Case Study

Hydrapower Dynamics Limited

- Systems
- Action programme
- Teamwork, training and development
- Quality bubbles and common sense quality
- 100% delivery on time
- Sales increased by 19% in 1 year

Summary

Formed in 1983, Hydrapower Dynamics Ltd, an assembler of hydraulic hose, has grown to a profitable company with annual sales in excess of £4.5m. That success reflects a sustained commitment to quality management, exemplified by recognition, in 1992, by the National Society for Quality through Teamwork as one of the winners of the prestigious Perkins Award.

With good systems (ISO 9001 & 9002) in place the company is now seeking to improve quality performance through greater emphasis on training and development, and the board is aiming to achieve Investors in People by 2001.

In a very competitive market place the company is endeavouring to reduce its dependence on original equipment manufacturers (OEM’s) by product/sector diversification and becoming a solution provider rather than just a supplier.

Patrick Browne, the Managing Director, believes the company is capable of substantial, profitable expansion, with a £10m per annum turnover as the 5 year objective, and a 15% increase in turnover as the year 2000 target. Exports account for approximately 10% of turnover.

To achieve these, a broad-ranging Action Programme has been drawn-up and a set of key performance indicators agreed to ensure that close performance monitoring, already a hallmark of senior management, is maintained and strengthened. The Action Programme will entail further recruitment, and investment to improve facilities, in particular the Design office with the purchase of the latest computer aided design, at a cost of ca. £60,000.

The Company

Hydrapower, in its present form, is the outcome of a management buy-out in 1989 by Patrick Browne and his two fellow directors, Alan Woodfield and Martin Morran.

The core business is the assembly and sale of hydraulic hose to a broad spectrum of industrial customers including agriculture, aerospace and transport, all with a common need to transfer fluid from one piece or point of machinery to another.

The company has grown steadily over the past 5 years, and in 1999, combined sales of Hydrapower Dynamics Limited (£4.5m) and an 80% owned subsidiary, Hydrapower Dynamics (Staffs) Limited (£0.73m) showed a 19% increase over the previous year. Results for 2000 point to even stronger performance, with sales growth coming from both established and new customers. The company is also achieving a level of profitability that reflects its quality management approach.
**Business Policy**
In a very competitive market place this performance has been underpinned by a business policy founded on 3 key principles:

- **An emphasis on high standards of product and service quality made possible by good systems (ISO 9001 & 9002, AQAP 4) and a company wide acceptance that quality is everyone’s responsibility. The Perkins Award was a well-merited recognition of the determination to make TQM a reality.**

- **The importance of developing relationships with customers, suppliers, the workforce and the community at large, based on mutual respect and understanding.**

- **An approach to business development that strikes a sensible balance between opportunism and financial caution.**

**Customer Development**
In implementing that business policy, the company has developed a customer base of some 200 live accounts, many of them ‘blue chip’ companies such as Dowty and Marconi, with no single customer accounting for more than 10% of total sales. Customers are categorised into 3 separate groups:

- **OEM’s, including refuse trucks and special purpose vehicles**
- **Aerospace/defence**
- **Miscellaneous end-users, including overseas customers (Africa, Middle East, Sri Lanka).**

The setting up of the Hydrapower Dynamics (Warwick) Limited subsidiary in 1991 was prompted by a local market opportunity following the withdrawal of a previous competitor. Similar responsiveness to perceived customer needs and competitive activity lay behind the decision taken to set up a Hose Replacement Mobile Service, a fleet of 3 vans on 24 hour call, to provide a hose repair/replacement service operating within a 40 mile radius of Birmingham.

A further development has been the setting-up of a Tube Manipulation Division, to manufacture specific tube related products that can either be fitted to hose end-fittings or supplied individually. This will provide a facility for the company to diversify into other engineering work.

These new business ventures should lead to an enlargement of the customer base and thereby provide a stronger platform for future growth.

The recent “supplier quality” award from a major OEM account for 100% delivery on time and no rejects in a 12 month period adds to the evidence from the sales figures that Hydrapower is meeting its customers needs. In doing so it is using 2 main resources - equipment and people - to add value to the components purchased from suppliers.

**People**
With a total workforce of 60, the company is achieving sales per employee of ca.£75,000. This reflects both a well-defined organisation structure, and the judicious use of incentive schemes, but most of all, the high level of involvement, motivation, and loyalty engendered by good management practice, and the use of quality and problem solving teams to put total quality management (TQM) into practice.

The proposed introduction of an appraisal scheme will add further support to the task of improving productivity through enlightened personnel management.
• **Systems**
Using these resources to best effect demands good systems. In this regard the company benefits from its long-standing ISO registration (the scope of which will be extended as soon as possible to include the new Tube Division) and by an equally efficient financial control and information system.

• **Quality Bubbles, Action Teams and Common Sense Quality**
Throughout its ‘Quality Learning Experience’, Hydrapower has maintained its ‘Quality Bubbles’ concept – describing any number of people in a Quality Circle activity, becoming larger or smaller, sometimes overlapping, remaining or dissolving according to any given situation. Although there are no rules about who may join ‘Quality Bubbles’, an attempt is made to involve at least one Director, also an advantage when requesting financial assistance formally at board level.

A culture has evolved at Hydrapower that has led to a common sense approach to quality matters, which in turn has benefited the company by becoming more competitive, whilst still expanding and developing new manufacturing and service divisions. As a basic premise, the Common Sense Quality (CSQ) technique:

- **Identifies a problem**
- **Obtains the opinions of all those affected**
- **Utilises resources**
- **Provides a solution**

Among the areas where CSQ has assisted the business to flourish are the formation of a precision Engineering Facility, the creation of a Tube Manipulation Division, the acquisition of an Aircraft Test Stand Company, development of a Mobile Workshop Unit (Hosemobiles) and the growth of a section dedicated to servicing and supplying Hose Assembly Equipment. The new ‘Pipework Division’ is already being subject to lashings of CSQ!

**CSQ and the Bubble Concept**
• **Training**

An example of using CSQ for an improvement activity was a task undertaken by a team regarding the training of personnel. The team realised, that, because of a desire to improve themselves by performing varied jobs, employees might find themselves performing tasks for which they had not been fully trained.

A Quality Bubble formed to address this and, after brainstorming, decided upon a Company Philosophy for training that could be documented and described in an easily understandable format. After discussion the team agreed that:

- **Only suitably qualified personnel can teach trainees**
- **By definition, the ‘trainees’ then become the best people to perform jobs**
- **This enables them to decide how to react to situations confidently and with appropriate work skills**
- **This, in turn, encourages everybody to treat their tasks positively, demanding the highest standards from themselves and their work**
- **The end result is the highest quality product or service available**

This was abbreviated into key words linked by arrows, and a depiction that has become the HydраОwer Company Philosophy for training, with the driving force fuelling the train being Quality Bubbles!