

# From concept TO REALITY

BY REG BREAKWELL, TOOLTECH PTY LTD

**E**xtensive association with the world aquaculture industry over the past 14 years has resented the Brisbane company Tooltech Pty Ltd with many interesting and exciting opportunities in product design, toolmaking and plastic moulding using a range of polymers since 1965.

They first produced the Aqua tray, a versatile shellfish grow-out system in 1994, after consultation and design work with one of Australia's foremost sub-tidal oyster farming companies, Cameron of Tasmania. This product, with its nine-version system, has proven to be the most versatile and comprehensive type of shellfish grow-out unit in the world, able to be used in numerous inter-tidal and sub-tidal farming modes.

The company continued to meet other shellfish farming demands by designing and producing the Aquapurse System with its several mesh versions, culminating in the recent release of two new products, the Aquapurse Mark VI and the 3mm mesh Aquapurse.

The Mark VI is said to be unique in that it is a one-piece unit that requires no assembly other than just to fold up and clip together, and this includes the ends. The only accessory required is whatever type of suspension device that the grower would need in intertidal mode. It requires no accessories for subtidal use.

Over the intervening years, Tooltech has produced a number of other products, and in

particular they were very involved in designing a special trough and bin for extensively farming soft shell crabs. The bins were tooled and moulded for Watermark Seafoods, whose computer-controlled farming system is said to be a world leader.

Tooltech is currently assisting in designing a new type of unit for a large-scale deepwater scallop farming concept. They will also tool and mould this product.

To meet the special needs of oyster growers, who had been using 2.4m tar-coated timber and mesh trays on rails for many generations, they were able to design, tool and mould their tray in environmentally friendly plastic, providing a significant saving on both labour and costs for the grower.

The company says it welcomes the challenge of special design requirements. To assist in meeting any product design task it can make a scale model using 3D data for fused deposit moulding, saving considerable time and cost.

The company says it welcomes inquiries from companies or individuals seeking assistance in developing polymer-made products. It will be exhibiting at the forthcoming Australasian Aquaculture Conference and Trade show in Brisbane, and will also present a conference session entitled from Concept to Reality, in keeping with the conference theme of Innovation in a Global Market.