

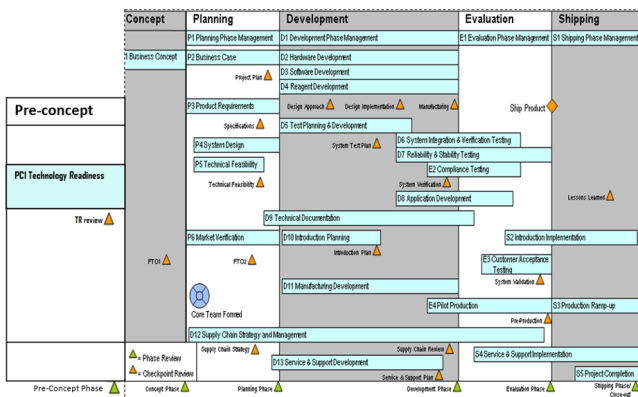
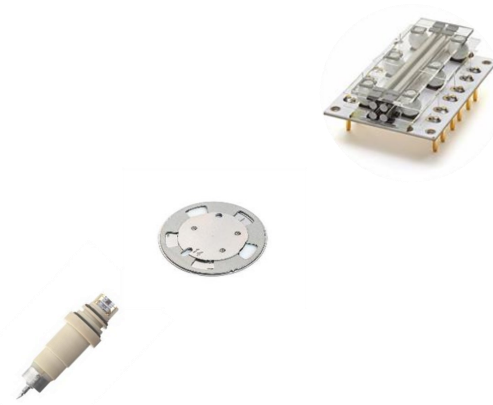


Product development and beyond

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Challenge

The advent of our award winning 4000 MiD mass spectrometer precipitated the current boom in miniature quadrupole mass spectrometers. However the initial rapid development of the product meant it incorporated many custom parts which required skilled in-house operators/technicians to manufacture at high labour cost. The design which was - largely identical to the initial prototypes - were clearly not ready for scalable production. Hardware and firmware issues which had been rare in small numbers had the potential to become significant at volume.



Solution

Microsaic initiated a root and branch review of the internal components focusing on manufacturability, servicing and user experience. In order to maintain transparency and focus with the business a structured waterfall-based project management system was implemented. All this was undertaken within our ISO 9001:2015 accredited Quality Management System (QMS).

Result

The release of the 4500 MiD marked a step change in the reliability, manufacturability, ease of use and serviceability. This permitted the outsourcing of production to a contract manufacturer greatly reducing Microsaic’s operating costs and inventory storage. This was achieved without compromising performance - enhancements made during this development lead to the 4500 MiDs position as the highest mass range (a key sales specification item) of its class and significantly increased up time.

