

# Welding procedure and welder operator approval scheme for PED or PESR permanent joints

## Factsheet

Welding procedure and welder operator approvals help to ensure that your welders meet industry and regulatory standards. Certification is a critical in providing assurance of the structural and pressure integrity of fabricated components and systems. This is particularly important if you or your customers manufacture pressure equipment that needs to comply with the pressure equipment directive (PED), or the pressure equipment safety regulations (PESR) as mandatory requirements change from April 2023.

### What are welding procedure and welder operator qualifications?

Weld procedure qualifications demonstrate that the welds produced to a specific set of parameters give the required mechanical properties in the weld joint to satisfy the design requirements of production items. Each qualification normally provides a range of approval for parameters like materials, thickness, heat inputs and joint configurations.

Each of the welding standards has its own method of grouping materials and welding consumables to reduce the number of tests required. However, they all have different systems and rules which can greatly change the range of approval for the same parameter from one standard to another.

Welder Performance Qualifications follow a similar logic with ranges of approval based on materials, consumables, process, and welding positions. Welder performance tests are aimed at demonstrating the welder's skill in being able to produce a sound weld. Therefore, the range of approval and parameters for approval of specific ranges can be significantly different from the range in the procedure qualification for the same parameter.

### Why is this important?

If you manufacture pressure equipment directive (PED) or pressure equipment safety regulations (PESR) Category II, III & IV equipment using permanent joints, then you will need to comply with PED Annex 1 § 3.1.2 or PESR Schedule 2 § Part 3, Regulation 21 (3).

The welding procedures and the welders including operators undertaking the work must be suitably qualified by a Notified Body (NoBo) or a Recognised Third-Party Organisation (RTPO). From April 2023, welders and operators will require certification under a scheme accredited by an EU accreditation body and for PESR by a UK Approved Body to ISO/IEC 17024\*, which is the international standard that sets out the requirements for bodies certifying people against specific schemes or requirements.

### Who does this apply to?

Candidates seeking certification under this scheme will have undergone prior training and or have suitable industrial experience covered by the scheme. Where no permanent joining qualifications are held, the candidate will need to demonstrate evidence of utilising the relevant joining process in the 6 months preceding the application. The scheme is open to all seeking permanent joining qualifications under this scheme.

### Examples of qualification testing include:

- BS EN ISO 9606-1. Qualification testing of Welders – Steels
- BS EN ISO 9606-2. Qualification testing of Welders – Aluminium and Aluminium Alloys
- BS EN ISO 9606-3. Qualification testing of Welders – Copper and Copper Alloys
- BS EN ISO 9606-4. Qualification testing of Welders – Nickel and Nickel Alloys
- BS EN ISO 9606-5. Qualification testing of Welders – Titanium and Zirconium Alloys
- ASME - Boiler and Pressure Vessel Code. Section IX. Welding and brazing Qualifications



## What are the benefits of the approval scheme?

### Improve your workforce

Witnessing welder and operator qualification tests ensure you can employ welders with verified skillsets with the ability to follow written and verbal instructions to a required standard for any welding project you are working on.

### Capability assured

With better welder capabilities comes improved performance levels and productivity. Implementing recognised welding procedures leads to high-quality products for your customers.

### Compliance and brand confidence

Your customers want assurance that your services or products are compliant and meet their expectations. Using fully qualified welders gives customers confidence in your business and the ability to achieve desired outcomes, opening new commercial opportunities.

### How can we help?

LRQA<sup>1</sup> is accredited by the Irish National Accreditation Board (INAB) and the United Kingdom Accreditation Body (UKAS) to ISO/IEC 17024 for the certification of joining and NDT personnel for PED / PESR.

Wherever you are in the world, our team of experienced examiners, assessors and inspectors are available to witness your welder tests. We strive to be your number one choice for welding qualification services – with a focus on integrity, safety and technical expertise that provides confidence for you and your stakeholders throughout the whole service.

### Why work with LRQA?

Our examiners, assessors and inspectors are industry experts who work with you to understand what helps your business operate at its optimum level. They create long-lasting value through collaboration, delivering a greater impact on your business, your people and your customers.

We offer you our commitment to inspection excellence, which means protecting your assets and your brand reputation as if they were our own.

### Why choose LRQA?

We're here to help negotiate a rapidly changing world, by working with you to manage and mitigate the risks you face. From compliance to data-driven supply chain transformation, it's our job to help you shape the future, rather than letting it shape you.

We do this by delivering:

### Strategic vision

Our technical know-how, sector expertise and innovative, forward-thinking approach will help you meet the challenges of today – and become a safer, more secure, and sustainable organisation tomorrow.

### Technical expertise

Our people are sector experts. They bring with them a clear understanding of your specific challenges, standards and requirements – then deploy deep knowledge of certification, brand assurance, food safety, cybersecurity, inspection and training to help you meet them.

