Consequently the 'lower spec' models were carrying parts that were redundant or over-engineered making the cost too high.

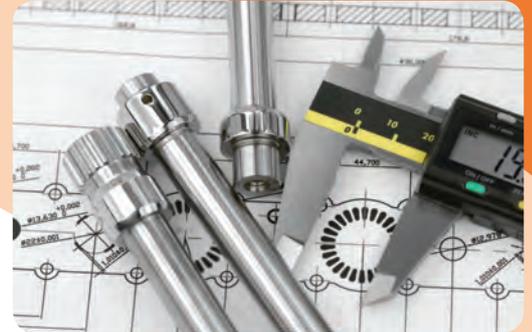
We were targeted with a cost reduction of £700 (on a £2,900 product). There wasn't the time or budget to start again, so a 3-month plan was put in place to re-engineer the product and challenge the specifications of the 'base model' platform.

In the first month the specifications were reviewed, a series of design-brainstorms were held with the production team and suppliers, and the electronics package (which had been single sourced) was put out to a market tender with a selection of new and existing suppliers.

By the close of the first month the savings were achieved 'on paper' so month two was spent evaluating new parts and working with the chosen electronics supplier. By the third month new designs and processes had been tested, final drawings were ready, suppliers had re-quoted, and everything was issued to manufacturing to commence production.

"The result of your leadership is that we have a new product range in place, ready to launch as planned and, most importantly, with all the supporting functions in place"

R Kenhard
Managing Director



Weald Technology Ltd has won awards for engineering and innovation in low-carbon and sustainable transport. Our collaborative design and engineering projects are used to generate industry-relevant STEM activities that inspire the UK's next generation of engineers and scientists.

**For further information please call
Phil Edwards on 01825 761890 email: info@weald-tech.co.uk**