Question: Do I need a fully qualified Welding Engineer if I want to have certification to ISO 3834?

Answer: ISO 3834 part 2 section 7.3 states:

The manufacture should have at his disposal appropriate welding personnel. Such persons having responsibility fro the quality activities shall have sufficient authority to enable any necessary action to be taken. The tasks and responsibilities of such persons shall be defined. The ISO documents to which it is required to conform to fulfil the quality requirements are specified in ISO 3834-5. Table 2 (which refers to ISO 14731) for arc welding, electron beam welding, laser beam welding and gas welding

ISO 14731 Welding Coordination-Tasks and responsibilities,

Section 6 of ISO3834 gives guidance on:

Technical knowledge, which is split into two areas, general and specialized
Specific knowledge which is split into three levels, Comprehensive, Specific and Basic.

Comprehensive technical knowledge, where full technical knowledge is required, in accordance with ISO 14731 section 6.1, for the planning, executing, supervising and testing of all tasks and responsibilities in welding fabrication

Specific technical knowledge, where the level of technical knowledge needs to be sufficient for the planning, executing, supervising and testing of all tasks and responsibilities in welding fabrication

Basic technical knowledge, where the level of technical knowledge needs to be sufficient for the planning, executing, supervising and testing of all tasks and responsibilities within a limited technical field, involving only simple welded structures.

Question: Can I comply with ISO 3834 if I don't have a quality system i.e. ISO 9001?

Answer: Yes it is still possible to comply with ISO 3834 if you do not have an approved quality system so long as you can address the essential requirement of the standard. ISO 3834-1 Section 4 gives an outline.

Independent certification to EN ISO 3834 benefits manufacturers by providing an authoritative third party statement of commercial value. Certification can be achieved alongside an ISO 9001 certification or it can stand alone. The stand-alone option may be attractive to companies in which the welding operations are simple.

Question: What essential areas are covered during the audit?

Answer: The following areas are covered:

1) Review of requirements
2) Technical review
3) Sub-contracting
4) Welders and welding operators
5) Welding coordination personnel
6) Inspection and testing personnel
7) Production and Testing equipment
8) Equipment Maintenance
9) Description of equipment
10) Production Planning
11) Welding Procedure specifications
12) Qualification of the welding procedure
13) Batch testing of consumables (if required)
14) Storage and handling of welding consumables
15) Storage of parent materials
16) PWHT
17) Inspection and testing before, during and after welding
18) Non conformances and corrective actions
19) Calibration or validation of measure, inspection and testing equipment
20) Identification during process
21) Traceability
22) Quality records

Question: What happens if my Responsible Welding Coordinator (RWC) leaves the company?

Answer: The certification will be suspended/withdrawn until a suitably approved replacement has been appointed; this individual will be subjected to an assessment to satisfy that he meets the requirements before the new certification can be issued

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Question: What happens if I want to expand into different grades of material which are not covered by my current certification? What happens if I start using different grades .....

Answer: Any change to the original certified scope will require re recertification

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Question: Are the assessors qualified welding engineers or just auditors?

Answer: All lead auditors are qualified as IIW/EWE certified welding engineers as well as being qualified as lead auditors, this ensures that the welding technical parts of the audit can be covered sufficiently to ensure compliance to the standard

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Question: If this is a quality audit why is TWI Certification Ltd doing this when there are several other accredited quality audit companies offering certification?

Answer: This certification is awarded to companies who satisfy the requirements of the ISO 3834 standard, The only way to satisfy the requirements (both assessing the company and the companies Responsible Welding Coordinator RWC) is for the person doing the audit/assessment to have both welding engineering and auditing qualifications, and industrial experience, All TWI certification assessors are qualified as IIW/EWE certified welding engineers as well as being qualified as lead auditors, this ensures that all welding technical activities can be covered sufficiently during the audit to ensure compliance to the standard

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Question: Does part 2 cover 3 or 4?

Answer: Yes as part 2 is the most stringent it will cover parts 3 and 4, also part 3 will cover part 4

Question: Does my welding subcontractor have to have ISO 3834 Certification?

Answer: No the welding subcontractor does not have to have certification to ISO 3834, however when a manufacturer intends to use sub-contracted services or activities (e.g. welding, inspection, non-destructive testing, heat treatment), information necessary to meet applicable requirements shall be supplied by the manufacturer to the sub-contractor. The sub-contractor shall provide such records and documentation of his work as may be specified by the manufacturer.

A sub-contractor shall work under the order and responsibility of the manufacturer and shall fully comply with the relevant requirements of the part of the standard being implemented (e.g. ISO 3834 parts 2, 3 or 4). The manufacturer shall ensure that the subcontractor can comply with the quality requirements specified.

The information to be provided by the manufacture to the sub-contractor shall include all relevant data from the review of the requirements (ISO 3834-2 and Part 3 see 5.2) and the technical review (ISO 3834-2 and Part 3 see 5.3). Additional requirements my

be specified as necessary to assure sub-contractor compliance with technical requirements

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Question: What level of knowledge does the welding coordinator have to have?

Answer: To control the various welding and welding-related operations and to achieve the desired quality consistently. A key feature of the standard ISO3834 (see section 6) is the requirement to ensure that people with welding responsibilities are competent to discharge those responsibilities. This is achieved by incorporation of another standard: ISO 14731 Welding Coordination-Tasks and responsibilities,
Technical knowledge, which is split into two areas, general and specialized
Specific knowledge which is split into three levels, Comprehensive, Specific and Basic.

