

Valeport Vision for Success

As UK manufacturer of oceanographic and hydrometric instrumentation, Valeport has come a long way since its humble beginnings in Dartmouth, Devon (UK) some 38 years ago. Innovation and quality has always kept the company one step ahead.

Originally established by Jim Stevens in 1969, Valeport's first product was a simple impeller-type device called the 'Braystoke Flow Meter', used in the feasibility study for the Thames Barrier project in London. Building on the popularity of that first product, a range of flow meters and accessories quickly followed. When Oceonics purchased Valeport as a strategic acquisition prior to its flotation in 1981 the product range soon expanded and Valeport expertise grew in a variety of technologies, such as CTD.

But the rapid growth of Oceonics could not be maintained, and in another strategic move it was decided to sell some parts of the group. As technical director of Oceonics, Charles Quartley had overall responsibility for Valeport. Seeing its vast potential, in 1985 he bought out the company, re-focusing on its core products. It has been profitable ever since. By 2003 Valeport (1) had outgrown its rented premises in Dartmouth and moved to its own facility upriver in Totnes. Since then the company has gone from strength to strength, virtually doubling turnover to ~£4m (US\$8m) and making significant impact in new market areas. In September 2005 Charles Quartley handed over the reins to his son Matthew, although Charles still maintains an active interest in the R&D programme.

Company Structure

Today Valeport employs 38 staff, plus Charles and Matthew: six R&D engineers (mechanical, electronic & software), three in sales, four in finance and administration, and the remainder in the production department, which covers machining, assembly, test, calibration and service. All are housed in the 1,200m² riverside facility, and surrounding land also provides potential for further expansion.

Products and Sales

Valeport now offers over fifty individual products across six ranges: Sound Velocity, CTD, Tides, Waves, Current and Flow, and Bathymetry. With annual variations, in general these ranges contribute almost equally to turnover. The company also handles OEM arrangements that significantly support stability. Examples of recent projects include SV sensors for companies like Sonardyne, a miniature low-power CTD for the Sea Mammal Research Unit at St Andrews University, and flow sensors to allow water companies to monitor drinking-water distribution networks.

Although the coastal and offshore markets now provide much of the business, the first Braystoke Flow Meter (Model 001) is still manufactured and sells in significant numbers, particularly to developing nations where the low cost and simplicity of operation is attractive. Conversely, the importance of continuing R&D is shown by the fact that over 60% of turnover comes from products launched within the last three years.

Last year the company exported around 60% of products directly, with about half of the remainder sent overseas through UK offices or third parties. There are Valeport agents in over forty countries throughout the world, generating the vast majority of export sales.

Success Strategies

Valeport continues to operate according to principles that have served it well over the years. They are outlined as follows.

1. Never rely too much on one product, customer or market. Valeport's biggest customer comprises about 8% of turnover. No single product contributes to more than 10% of the turnover. A wide customer base and product range enhances the possibility that when one market or technology has slumped, another is booming.

2. Invest as much as necessary in the right tools and facilities. Over the last three years the company has invested significantly to create a truly high-class manufacturing facility:

- CNC machines for in-house machining facility
- calibration facilities, including primary temperature standards, temperature baths stable to <1mK, and unique techniques and equipment for calibration of ultra-high-accuracy sound velocity sensors
- anti-static environments for all R&D, storage, assembly, test and calibration activity, reducing PCB unreliability by approximately 95%
- air conditioning and environmental improvements to maximise staff comfort and productivity.

3. Maintain total control over all aspects of product development. All development (mechanical, electronic and software) is done in-house, and Valeport owns all the IP in the products. This enables easy transfer of new technologies between products. A good example is the use of new materials in conductivity sensors. One development required the investigation of alternative materials and construction methods to create a small but high-strength conductivity sensor, and the results have now been transferred to mainstream products. The design is so strong that even at 6,000m any distortion in shape is measured in µm; this means that the instrument performs to specification under deployment, rather than just laboratory conditions.

4. Have total control over all aspects of manufacture. Although Valeport now subcontracts some machining to cope with increase in volume, it retains the capability to make every part of every product. Assembly, testing and calibration are also conducted in-house.

5. Employ good people.

The company has an exceptionally low staff turnover. One senior technician was at Valeport the day it opened, and others have been

there for over 25 years. Ongoing training in new technologies is an essential investment, but staff longevity has brought solid relationships with customers and encourages newer staff to understand the ethos of markets and the company philosophy.

6.View every challenge as an opportunity.

As an example, the recent WEEE legislation, where the supplier is responsible for product disposal rather than the consumer, adds cost and puts companies at a disadvantage to non-European competitors who cannot be forced to comply with legislation. However, Valeport has used this as an opportunity, redeveloping product ranges to decrease the amount of non-recyclable materials and improve manufacturing efficiency. Despite the added cost of compliance, the company will end up saving money in the long term; it will also be more competitive.

7.Product support is critical.Valeport believes that if a customer has a problem it should be resolved. Problem resolution usually provides an opportunity to improve the product. Valeport also makes every effort to support a product throughout its life. Since 1985 there has been just one instrument that was irreparable (excluding cases of catastrophic damage), and in this case a new instrument was offered. Firmware and software is automatically upgraded free of charge during a service, which helps ensure longevity of the instrument.

Valeport is fortunate in being a successful family business with no external shareholders. The prime goal is for long-term success, stability and organic growth, and not short-term (even annual) financial gains for investors. This has allowed a philosophy of “no compromise” when it comes to the cost of providing the right products and services for customers.

What Next

The plan for the future is simple: growth and stability built on the basic principles upon which the company operates. With innovative ideas the company will continue to provide high-quality, high-performance products, but the biggest challenge will be dealing with things outside the company's control. These might include the strength of the pound against the dollar, the price of oil, and the ever-growing economies and technological output of countries like India and China. Such threats simply drive the development of new technologies and methods, keeping Valeport one step ahead of the game.

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