Bernard offers expertise in depth

According to the popular saying a picture can tell more than a thousand words. In the case of L. Bernard S.A., then the picture would have to show at least an oil field, a nuclear power plant, a water treatment station and a road tunnel – such is the incredible range of applications where Bernard's actuators are specified. The real artistic challenge, of course, would be to portray the in-depth expertise that Bernard routinely applies when serving projects. To find out more about this expertise, Valve World visited Bernard's headquarters in Gonesse, France.

By David Sear

Think electric actuators and Bernard will be a name that immediately springs to mind. After all, the company has been developing and manufacturing electric actuators for over half a century. Throughout those years Bernard has established a loyal clientele, confirms Marketing Manager Mr Fabien Lemaitre with a wry smile. "As you may know, Bernard is sometimes still perceived as a quality supplier of small electric actuators. That is of course both gratifying and true but it is certainly not the whole truth! Today our range also encompasses much larger actuators as well. Moreover, we have developed from being simply an OEM into fully-fledged solutions providers. With our vast expertise we can really bring benefits to our clients at each stage of long-term and complex projects." Of course, this begs the question about when and where clients should ask Bernard to become involved in their projects. Mr Lemaitre gives an immediate and emphatic answer. "At just about every stage! And ideally, we should be contacted as soon as possible. Projects can sometimes be very complicated with numerous parties, such as the end user, the engineering firm, the contractor, the valve manufacturer, etc, who may have different objectives. We can give them all impartial advice on crucial design details, such as the most appropriate actuator technology for each specific MOV (motor-operated valve), possible environmental constraints and also how to interface with the control system. So although the actual purchaser may be the valvemaker or systems integrator, we want to ensure that the ultimate client – the end user – receives a valve-actuator combination that does the job he expects."

Proactive, not reactive

At Bernard, a lot of thought goes into actuator selection. Mr Lemaitre: "we are not simply looking for an actuator that meets the project specifications. We want to identify the actuator that will deliver long-term, reliable operation. So we consider the appropriate actuator technology, the best configuration, the

sizing and of course how the actuator will interface with the valve. The whole objective is to be proactive, not reactive. Cost savings in projects come from getting the early stages right. Hence we engage in discussions with end users at the earliest possible moment to fully understand their expectations and pick up on possible future issues. Then we can develop tailor-made actuation solutions that meet their needs."

Nor does Bernard's commitment to its customers end after the moment of sale. Recognizing that on-site activities can also be critical to ensuring project success, Bernard has established a global team of specialists to provide assistance during actuator installation, set-up, start-up and training. Mr Lemaitre: "properly integrating MOVs into control systems can be a complex operation and that is precisely where our expertise can deliver huge benefits. We are therefore most willing to provide help even at this late stage to prevent costly start-up delays."

The key word to providing on-site service is of course proximity. That means having qualified staff at locations world-wide. Mr Lemaitre: "of course we have a multi-lingual staff here in Gonesse. However, you cannot beat having personnel within easy reach of clients' locations and who speak the local language. For that reason in 2009 we appointed an additional engineer at our Dubai office and also opened a new office in Moscow." As an aside, Mr Lemaitre points out that Bernard already has a massive installed base of actuators in Russia thanks to indirect sales. He foresees future growth in many areas: not just oil and gas, but also district heating, water and steel mills.

> **"We focus exclusively on electric actuators. That gives us in-depth product knowledge."**

Technology-driven

Bernard is known as a technology-driven company and rightly so. It launched an intelligent actuator – the Intelli+ - almost a decade ago and also failsafe actuators which have proven very popular in remote locations. The company continues to invest strongly in research, according to General Sales Manager Mr Jean-Yves Pinvidic. "Within Bernard, our goal is to develop new products that better meet client's existing and future needs. We want to be prepared in advance for challenging applications. For example, about a year ago we launched our ST220, which is a very large multi-turn actuator that enables us to motorize valves of almost any size."

In that light, Mr Pinvidic notes that ST220 models were recently installed on massive 30 inch, Class 1500 ball valves used in a crude oil gathering centre. He further adds that in such cases electric actuators are not only significantly smaller and lighter than alternatives but more cost-effective as well. "For many pipeline valves electric actuators are the most flexible solution, especially for remote areas where there is no direct access to say compressed air. In very isolated spots actuators can also be driven using solar panels. Our electric units are also being used in preference to gas-over-oil models for gas pipelines in environmentally sensitive areas."

Another exciting new technical development which Bernard is set to release is the so-called Master Station. These units can interface multiple actuators to the customer's DCS. Mr Pinvidic: "Fieldbus capability has already become an important requirement for many new projects. The Master Station

Large ST Intelli+ actuators on 30" Class 1500 ball valves.

facilitates the connection of remote actuators in say a refinery to the central control room. The advantage for the client is that the Master Station gives full control to operate the system without swamping the DCS with unnecessary input. So the DCS stays as it should be: a high-end system. On top of that, local staff has direct access to key information they need to perform maintenance activities, etc."
If further proof were needed of Bernard's technology credentials, then simply compare the newly approved European Standard for Electric Actuators (EN15714-2) with Bernard's own in-house classification system. This was developed by Bernard many years ago to better reflect actuator applications. Mr Pinvidic: "Previously, actuators were seen as either performing on/off or modulating duties. However, there can be tremendous differences between modulating actuators. In a water treatment facility for example the actuators may only operate infrequently and are not required to give precise control. In a nuclear power plant, however, actuators on feedwater duty may be specified for continuous, fast and precise operation. We therefore developed modulating classes that reflect these variations and also offer a common language for buyers and manufacturers to communicate. That this system has real merit is amply shown by the willingness of other manufacturers to use it and the fact it was also adopted by the Working Group responsible for EN15714-2."

