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Customer Story

Save Time and Money – EWM WPQR Package simplifies certification to EN 1090

▶ Advantages at a Glance

- / **Save money** by using standard JOB-based EWM welding processes.
- / **Save time thanks to rapid qualification of welding processes** – welding specifications are available for steels up to S355.
- / **Use welding procedure specifications multiple times**
Also available for already acquired EWM welding machines from the alpha Q, Phoenix, Taurus Synergic and Picomig series!
- / **Universal use** – tested welding consumables for steels up to S275

All-in-one package offers impressive results

EWM's WPQR package simplifies EN 1090 certification



/ The FPC team at THOM Metall- und Maschinenbau GmbH: From left to right: Torsten Thom, Carsten Rosebrock, Manfred Thom, Jann Schwecke, Frank Liebich, Kai-Uwe Schwiebert.

Mündersbach, 9 July 2014 – Welding machines from EWM are not only extremely easy to operate. The integrated innovative welding processes cut costs by boosting productivity and can extend the range of applications to ensure increased competitiveness. These features so impressed the directors of THOM Metall- und Maschinenbau GmbH that they opted for EWM's WPQR package and also purchased a number of machines at the same time. As a result, the welding procedure specifications required for EN 1090 certification were created quickly and certification was completed successfully.

Switch on and start welding

Director Torsten Thom and operations manager Carsten Rosebrock work with welding technology on a daily basis – but only indirectly. So René Conradi, head of EWM's Göttingen branch, was determined to stimulate the interest of the two directors with the first machine demonstration. He gave them a welding procedure specification from the WPQR package and a suitable welding machine and just asked them to start welding according to the specification.

What at first seemed impossible proved simple enough. All they had to do was switch on the welding machine, set the JOB number and welding parameters as per the welding procedure specification and they were ready to go. They could immediately start welding, which proved to be no problem at all. The result was a visually perfect seam. And the seams also held up well in inspections after the breaking test. Torsten Thom realised that if welding with this machine was so easy for him, his trained and certified welders would really be able to use it to its full advantage!

The machine was then used to weld specific construction components and a comparison was made with recent weld seams. The results showed that the seams welded with the EWM machine were of better quality, could be welded faster and were also virtually spatter-free – which minimises finishing work and makes the process much more economical. The reproducibility of the



/ Safety for every employee – welding procedure specifications for standard procedures are put on noticeboards in the production halls

welding parameters should be highlighted in particular. If the parameters are preset, the seam always maintains the same level of quality. This applies just as much to pulsed and standard welding procedures as it does to the innovative welding procedures. EWM's innovative welding procedures have now been added to THOM's portfolio of products and processes.

Everything from a single source – services included

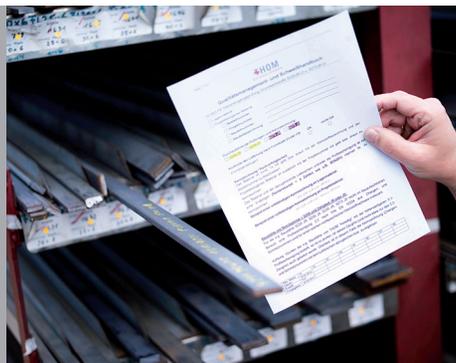
The philosophy of "everything from a single source" is standard practice at system and solution supplier THOM. When individual components are perfectly coordinated, the entire system delivers the best possible results. EWM follows the same systematic ap-



/ THOM Metall- und Maschinenbau GmbH is a metalworking company located in Verden, Lower Saxony



/ At the date of certification, all the welding procedure specifications must be to hand – with the WPQR package THOM owns the prerequisites necessary



/ Factory production control (FPC) at THOM Metall- und Maschinenbau GmbH: Labelling the material for clear allocation and optimum utilisation of materials.



/ Qualified welding procedure specifications (WPS): The parameters from the WPQR package can be used for many applications and can be transferred to a company's own forms.

proach and is a one-stop supplier of welding machines, wire feeders, welding torches and welding consumables, plus a wide range of accessories. But hardware is only ever part of the equation. Services and customer care linked with the product are also crucially important. With great commitment and expertise, welding machine manufacturer EWM provided assistance with technical welding queries and THOM was able to complete the certification process smoothly. This emphasis on service resulted in THOM going against the general consensus, whereby the WPQR package is normally selected based on equipment already owned. However, THOM was so impressed with the special features offered by EWM that they chose its WPQR package and also purchased welding equipment. THOM's equipment pool now includes a number of EWM welding machines.

The welding procedure specifications from the WPQR package can be used for all EWM welding machines, as they apply to MIG/MAG inverter welding machines regardless of the series.

