

VDL KTI specialises in high-quality welding using premium-grade materials for the chemical, petrochemical, oil and gas industries.

VDL KTI devotes great attention to ensure all welds are properly fused. The end products are often required to withstand extreme weather conditions, for example in Siberia. "We have projects in Chile where there are severe earthquakes nearly every week," says Simon Jacobs. "We supply equipment that operates continuously at 400 bar. Just imagine if the weld

cracked – the damage would be immeasurable." Specific components of welding processes at VDL KTI are carried out semi-automatically. The operators monitor the processes closely and make adjustments where necessary. "The

welding process on the scrubbers is automated," says Simon Jacobs. "We had to build an assembly line because we needed to produce large quantities in a short period of time. In cooperation with the manufacturer, we produced a custom welding machine that could do the job." The crucial welding processes are still carried out manually by our qualified welders. "We are very proud of our craftsmanship at VDL KTI: welding is an art and we're extremely good at it," says Simon Jacobs.

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Welding is performed by the company's team of 60 qualified and skilled welders. "Welders build their qualifications and experience over the years," Simon Jacobs continues. "Every welder must have completed the required tests to be allowed to weld specific materials, such as nickel alloys.

We offer guidance and support, and we constantly make sure they receive the necessary training. Welders are the heart of our company and their craftsmanship is always a top priority. We do everything we can to keep them on board for as long as possible." VDL KTI invests a great deal in the welders' working conditions. "There was a time when the welders often had to work on their knees," says Dorus van Leeuwen, Managing Director of VDL KTI. "Now they can operate the welding machine from a chair, using a joystick. This makes it easier for older, highly experienced welders to continue doing their job. We've come a long way in terms of ergonomics and safety." At VDL KTI, a lot has been invested in materials to support its staff.

The company also purchased an annealing furnace to enable low-tensions. "The tension in the thick welds can be very high during the welding process, weakening the section as a whole," explains Dorus van Leeuwen. "If we reheat the metal to a red-hot state at 600-700 degrees, the material becomes soft and the tension is reduced. At VDL KTI, every detail is comprehensively checked to determine whether a weld is properly fused. The welds are scanned with an X-ray machine. "We have two bunkers where we can perform radiographic tests by X-ray," says Dorus van Leeuwen. "We can also examine the thick welds using sound waves (ultrasonic tests). In both cases, we check for lack of fusion or gas bubbles in the welds." The results of the tests are then recorded in a data log that contains all the qualifications, tests and certificates.



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