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World-scale projects

Thanks to its track-record of product quality, technological capabilities and customer service, Bernard has literally dozens of approvals from industry leaders plus very extensive project references. Asked to provide some examples, General Secretary Mrs Christine Bernard quickly runs off a list. "We have just completed deliveries to a refinery storage revamp project in Estonia, for example. Here, the owners were looking to modernize the plant and gain benefits from introducing a digital control system. In fact, we were on-site on two separate occasions. Firstly we visited the site to assess the installed valves and determine appropriate actuation solutions and later we returned to monitor installation and commissioning."
Bernard has also made regular deliveries to France's newest nuclear power plant in Flamanville. Mrs Bernard: "even when nuclear projects were few and far between we never stopped the further evolution of our actuators so we could immediately respond with the very best technology when this plant particular was announced. Now, as world leaders look to reduce carbon dioxide emissions, nuclear power could be very firmly back on the agenda. With actuators suited to all nuclear plant designs and an installed base around the globe, we remain fully geared to serving this industry."
Stable power supplies and a cleaner environment are of course major concerns for governments world-wide.

VIDEO INTERVIEW
with Mr Etienne Bernard

Check out our exclusive interview with the president of Bernard.
www.valve-world.net/bernard.aspx

Another issue many are facing is ensuring there is enough clean water for people to drink. Mrs Bernard: "we are seeing an increasing interest in desalination plants, especially in the Middle East. Again, we have the appropriate level of technology to offer and recently supplied actuators to the Marafiq IWPP Jubail facility in Saudi Arabia. Finally, people travelling through the Gotthard Tunnel might like to note that we supplied 500 actuators for the safety systems there. All these projects underline our capacity to assist major projects world-wide with a combination of products, technology and service. Our aim is to use all our expertise to help engineers select the most appropriate, long-lasting actuator for each application."

On-site training is crucial to ensure project success.

Actuator with Intelli+ non intrusive controls.

Innovation

Bringing the meeting to a close, company President Mr Etienne Bernard sums up what he believes are important factors behind Bernard's successes. "Firstly, as an organization we focus exclusively on electric actuators. That gives us in-depth product knowledge. Furthermore, we have market specialists who focus on one industry only. By working with, for example, the oil and gas industry day in, day out, they have gained an unparalleled understanding of the specific requirements of each application. After all, an actuator fitted to an oil pipeline may be required to deliver a totally different closing speed than one fitted to a water pipeline, for example. Ultimately, the end user has a process which he wants to be able to run as efficiently as possible. Our job is to help him, by providing reliable, low maintenance actuators."

Like other globally active manufacturers, Bernard is closely following the development of the Dollar and Euro zones. Mr Bernard confirms his vision of having a strong manufacturing and sales presence in both areas. France, however, will remain the centre for R&D activities. Mr Bernard: "the important thing is that we continue to innovate each day. As a medium sized company we have the resources and flexibility to respond quickly to customer requests. For example, we recently developed a unique actuator for a boiler application. The starting point was our proven technology which we adapted to this particular environment. As we tell our clients: if you can dream it, then we can make it!"

Mr Bernard is therefore quietly confident about the future. "As we emerge from the crisis there is growing demand for actuators. Bernard's aim is to maintain a leading position in nuclear power and also to support customers in key sectors such as oil and gas as well as general industry. We will do so by remaining fully independent and delivering the required technology. In the future I expect to see further integration of intelligence and controls into the actuator itself. Our Master Station is one step along that road. Watch this space, for here at Bernard we have plenty of exciting and visionary ideas."

Facts & Figures

Name:	L. Bernard SA
Headquarters:	Gonesse, France (Paris area)
Manufacturing sites:	Europe: Gonesse and Grandvilliers (France) Americas: Houston (USA) Asia: Beijing (China)
Distribution:	Subsidiaries in Belgium, China, Germany, Italy, The Netherlands, Spain, USA and offices in Russia, Thailand and UAE
Distributors:	In over 40 countries
Products:	Electric actuators (quarter-turn, multi-turn, modulating, failsafe, intelligent controls, fieldbus communication, additional gearboxes),
Quality certifications:	ISO 9001-2000, CSA, GOST-R, GGTN, CE, NEMA, ATEX, Germanischer Lloyd, ABS, and many more
Nuclear certifications:	IEEE, RCC-E, KTA
Main applications:	Thermal & nuclear power, oil & gas, water treatment, industry automation, shipbuilding
Main clients:	End users, engineering companies, valve manufacturers, systems integrators
Sales:	~ 40 million EUR in 2009
Employees:	320

Introducing Mr. Jeff Bricker

After several years of experience in the oil and gas industry, and a background in mechanical engineering, Mr. Jeff Bricker joined L.Bernard's US subsidiary - Bernard Controls Inc. - as General Manager this January.

Established in Houston since the 1980's, the L.Bernard group will certainly rely on this new support to strengthen its electric actuators business in America.