### Global capability

Operating in more than 120 countries, recognised by over 30 accreditation bodies worldwide, and covering almost every sector, we can help you manage risk, drive improvement and build credibility with stakeholders around the globe.

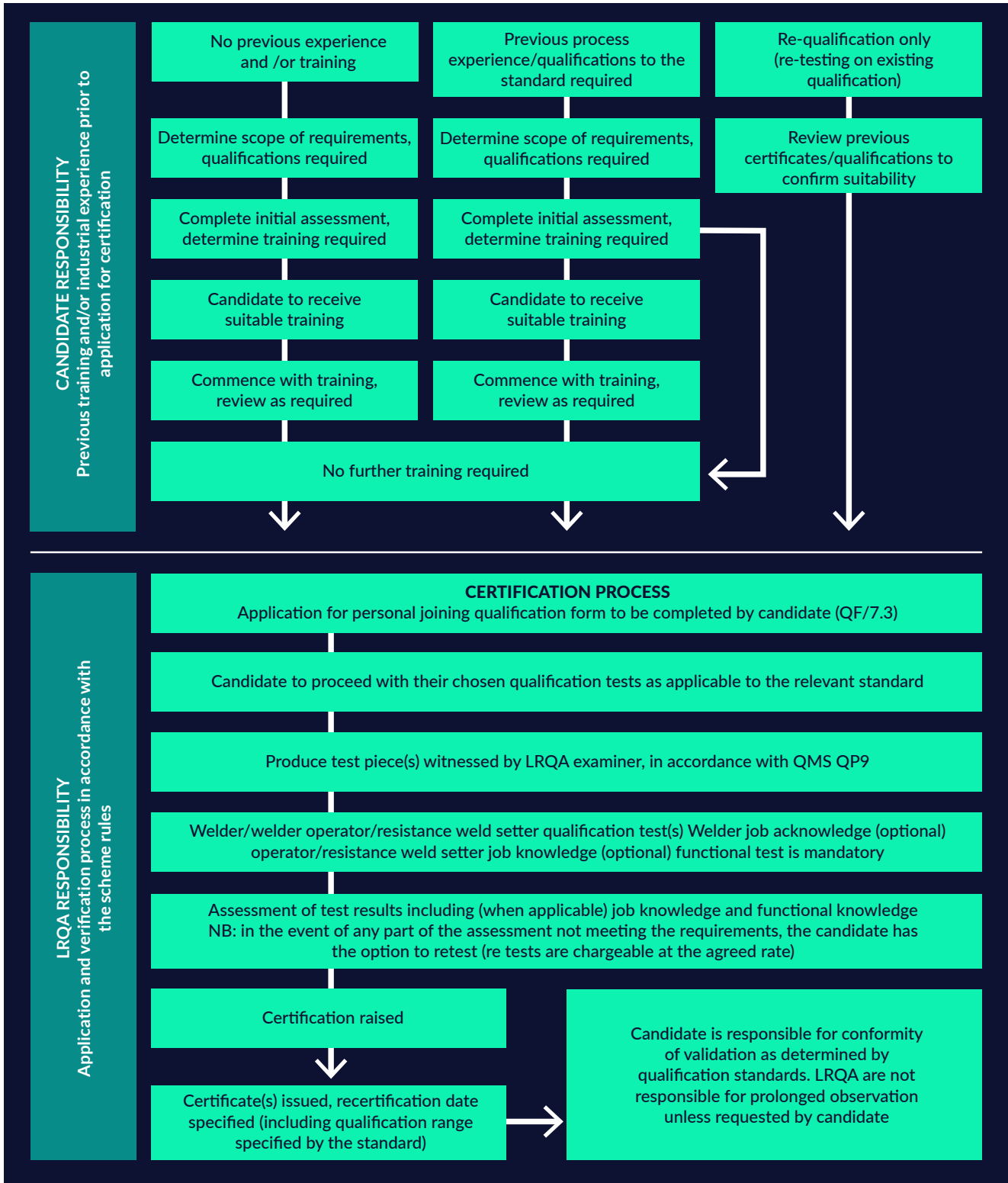
### Effective partnership

Every business is unique. That's why our experts work with you, to fully understand your needs and goals, and work out how we can best support them.

### Fresh perspective

We have led the way in shaping our industry and continue to take every opportunity to collaborate with clients and pioneer new ideas, services and innovation.

# Illustration of possible routes to access certification



## Get in touch

Visit [www.lrqa.com/sg](http://www.lrqa.com/sg) for more information, email [enquiries.sg@lrqa.com](mailto:enquiries.sg@lrqa.com) or call +65 69904500



LRQA

460 Alexandra Road  
mTower #15-01  
Singapore 119963



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