



Design right first time

It has been the better part of four years since *Energy, Oil & Gas* last spoke to Christophe Valdenaire, Global Market Manager for Oil and Gas at Saint-Gobain Seals, and as he quickly established when we caught up with him recently, a fair bit has changed in that time. “Since we last spoke, the scope of our activities has widened to encompass more critical applications, specifically those that meet challenging demands for extreme pressure, temperature and low fugitive emission solutions,” he begins. “In order to meet these requirements, we have made a very concerted effort to improve our internal pre-validation capabilities to ensure that all of our seals and components are delivered to meet the needs of our customers and the end user.”

As part of the global Saint-Gobain Group, Saint-Gobain Seals is the market leader in the design and manufacture of critical seals and polymer parts making THE difference in core systems, which it supplies to various global industries, one of the core ones being the oil and gas market. It is here that the business has forged a commanding reputation on the back of its flagship product line, the OmniSeal® polymer spring-energised seal, which is used throughout the world with engineered topside and subsea valves, FPSO turret swivels, liquid transfer equipment, pumps and compressors. The RACO® seal design in particular has been successfully used over 60 years in

extreme applications involving cryogenics and dangerous gases. The business’ diverse product range also includes OmniSeal® and DynaLip® PTFE rotary shaft lip seals; Rulon® fluoropolymer bearings and components; and Meldin® thermoplastic thrust washers, piston rings, and injection-molded components, and thermoset polyimide bearings and components.

Adapt to trends

When giving his opinion of what business was like for the business during 2017, Christophe explains how conditions have forced it to become more agile and flexible than perhaps ever before in order to react to changes in customer demand and to quickly capitalise on opportunities that appear in different energy sectors. An example of this comes in the form of the LNG market, which has seen the commissioning of a number of significant projects at a time when other sectors have been feeling the effects of volatile economic headwinds.

“One of the things we addressed was the technical capabilities of the business in order to adapt to the trends we are seeing in the LNG market and develop specific designs to match certain applications,” Christophe states. “An example of this work in action was the recent development of a new generation of seals for cryogenic ball valves, which is a highly challenging application used within



the LNG market. As with every product we design and manufacture, our primary goal is to design right the first time. Using our in-house testing capabilities, which adhere to the strictest of industry specifications, we were able to pre-validate these seals, as we do with all of our components, to the highest of quality and reliable standards, thus reducing development time and therefore also development costs. These cryogenic seals were launched in 2017, and are currently in the co-development phase with our customers.”

Demand for seals

The creation of these cryogenic ball valve seals represents just the latest success that comes as a result of the business’ immense R&D efforts, which very much encapsulate the ethos of the wider parent Saint-Gobain Group, which has been recognised by industry watchers as one of the world’s leading innovators multiple years over. “For 2018, one of our big R&D projects involves the development of stem sealing solutions for fugitive emission valves for the oil and gas industry,” Christophe says. “Oil and gas companies are making every effort to reduce the emissions they create and adhere to industry standards when it comes to things such as leakage, and of course seals are a key component in making this possible.

“The first product that we will introduce this year will be steam seals for on-off valves that match ISO specifications and adhere to ‘Class A’ leakage standards. We have identified demand for these valves, particularly in regions such as the Middle East where projects are starting to be commissioned in greater numbers as confidence returns. The plan for us is to have the product ready for commercial sales in the latter half of 2018, and its success is something we hope to share with the rest of the industry at the 2018 Valve World Expo in Düsseldorf, Germany, in November, where we will also be delivering a presentation paper as part of the bi-annual conference.”

2018, in Christophe’s opinion, may well be something of a transitional year for the industry as it prepares to ramp up for more projects to commence towards the turn of 2019, which the business believes will ultimately result in an increase in orders and commercial activity. “As our customers and their end users move towards even more complex projects, we are making sure we align our own strategy to meet their expected demands in order to provide precise fit and

lifetime confidence,” he adds. “Failure of our products is simply not an option for us, meaning that the pre-validation of our sealing solutions will remain critical, which is why we will continue to ensure that we always design right the first time, increasing the speed to market and reducing costs to our customers.”

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