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WE ARE WELDING

Customer**Story**

Program not paper

ewm Xnet simplifies time-consuming documentation

It's a lot of paper that welding coordinators and welders have to deal with on a daily basis – or they use ewm Xnet. This is the experience of Bilfinger Noell from Würzburg. The nuclear and magnetic-technology specialist is certified according to BS EN 1090 in the highest execution class – EXC

4. The documentation, which goes down to seam level, is correspondingly complex. But it doesn't have to be that complex. The advantages of ewm Xnet make the work of every welding coordinator easier.

Bilfinger Noell manufactures safety components for nuclear and cleanroom technology at the highest level – and must document and prove the quality accordingly. In welding technology, verification is carried out using ewm Xnet.

"The introduction of ewm Xnet has changed everything in my daily work – but at the same time changed nothing at all," summarises Steve Möller, welding co-ordination personnel at Bilfinger Noell. Of course, ewm Xnet does not change the work of a welding coordinator. It just makes it easier and safer.

Constantly documenting

Traceability and documentation are typical buzzwords, especially when it comes to certified components. Who welded which seam with which parameters and when? All this data is necessary to fulfil the obligatory documentation. But it's so easy to make a writing error when transferring the welding parameters to the paper table. And is it really stored in such a way that it can be retrieved at any time? After all, the worst-case scenario for any welding coordination personnel is when something happens but the relevant documents are not available.
As everything is managed digitally with ewm Xnet, everything actually is documented and can be accessed at any time. Nothing is misplaced and there is no more searching. This system is so simple and the benefits are so enormous.

The Xbutton: documentation for the welder.

The issue of documentation is even simpler for the welders. You log on to the welding machine with a digital key, the Xbutton. This means that the name, time and welder qualification are stored in the system. This eliminates a lot of work steps for the welder – and avoids them repeating these steps several times a day. In the next step, it identifies the component using a barcode scanner and this link

is also created in the system. At the same time, the welding machine automatically sets the necessary welding parameters. The welder can start welding straight away and does not have to worry about the tedious bureaucracy in the background. At the same time, the system automatically records the various welding parameters in real time and stores them in the database. This means that the welding coordination personnel can even monitor and analyse the process during the welding process. "This works right down to seam level," confirms Steve Möller, who also fulfils the obligatory documentation for certified seams in this simple way. This also includes the documentation of welding procedure specifications, associated welding procedure tests, areas of validity, revision statuses and the validity of the welder certificates at the relevant time.

The welder scans the seam to be welded and can then start welding straight away – without any bureaucracy. The parameters are automatically preset on the welding machine.

Overcoming borders

It goes without saying that employees in international companies speak different languages in different countries. However, it's also often the case for domestic production, with different employees speaking different languages. ewm Xnet helps to overcome these barriers. The welding coordinator can fill in the welding procedure specifications in their native language and then translate them into 13 other languages with just one click. This means that every welder receives the welding procedure specification in their preferred language – either on paper or electronically – and the coordinators can be sure that the weld seams are of the required quality. With the help of an editor integrated in ewm Xnet, the welding coordinator can very easily create sketches of various seams and seam structures, including seam preparation and weld seam sequence. The editor reacts directly to the input. This means that the user knows what the various parameters mean and how this affects the drawing. Of course, the information in these sketches is also translated into other languages if this is relevant for the welders.

The welder logs on to the welding machine using an RFID key, the Xbutton. Their qualifications are also stored with this key.

Legal validity

Each welding coordinator has their own account, which is password-protected. They can therefore also provide a digital signature directly in Xnet, which is then legally valid and legally secure. This can be relevant for proving the scope of welding certificates, which must be regularly renewed and maintained. Such evidence and documents are also stored in the system, can be accessed at any time and cannot be manipulated. This feature is also important for audits. As all data is time-stamped, each work step can be clearly traced and checked and traceability in accordance with the standard is guaranteed. This also gives inspectors and auditors peace of mind that they can rely on the data. This provides additional security for every coordinator when it comes to auditing.

With the Universal logger, welding machines from other manufacturers can also be integrated into ewm Xnet – with the same convenience of simple documentation.

Record data from anywhere with the Universal logger

Within production, welding machines are integrated into the company network. But sometimes work is also carried out outside the factory premises on construction sites. In such cases, a connection to the ewm Xnet server can be established via mobile radio. If this option is not available, data is automatically saved locally on the machine. Whenever the machine connects to the network again, this data is merged and is immediately available to the welding coordination personnel. And it's not just EWM welding machines that can take advantage of Xnet; welding machines from other manufacturers can also be integrated into the system via the ewm Xnet Universal logger.

The gateway creates the connection to the ewm Xnet server and establishes the connection to the scanner and the welding machine for data transmission.

Discover potential savings

ewm Xnet already offers measurable added value along the entire value chain of the welding company. In the future, Bilfinger Noell wants to integrate the software even more strongly into the production process in order to become even more efficient. After all, the data not only records the welding parameters, but also the consumption of gas, electricity and filler material. The workshop management can use this for post-calculation and save money without compromising on quality. For Steve Möller, one thing is clear: "For us at Bilfinger, quality always takes centre stage."

On the construction site, a connection to the ewm Xnet server is established via mobile radio. Should this be unavailable at the work site, the parameters are automatically saved locally in the machine.

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