Comprehensive technical knowledge, where full technical knowledge is required, in accordance with ISO 14731 section 6.1, for the planning, executing, supervising and testing of all tasks and responsibilities in welding fabrication

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Basic technical knowledge, where the level of technical knowledge needs to be sufficient for the planning, executing, supervising and testing of all tasks and responsibilities within a limited technical field, involving only simple welded structures.

Question: What happens if I want to add another welding process to my certification?

Answer: You will need to apply to have the certification extended to cover the additional welding process; also the Responsible Welding Coordinator (RWC) will need to be interviewed to confirm that he has the necessary knowledge to coordinate the welding activities of the new process.

Question: What does a product range cover?

Answer: Products are split into classifications please see list:

Product Classification

1 Sheet metal fabrication
2 Sheet metal containers

3 Rod and wire products
4 Domestic equipment
5 Hand tools
6 Vehicles, on/off road
7 Earth moving plant
8 Railway rolling stock
9 Mechanical handling equipment
10 Agricultural/garden machinery
11 Power tools
12 Machine tools
13 Electrical rotating machines
14 Internal combustion engines
15 Mechanical conveying equipment
16 Pumping equipment
17 Turbines, water/steam
18 Wind power machinery
19 Machinery
20 Mineral/quarry plant
21 Ship machinery
22 Electrical power equipment, static
23 Pressure vessels, unfired
24 Boilers
25 Heat exchangers
26 Process plant
27 Food/light processing plant
28 Pipelines, land
29 Pipelines, offshore
30 Pipework
31 Fluid control equipment
32 Structural steelwork
33 Offshore structures
34 Water control equipment
35 Storage vessels
36 Airframes
37 Ships' hulls
38 Repair and maintenance
39 Surface coating
40 Plastics products
41 Other products

Question: If I need to CE mark my products will this satisfy the requirements?

Answer: To CE structural steel work the standard used is BS EN 1090, this also mentions control of welding related activities in accordance with ISO 3834, so having certification to ISO 3834 will make the transition to BS EN 1090 certification a shorter

process.

Question: Does the Responsible Welding Coordinator (RWC) need to be a full time employee or can he be subcontracted?

Answer: The Responsible Welding Coordinator does not need to be a full time employee and can be subcontracted, however the company must have a nominated person or persons within the organisation who has the responsibility for the day to day welding activities

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Question: Is EN ISO 3834 certification mandatory for welding fabricators?

Answer: The development of European and International Standards is having a profound effect on manufacturing and fabricating companies. To be successful in this business you have to comply with a bewildering array of requirements which seem to change almost daily.
Many companies have achieved certification to ISO 9001 with respect to their quality management systems. But where significant use is made of a special process like welding, such certification is unlikely to provide the required demonstration of capability of the company to manufacture products of the required quality.

EN ISO 3834 can overcome this shortfall and boost the manufacturing company's ability to sell its products in both domestic and overseas markets. Compliance with EN ISO 3834 provides a 'one-stop-shop' to achieve global recognition of your company's capability.

Question: How do I decide what quality level or part of ISO 3834 I am working too?

Answer: ISO 3834-1 gives the criteria for the selection of the appropriate level of the quality requirements. Section 5 states: The selection of the appropriate part of ISO 3834, specifying the required level of quality requirements, should be in accordance with the product standard, specification, regulation or contract. Because ISO 3834 may be used in a variety of situations and for different applications, definite rules on the level of quality requirements to be adopted in individual circumstances

ISO 3834 may be applied to a variety of situations. The manufacturer should select one of the three parts specifying different levels of quality requirements, based on the following criteria related to products

- the extent and significance of safety-critical products;

- the complexity of manufacturer;

- the range of products manufactured;

- the range of different materials used;

- the extent to which metallurgical problems occur;

- the extent to which manufacturing imperfections, e.g. misalignment, distortion or weld imperfections, affect product performance.

Question: How can my company apply for certification to ISO 3834

Answer: Please follow the link http://www.iso3834.org/associated/index.jsp

This will allow you to download the following documents

- Application Form (PDF)
- Scheme description and benefits (PDF)
- Capability Assessment (PDF)

Question: Is there a general overview of the certification

Answer: If you follow the link http://www.iso3834.org/overview/index.jsp

This should give you a greater understanding of the scheme and its advantages

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Question: Are there any courses available to help me understand the requirements of ISO 3834

Answer: Please follow this link
http://www.twitraining.com/world/courses/index.jsp?coursecode=WTC15

This course is designed to assist Welding Engineering and Quality Managers and Auditors (whether involved in 1st, 2nd or 3rd party audits against ISO 3834).
in fabricating companies, or manufacturers using welding as a production process, seeking to understand the requirements of ISO 3834.

Question: What does the WTC ISO 3834 course cover and what are its objectives?

Answer: The course covers the following subjects**:**

Review of ISO 3834 series of standards and their relevance to fabrication and manufacture by welding, the relationship between ISO 3834 and ISO 9001; establishing compliance with ISO 3834 by audit; planning, conducting and reporting ISO 3834 audits, guidance on the categorisation of non-conformity and agreeing corrective action; establishing compliance with ISO 14731 by assessment of welding co-ordination function; certification to ISO 3834, the available options and mechanisms by which certification bodies are accredited for ISO 3834, the role of the European Welding Federation and the European Co-operation for Accreditation.

Objectives:

- to explain the reasons for the ISO 3834 series of standards and their relationship to ISO 9001
- to select the appropriate part of ISO 3834
- to describe documentation and criteria for assessing compliance with ISO 3834
- to establish compliance with ISO 3834 for welding co-ordination personnel
- to understand certification and accreditation in relation to ISO 3834
- guidance for auditors in relation to ISO 3834