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A photograph of Hans Beele, a man with grey hair and glasses, wearing a dark blue suit, light blue shirt, and patterned tie. He is holding a black microphone and appears to be speaking. The background is an industrial setting with large orange flames or molten material on the right and yellow machinery on the left. A red graphic element, resembling a stylized 'L' or a corner bracket, is positioned above the 'R&D Investment' text.

R&D Investment

Hans Beele's Mission to Build

Sealing Valley

BY TOM MULLIGAN



Sealing Valley is a new concept that has been developed by Hans Beele, President of Dutch engineering specialist Beele Engineering. He will invest in a center of expertise for the advancement of fire protection and watertight sealing technology to provide the highest possible levels of safety. Modeled on Silicon Valley, Sealing Valley will create a concentrated center of know-how, with shipboard and marine safety a prime focus area. It will be here that expertise, creativity and daily installation practice will come together in a campus set-up. Beele says that Sealing Valley will strive to change the general industry safety mentality from a reactionary one to a much more proactive approach, and describes his vision in an exclusive interview with Tom Mulligan of Maritime Reporter and Engineering News.

What gave you the idea of establishing Sealing Valley, was it a pressing need within the fire protection and watertight sealing industry or was it a 'moment of insight' in which you recognized that the Silicon Valley model had potential application in your industry sector?

— Ever since the development of our first sealing system 45 years ago, we have visited and seen thousands of installations with cable and pipe transits that were or should be sealed in a way such that people and assets would be protected against the risks represented by water and fire. During these visits, as well as during many discussions on fire safety and water tightness, I realised in particular that awareness of these risks was not what it should be. Instead of talking about safety, most of the discussions focused on talking about costs. Trying to convince people over many years that sealing devices are in fact safety devices, I felt that sealing against fire and water was generally not a priority issue. We are obliged to install these systems because of legislation, but having seen the status of such devices, if present at all, on a regular basis, it ended up for me as a mission based on the idea that “we care, so we will do it better”. Having considered several options, I came to the conclusion that starting an expertise center would be the best way of re-

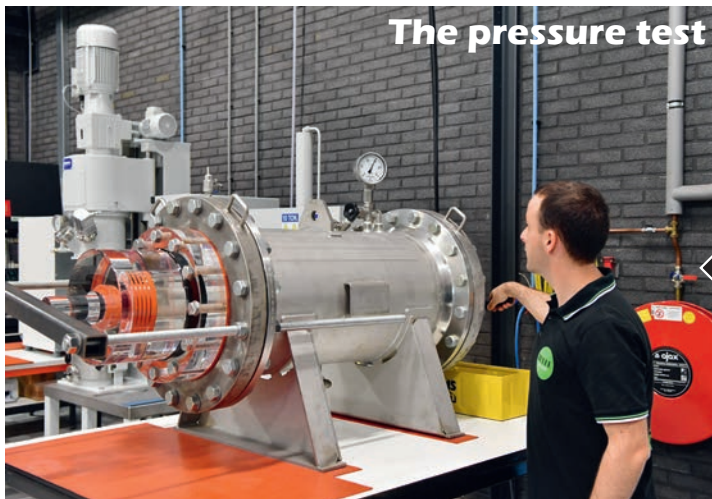
R&D Investment



The new building



The fire test



The pressure test

solving this problem. Creating an environment that combines expertise, research, development, training, education and even a pilot plant seemed to me to be the ideal solution. Sealing Valley will, therefore, be the ultimate source of answers to any sealing-related questions. And as an 'all inclusive' expertise center, we will be able to translate market problems into practical solutions. Having such a single hub of expertise and knowledge that can be shared with the industry is the ideal means by which to transfer know-how on shipboard fire and flood safety and improve the way companies choose, order and install sealing systems in order to ensure life safety.

What reaction from the sealing industry, its end-user sectors, relevant government departments, NGOs, other bodies or even the general public have you had to the idea so far?

— We have found that everywhere we tell our story there is agreement with what we have to say. We have seen many people applauding the idea that fire safety and water tightness should be lifted to a higher level. However, strangely enough, it proved to be difficult to mobilize supporters to undertake action. But action is a vital necessity to improve safety! This requires not only knowledge, which we are willing to share, but also bundling expertise with others. Sharing know-how and expertise from daily practice is necessary to secure the cooperation needed to ensure life safety. Changing processes is not an overnight show. Apart from the will to change, it might not be the right time, nor might it fit in with the daily business of people. In short, we would like to achieve a fundamental mindset change to create awareness of what the consequences would be if we didn't raise the safety bar.

What precisely are the aims and objectives of the project?

— First of all, the transfer of know-how and expertise on how risky situations could become safer. It's aimed at every professional in the safety chain. No doubt, test procedures and certificates must be a part of this chain. We want to contribute to the optimization of the safety chain and therefore we focus on young engineers, the ones that will shape our fire-safe future. We want to make sure that there will be a generation that really understands the importance of fire-safe and watertight sealing systems.

Of course, we will also target regulators and certification organisations and other parties that are involved in legislation. Certificates are of vital importance for our industry. But, since they are vital, they should also be clearly specified and understandable for anyone working in the

With Sealing Valley, Beele Engineering intends contribute to increased safety for crews and the protection of ships and offshore platforms. Test and field application: the discrepancy between these will certainly be one of the themes to be discussed in setting up Sealing Valley.

field. We have noticed many times that there is a significant gap between the certification process and the final field application. This has really caused me to ask why we could not make it all clearer, more uniform and more understandable for the people at the end of the chain, the ones that have to install these safety systems. What about service life and durability? A disaster strikes unannounced. Sealing Valley will contribute to a better awareness of safety in the industry, from developer to surveyor. To cover this chain, we will be working on creating a new mindset towards sealing technology. This is also why we consider the younger generation of engineers to be of such importance. On the other hand, we will try to interest suppliers of raw materials in working with us to get the optimum safety out of products and systems. And, as we already do on a regular basis, we will be offering partnerships with customers to fine-tune the process of fitting on-board applications.

