

Welding Briefing Note

The Quality of welding and the welding systems required for a fabricator to be certified to be able to CE Mark to BS EN 1090 are as we now know higher than we had at first expected. The costs of welding consultants to work with members to bring their systems up to scratch had looked to be so high as to be nearly prohibitive, but we are now talking to consultants who have a better idea of what we do and so are able to provide a more reasonable price.

BS EN 1090 Part 2 says that:

- Welding shall be undertaken in accordance with EN ISO 3834 with EXC 1 to Part 4 'Elementary' and EXC 2 Part 3 'standard', Higher EXC classes require higher standards, but few RIDBA members fabricate to EXC 3 and above.
- The welding procedures should be carried out to a Welding Procedure Specification (WPS) in accordance with EN ISO 15609
- Welders shall be qualified in accordance with EN 287-1
- Welding Coordinators (WC) need to be suitably qualified as specified in EN ISO 1473
- The Responsible Welding Coordinator (RWC) needs to be adequately qualified and to have the necessary authority to be able to control all the welding carried out by the fabricator.

We are in the process of finding credible and competent third parties who can check members' WPS, their welders, WC and procedures and if they comply with the above provide evidence to our Notified Body (NB) that members comply.

If the Member does not comply the third party needs to be able to train them or advise them of a trainer that can do so.

It is possible that some Members will not be able to employ a RWC and so either the third party can undertake that role as a consultant or advise them of a consultant that can do so.

The original consultants we spoke to quoted very high prices for the above services.

TWI provides a Welding Fabrication Certification Scheme, but we believe that this is over complicated for the simple types of welding carried out by our members.

I am also of the view that there is no need to go down the certification route, we just need a competent independent third party to be able to assess the RWC, WC, welders and procedures and provide assurances to the NB that they are compliant.

So once we have completed our research we will need to ensure that our NB is happy with the qualifications, experience, independence and procedures of the welding consultant/s we wish to work with.

Welders

It is likely that a number of welders employed by members will be coded and up to the required standard all ready, but some will not and so our chosen consultant will need to assess them and if further training is required provide the necessary training or advise someone that can.

The type of welding carried out by members is relatively simple and is likely to be, fillet, butt and possible tube welding, once this is confirmed and the type of welding equipment used then I expect RIDBA will commission the writing of the necessary generic WPS which can then be passed on to members at a vastly lower cost than if they had to do it themselves.

Once the welder has been third party assessed and his weld coupon deemed acceptable then if all goes well they will only need testing every 2 years.

The cost of the above does need to be taken into account and there is no need to code all welders to the same standard, so where a fabricator has 10 welders and 80% of the welding they do is fillet welding 10% butt and 10% site welding, the fillet weld is the simplest so cheapest to achieve followed by butt and then

site welding. There is a strong argument that all are coded for fillet but only 2 for butt and site welding. Each company's mix of welds will probably be different and so they will need to decide their coding requirements with the welding consultant.

Welding Coordinators

I also expect RIDBA to commission and purchase generic WC procedures so that once again they can be passed on to members for a cost lower than they can do it themselves. RIDBA will also need to agree prices for WC training with the consultant, as it is likely that most members will require only 1 or 2 WCs and so for them to be trained as part of a group is likely to be less expensive than individual training.

Responsible welding coordinator

These will need to be very highly qualified and it is not a full time job and so I would not expect many if any members to employ their own. We will obtain prices from Competent Welding Consultants to provide this service to members. Depending on the size of the member and the processes they carry out it is felt that the job will require a visit for 1 to 2 days between 3 and 6 times a year; with communication, where required, such as concerning new WPSs, carried out electronically between visits.

In Conclusion

Our aim is to be able to provide the following to members in the near future:

- The ability to purchase Welding Procedure Specifications, from RIDBA for the welding processes and equipment used by the member.
- The assessment of welders, testing of their welds and where required the cost of training them to the required standard for the EXC involved.
- The ability to purchase a generic welding coordination procedure of how the welding coordinator should control the welding, at a price considerably lower than doing it themselves.
- A price for training a welding coordinator.
- A price for a consultant Responsible Welding Coordinator.