



# Paladon Systems Limited

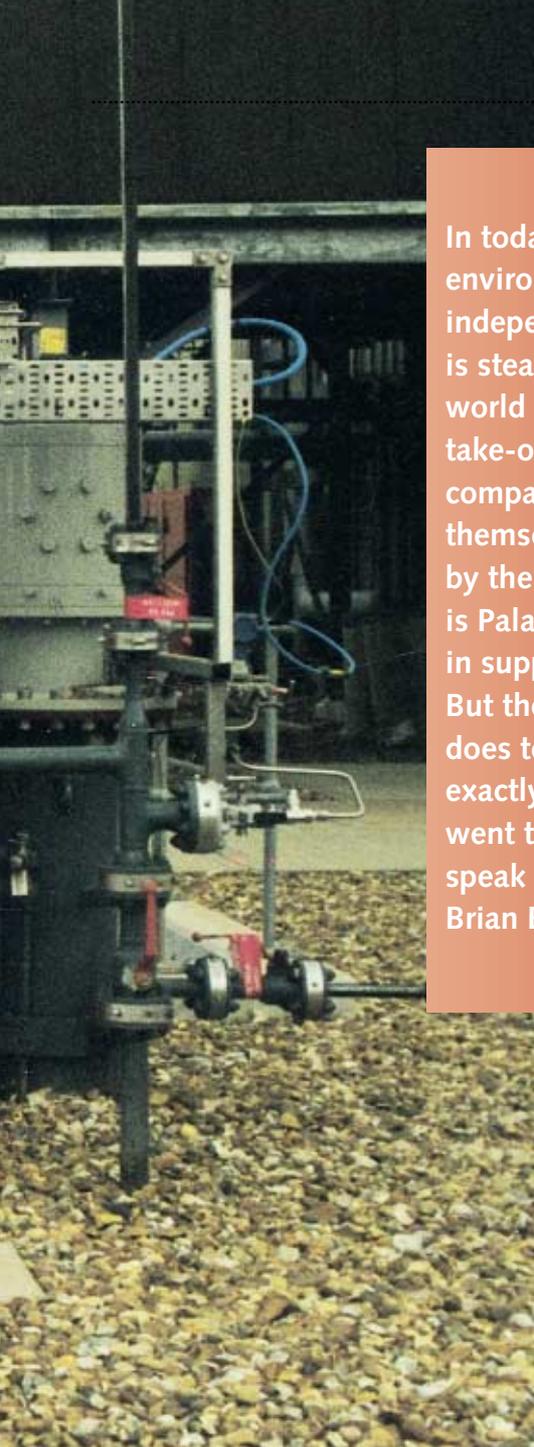
## From actuator supply house to integrated solutions provider

When Brian Ennever starts talking about his company, it is immediately evident that here is a man who is passionate about his profession. It's not surprising, considering the fact that Mr Ennever founded Paladon Systems in 1981, seeing the opportunities available within a booming North Sea Oil & Gas industry and the business potential to flow control specialists. Mr Ennever explains how the birth of his company came about: "Back in the

1970s the oil & gas industry in the UK was growing very rapidly and I wanted the company I worked for at that time to become more involved in this market. Unfortunately the senior management, which was based in Frankfurt, decided to stay with its traditional markets because there were significant American influences in the oil and gas industry in those times. This did not dampen my enthusiasm to try and find a way into the North Sea business. I hap-

pened to meet a few customers who were in the same situation: they saw business opportunities in the North Sea, but similarly the company they worked for did not. They decided to start their own company called Paladon Engineering, designing and building gas separators utilising multi-cyclone technology. Together with those chemical and mechanical engineers I formed a sister company, Paladon Systems, specialising in instrumentation and particularly en-

In today's international business environment, the number of independent flow control specialists is steadily decreasing. However, in a world dominated by mergers and take-overs, there are also a number of companies that have positioned themselves in market areas untouched by the big players. One such company is Paladon Systems, which specialises in supplying valve automation systems. But there is much more that Paladon does to serve its customers. To find out exactly how much more, Valve World went to Northampton, England, to speak with its Managing Director, Brian Ennever.



gineering solutions to flow control problems which included valve automation. After a few years, Paladon Engineering was sold to Kvaerner. At that time Paladon Systems could have gone to Kvaerner as well but I decided I wanted to remain independent and consequently purchased the majority shareholding and continued to develop the business but specialising in valve automation and control”