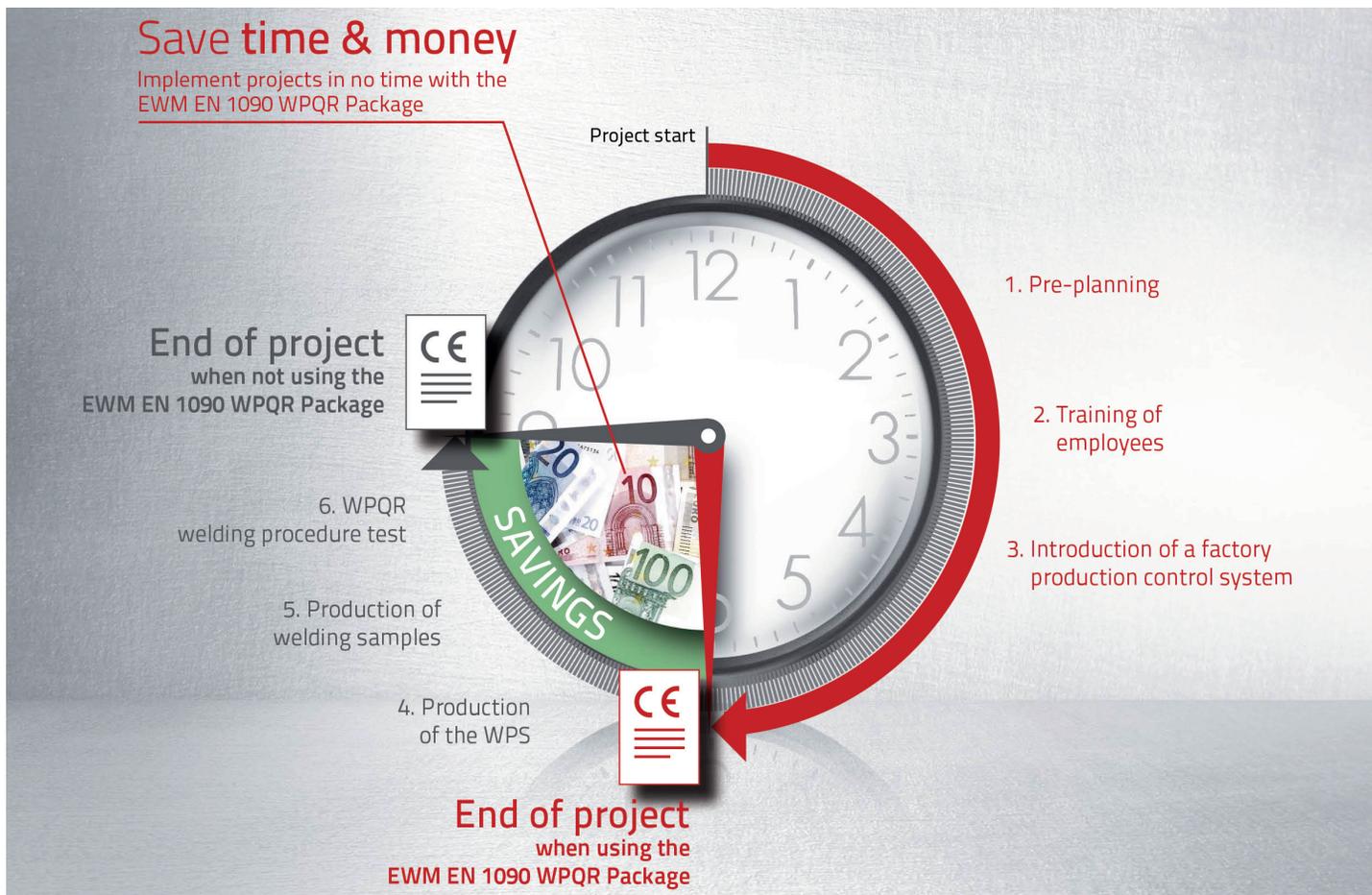
Welding up to and including S355

THOM manufactures staircases, railings, canopies, complex supporting structures and steel installations at its steelworks. As the company already had DIN 18800 certification, the welding procedure specifications were nothing new for its factory production control system (FPC), which was already organised according to DIN 18800. Welding procedure specifications for qualified welding consumables for materials up to a yield strength of 275

MPa had been produced easily and could be used for structural steelwork. But as a steel construction company, THOM has also worked with materials up to a yield strength of 355 MPa and wanted to continue operating in this sector. This means business in EXC2 must be certified according to EN 1090,



/ The EN 1090 WPQR package from EWM One package for all MIG/MAG inverter welding machines from EWM – regardless of the series.



/ Fast and successful certification: The EWM WPQR package saves time and money.

which requires welding procedure specifications based on standard welding procedures. Welding procedure specifications for qualified consumables could no longer be used for these materials.

With the WPQR package and the associated welding machine, THOM owns the prerequisites necessary to create welding procedure specifications for steels up to S355 and also to deploy these materials for supporting structures.

At the date of certification, all the welding procedure specifications that a company wishes to use in its manufacturing must be to hand. For THOM to continue using steel up to a yield strength of 355 MPa for supporting structures, these welding procedure specifications also needed to be available. The WPQR package was the basis for these welding procedure specifications. The welding parameters were transferred to THOM's own forms and the process was complete. The inspectors accepted this course of action without requiring any further procedure tests. This step made good economic sense for THOM. The costs for the whole WPQR package – i.e. for all of the welding procedure specifications for

steels up to 355 MPa – was only a fraction of what one single procedure test would have cost, aside from the time required.

Fast certification at THOM

At THOM, certification to EN 1090 was completed in just six months. It is true that a lot of preliminary work had already been undertaken for certification to DIN 18800 and ISO 9001 and the company already had experience of creating welding procedure specifications. Nevertheless, the WPQR package provided excellent support that enabled THOM to

obtain certification very quickly. All welding procedure specifications for steels up to and including S355 were immediately available and evidence could be provided at the certification point.

By using EWM welding machines, THOM is also well equipped for the future. All available welding procedures are always integrated in every welding machine, be they MIG/MAG standard and pulsed welding procedures or the innovative welding procedures. No matter what technical welding tasks THOM is asked to undertake in the future – with EWM, all the prerequisites are in place to carry them out successfully in every case.



/ Built-on balconies: Manufactured in accordance with standards.