This also means that Sealing Valley will open its doors to those who work on the practical application of systems. What are the best installation practices? How can an installer make sure that his installation work is guaranteed for decades? Sealing Valley will allow us to invite installers and other parties involved to our center so that they can experience and assess the impact of their work.

Is there a range of specific goals with a timetable or is the emphasis more on changing the 'philosophy' of the sector from a reactive approach, for example in response to natural or man-made disasters, to a more preventative one?

—We have always been a company with a proactive approach. This is because we think that it's all in the saying: better safe than sorry. And it is our objective to turn the sector from reactive to proactive. Sealing Valley will be developed in phases, with the first phase planned for opening next year. As soon as the doors of Sealing Valley open, we will start educating, training and informing the market. There will be the latest IT and telecom technologies so that we can train and exchange knowledge with those who aren't able to visit Sealing Valley live. Engineers who want to become a certified installer can visit Sealing Valley for an official installers' training and make sure systems are applied in the way they were planned. The last thing we want after developing products and systems to the highest standards is that these are installed improperly. And apart from the training and education facilities, we will carry out R&D into sealing technologies right from the start of the Sealing Valley project.

Once you decided to go ahead with the project, how did you start to implement it and whom did you approach to help you 'get it off the ground'?

—At the start this project, we will build up a team of professionals working nonstop on Sealing Valley. This multifunctional team, with expertise ranging from building and construction

to mechanical engineering and from materials management to marketing, will be able to educate and train not only our own task force, but also engineers, installers and new staff. This team should be able to communicate with those involved with procedures and certification to establish the basis for developing an understanding of safety awareness. The team is initially headed by myself and I feel excited every day that we are working on this project. And let us hope that once the basics are in place, the project will be taken over by others. Ultimately, it is all about sharing knowledge and capabilities to bring about improvements.

How did you determine what funding would be needed and where did you get this from? How will the project be funded going forward?

—Ever since I started in this business, I have had one philosophy: make sure we stay financially independent. So far we have succeeded in this. Even in times of recession we have been able to invest in the future. When I launched my plans for Sealing Valley I expected that no bank would be prepared to get on board. This is why we will fund Sealing Valley, our investment in a safer future, privately, from start to finish.

Can you explain the concept in more detail? How, in practical terms, will it achieve its goals? Are any of its objectives focused specifically on the maritime and offshore industry sectors? Are there any maritime or offshore industry trade bodies, associations or any of the class societies involved in the project in any way?

—Ever since the founding of our company we have been serving the maritime and offshore sectors. At present, the class societies are not involved in the Sealing Valley project, however, our goal is to solicit cooperation from those involved in every sector of these markets, after all, it's in everyone's best interest to improve shipboard safety.

Meanwhile we are working to set up the first training courses, with personal certification by a Notified Body, followed by field inspection for an industrial complex. Sealing technology is also of importance for many other markets. Energy, water and wastewater, building and construction, and infrastructure are just a few of the sectors that we also want to cover. Of course, we want to cooperate with others: it's in the nature of Sealing Valley.

However, this requires means that all parties must be focused on the same objectives: creating a safer place to work and live by raising the standards for fire-safe, smoke and watertight sealing technology.

How will Sealing Valley educate the industry about shipboard safety and what educational programs will it put in place?

—The basis for the educational program will be our wealth

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of know-how and experience. This covers all theoretical and practical aspects of sealing technology. We want to create better awareness of regulations and standards and the impact of these on daily installation practice by sharing this knowledge. The situation now is that people start thinking about fire safety and water tightness after an accident has happened. People ask themselves 'why did we do it that way?' Our goal is to have installers, engineers and everybody else who is involved in the sealing technology business think about the consequences before starting any operations. The safety chain is a long one and starts in the R&D labs of companies, moving through testing, approving and certifying the system to the final application in the field. There are many parties involved in this process: owners, yards, surveyors, installers and many more. We will develop educational programs that not only increase their knowledge of sealing technology but that will also enable these parties to understand each other's perspective and their role in the safety chain.

How will the success of the project be monitored?

— In the short term, the success of Sealing Valley will be monitored by recording the amount of training that we give. However, what's more important is its success in the long term.

We want to raise awareness and know-how of fire safety and water tightness, so in that sense the project's success will be measured by the amount of cooperation that is realized once the industry is aware that the current system needs an update. Improving installations and long-term performance in the worst of conditions will be the ultimate result.

How do you see Sealing Valley growing and the concept developing in the future? Would you be willing to promote the idea to other industries?

— We see a great future for an initiative such as this. We feel it as an obligation to the market and to society to contribute to safety. And, based on the response received so far, there is enormous interest in Sealing Valley. Exporting the concept could be an option, but we would rather first make this a big success before exporting it to other areas. Sealing Valley is an ambitious project based on a sense of reality and on the recognition that the current situation regarding safety is not optimal. We are free from politics, and can move swiftly in a refreshing way. At the same time, we invite decision- and policymakers to engage with us so that a broader platform will become available for increasing safety for those who frequently brave the oceans away from their loved ones.