### Growth

In the early days of its existence Paladon Systems was basically an actuator supply house, selling actuators to valve manufacturers and distributors from its facility in Northampton. But the company, with its

extensive engineering knowledge base, quickly started developing its own automation systems. And it has been doing a good job ever since: in the 20 years of its existence Paladon has supplied over 15,000 of these systems. Furthermore, there are now offices in Aberdeen, Cairo and the United Arab Emirates. Mr Ennever summarises the growth of his company and how it was driven: “For the first ten years of our existence we were entirely focused on the UK because it offered plenty of business opportunities. We started in Northampton from where we still oversee all engineering, quality control, product development and pricing activities to ensure consistency and avoid any duplication of resources. In 1991, Aberdeen was chosen as the best location for the first stage of our expansion because it enabled us to be even closer to the North Sea Oil & Gas industry operations. A complete factory and of-

fices are operational there with actuators and control components in stock to provide quick response to customer requirements. In 1998 we expanded our market reach towards the East by setting up our Cairo office, which encompasses a complete factory as well. From Cairo we can service the Mediterranean market much more easily. In 2001, we took our business even further by establishing Paladon Gulf in the United Arab Emirates, bringing us to the Persian Gulf area. As you can tell, I prefer being close to the markets we serve. I think it is very important to be close to customers, to understand their needs and to work with them. Our organisation is therefore geared to servicing our customers as efficiently as possible. All our engineering facilities are based in Northampton, which means we have a tremendous wealth of information and resources available centrally. In this way we prevent people in our other locations re-inventing what we already have. Through modern information technology we can design something here and send the drawings, for example, to Cairo and have the product made locally.” It became clear early on that Paladon would not stop at just supplying control systems. The company is relatively small and, as an independent partner, can often answer customers' needs far better than larger



competitors, believes Mr Ennever. The core of its business is still providing the actuator, the muscle unit to operate a valve, any valve, be it hydraulic, pneumatic or electric. But that's just the start. Mr Ennever: "Ball valves still represent the largest part of our market, followed by gate valves of all types, butterfly valves, globe valves and plug valves etc. Besides supplying the actuators, we also supply the controls that interface with the end user's main control system. In supplying our products we operate in two ways: either a customer can tell the valve manufacturer to have Paladon actuators installed, or a valve manufacturer can have his products sent to us so that we can fit and test the automation here."

### Interface

Although most of Paladon's business is with valve manufacturers, the company is in direct contact with the end users as well. And this is an area where Paladon has a big advantage because it truly aims at being an expert partner for its customers. Mr Ennever: "Our final customer, the end user, wants to look at the whole flow control issue. He wants solutions to his problems and answers to his instrumentation issues that valve manufacturers do not always have. Their speciality lies in manufacturing valves, they are not control specialists. Our service therefore stretches to interfacing between the end user and the valve manufacturer when it comes to process control." This has led to a situation where Paladon has become increasingly involved in the first stages of front-end engineering and where Paladon's involvement is requested earlier and earlier. Its R & D activities are therefore aimed at searching for practical, cost effective solutions to customers' prob-



**Besides supplying the actuators, Paladon also supplies the controls that interface with the end user's main control system.**

lems which is why Paladon offers a product range that has come straight from their own ideas and those of its customers. Mr Ennever: "We offer, for example, a positional control system for choke valves on wellheads. One of our customers in Egypt had to control wellheads that may be operating for only six months in one remote desert location then moved to another position. So the requirements for the control system were pretty high, it needed to be stand-alone, rugged, reliable etc. In the end, we developed that system and sup-

plied over 30 of them to that one customer before taking the system to the open market but in the meantime we have found various other applications where this system can be used!"

One of the major events that promoted Paladon's close co-operation with end users in developing new products, Mr Ennever said, was the Piper Alpha disaster. "Piper Alpha provoked everyone to look at testing procedures. Before the accident there was uncertainty about system integrity; you could have a very small component fail in a control system causing a 36" ESD valve not to operate. In the wake of Piper Alpha we developed the Emergency Shut Down Valve Monitor (ESDVM) system. It's an on-line monitoring system that provides information on when the valve last moved, the various operating parameters to see if the torque required to operate the valve has been increasing or decreasing, what the operation times were, if there is any jerkiness in the valve etc. It provides an audit

### Product info

- Paladon manufactures a complete range of quarter turn and linear actuators for all valve sizes and class ratings for heavy-duty applications.
- Pneumatic, hydraulic and gas/hydraulic actuators. Double acting and spring return

**PALADON'S NEW ALL-STEEL ACTUATOR WILL BE ON SHOW AT THE VALVE WORLD 2002 CONFERENCE & EXPO.**

- EIM electric actuators in a wide range of frame sizes, horsepower ratings and output speeds incorporating the latest technology within the new TEC 2000 range.

