



ISO 3834 - Quality requirements for fusion welding of metallic materials

The ISO 3834 is a stand-alone internationally recognised standard that focuses on the quality management of welding processes. The ISO 3834 by itself can be used by the manufacturer, independently of the ISO 9001 requirements, to demonstrate to a client or third party that the welding products are manufactured according to an appropriate quality level. Although it is not by itself a quality management system like the ISO 9001, it can be an extremely useful tool in implementing the ISO 9001 requirements for 'special processes', in cases where this standard is applied by the manufacturer.

If you have questions about the certification status of a company, feel free to contact us at certification@vincotte.be.

Your tailor-made solution

Welding is designated under the ISO 9001 as a 'special process', in particular because the strength and soundness of the weld cannot be fully verified solely by conducting tests later on.

Quality cannot be inspected within a product, it has to be integrated into it. Even the most extensive and sophisticated non-destructive testing cannot improve the quality of the product.

Therefore, in order to achieve a correct weld, it is not only important to test the final weld but to also monitor all the important intermediate steps (design, material procurement, traceability, providing and verifying welding documents, production tests, non-destructive testing, etc.).

Vincotte can certify the quality management system of the manufacturer according to the ISO 3834 for the three different quality levels: comprehensive quality, standard quality and elementary quality.

For this reason, our experts rely on their practical experience of quality system certification, and follow a certification scheme based on the requirements of the IIW (International Institute of Welding).

Our auditors, who perform the assessment are therefore not only competent in quality system certification, but they also have extensive knowledge of welding applications. You can therefore be certain that their judgment is totally reliable.

The elements to be assessed during the audit include:

- Technical reviews of tenders, customer queries, quality requirements for welding, etc.
- Sub-contracting and how this is handled
- Welding documentation for processes and personnel
- Inspection and testing procedures and personnel
- Equipment for welding and testing, maintenance and calibration
- Production planning
- Traceability
- Handling of defects, etc.

Your result

The benefits of ISO 3834:

- Better management of welding quality
- Cost savings - more efficient technology
- Less rework
- Local and international recognition as a competent organisation
- Compliance with welding-related requirements of ISO 9001
- More opportunities and options when bidding for tenders
- Easier renewal of welders' qualifications in accordance with future versions of the ISO 9606-1
- More efficient coordination of welding activities

- Compliance with the requirements of EN 1090 “Execution of steel structures - Technical requirements” and the Construction Products Regulation (CPR) - EU 305/2011, for the construction sector
- Certification by a third party enables a manufacturer to demonstrate his compliance with standards from an independent perspective.
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Please note

Legislations

ISO 3834 is a useful tool designed to facilitate compliance with several quality and production requirements arising under several New Approach Directives such as the Pressure Equipment Directive (PED 97/23/EC) and the Construction Products Regulation (CPR) - EU 305/2011.

Norms and Standards

ISO 3834 series: Quality requirements for fusion welding of metals, consisting of 6 parts:

- ISO 3834-1 : Part 1: Criteria for the selection of the appropriate level of quality requirements
- ISO 3834-2 : Part 2: Comprehensive Quality requirements
- ISO 3834-3 : Part 3: Standard Quality requirements
- ISO 3834-4 : Part 4: Elementary Quality requirements
- ISO 3834-5 : Part 5: Documents with which it is necessary to conform in order to be able to claim conformity with the quality requirements of ISO 3834-2, ISO 3834-3 or ISO 3834-4
- ISO 3834-6 : Part 6: Guidelines for the implementation of ISO 3834

In which situation?

This service is primarily intended for manufacturers of welded products for applications such as:

- pressure equipment (pipelines, heat exchangers, vessels, etc.)
- metal components and structures

but also for operators from various sectors such as: civil engineering, (petro)-chemical sector, automotive sector, etc.