### Control systems:

- Pneumatic and Hydraulic Control Systems, ESD, HIPPS, Positional Control
- Hydraulic Power Units, Self Contained, Centralised
- Gas / Hydraulic (for Pipeline Actuation) Local, Remote, Slam Shut, Voting Systems, Line Break
- Gas and Oxygen Odouring Systems

trail from factory testing, through maintenance strip downs right up to date. Every valve movement and initialising signal is monitored. We developed and installed this system in close co-operation with the customer, a major offshore operator. Their people now work in a much safer environment than before." After developing and installing control systems with the customer, contact remains between them and Paladon. The company strongly emphasises building up customer relations and that's why it has an extensive after-sales organisation as well. Mr Ennever: "Our after-sales service in the field of valve automation is second to none. We have a dedicated team of site engineers who specialise in all site activities from installation of new equipment to modification/retrofit and service of existing equipment, irrespective of who installed it. Fully equipped mobile workshops are available to carry out any type of work in remote areas



**Paladon offers a total service concept: from engineering right through to plant maintenance.**

independently of site facilities, onshore and offshore. Together with our ready-to-dispatch service units this completes the picture of our total service concept: from engineering right through to plant maintenance.

## Manufacturing

And that brings us to the core of the interview. Up to now, Paladon has been an automation control systems builder, putting together all the various components of a flow control system, but it has never been an actual manufacturer. However, Mr Ennever disclosed that Paladon has just set up its first actuator manufacturing plant in northern Italy. "Our decision to start manufacturing actuators has really been pushed forward by our customers. The reason for this is that we are an independent company, as opposed to many actuator suppliers who are part of larger conglomerates. Many of our valve manufacturer customers feel that when they buy actuators from companies that are part of a larger whole, they are actually indirectly supporting their competition because in that conglomerate there is quite likely to be a valve manufacturer or two as well. So in the end we decided to go forward with it and started looking for the right location. We finally concluded to take it to northern Italy because of the established infrastructure there, especially in this industry. The factory is established and the necessary cranes, machinery and test equipment have been put in place, everything is ready for full-scale production. As a matter of fact, the first units have been built and are now completing their final field trials and we are beginning formal customer approval tests. Paladon's new range of actuators will embrace all that has been learned in the past 20 years. The fabricated steel construction is extremely rugged and will suit all heavy-duty applications. The flexibility in design and configuration (including canted yoke) means that an actuation solution offered by Paladon will be tailor-made to suit project requirements with the customer not paying for unwanted features, size or weight. Special materials of construction and finish can be easily incorporated to suit prevailing operating or environmental conditions. With the recent step towards manufacturing, Paladon takes its activities into quite a new field, changing the current relations within the actuator manufacturing industry. But Mr Ennever is certain that there is room for an independent manufacturer and he emphasised

that Paladon will continue offering its existing services to customers. Mr Ennever: "Paladon will continue to strive for local presence in our core markets by expanding our network, listening to market needs, talking to our customers about their problems and developing new control systems together with them." ■

## FACTS & FIGURES

Paladon Systems Limited manufactures actuators and supplies total valve automation packages. Its business is to design, build, test, install and service all types of valve automation. It has facilities in the following locations:

- Northampton
- 1000M<sup>2</sup> factory
- 500M<sup>2</sup> office
- Aberdeen
- 850M<sup>2</sup> factory
- 400M<sup>2</sup> office
- Egypt
- 450M<sup>2</sup> factory
- 400M<sup>2</sup> office
- United Arab Emirates
- 55M<sup>2</sup> office
- Actuator manufacturing plant in Italy
- 2000M<sup>2</sup> Factory
- 150M<sup>2</sup> Office

Number of employees: 68  
Key markets: offshore and onshore oil & gas, subsea gas distribution pipelines, water industry, food, chemical, nuclear and conventional power stations.



**Paladon's locations in Aberdeen (top) and Egypt (under). The Northampton facility is shown on the cover of this issue.**