SLV BERLIN-BRANDENBURG
Civilian lead agency for military technology DIN 2303

A-Z collection

of the exchange of experience between the recognised bodies according to DIN 2303

The exchange of experience between the recognised bodies according to DIN 2303 (ERFA DIN 2303) is the senior body which is responsible for special arrangements and interpretations in connection with DIN 2303. As the civilian lead agency, GSI mbH, NL SLV Berlin-Brandenburg bears the responsibility for the execution of ERFA DIN 2303.

The directors of the "recognised bodies" are obliged to take part in ERFA DIN 2303. On the list of the approved "recognised bodies", these persons are highlighted in boldface type.

The stipulations in the A-Z collection are binding on the nominated persons; they must take account of these stipulations during plant audits.

All recognised bodies have the possibility of submitting more extensive special arrangements and interpretations to ERFA DIN 2303; after discussion and approval in ERFA DIN 2303, these are included in the A-Z collection.

Any detailed questions which cannot even be clarified with the relevant quality testing agencies of the Federal Armed Forces must be clarified in ERFA DIN 2303 and, if necessary, are also included in the A-Z collection.

This collection replaces the collection of February 12th, 2025

Changes: 12, 22, 29, 30, 37 (No. and change with grey background)

New: 48 (N. with grey background)

Cons. no.	Subject
4	<u>Authorisation to perform qualification tests</u> As a supplement to DIN 2303, Para. 5.1.2, coordinators with the minimum qualification WS, EWS or IWS may also, internally in the plant, accept: ▪ Welder qualification tests according to DIN EN 9606-1 to -5. ▪ Brazer qualification tests according to DIN EN ISO 13585. ▪ Qualification tests for operators according to DIN EN ISO 14732. • Qualification tests for thermal sprayers and operators according to DIN EN ISO 14918. <u>Conditions:</u> 1. Documented process description to perform qualification tests 2. Designation and independence of the auditor 3. These coordinators must have proven the required specialist knowledge during the plant audit. 4. On the certificate, they must be indicated as the coordinator or as the representative. 5. The authorisation to perform qualification tests must be expressly noted on the rear side of the certificate according to DIN 2303.
5	<u>English-language version</u> In addition, certificates about the manufacturer qualification according to DIN 2303 may also be issued in the English language.
6	<u>Scope of validity of welder qualification tests</u> Qualification tests for butt welds do **<u>not</u>** include qualification tests for fillet welds. If fillet welds are executed, it is necessary to prove corresponding fillet weld qualification tests. 6.
7	<u>Grace period</u> A period of max. three months applies to the exceeding of the point in time of the validity of a certificate according to DIN 2303. <u>Condition:</u> The application for extension must have been made in good time before the expiry of the duration of validity.
8	<u>Manufacturer Qualification Class Q1</u> Materials in Groups 1.1, 1.2, 1.4, 8.1, 21 and 22 according to CEN ISO/TR 15608 are assigned to Class Q1. All other material groups belong to Class Q2. This does not affect the materials in Classes Q3 and Q4.

12	Approved welding consumables The Research Institute for Materials, Fuels and Lubricants (WIWeB) makes available a list of approved welding consumables (only for absolutely special materials). All other welding consumables must basically be standardised, supplied with certificates according to DIN EN 10204 (Acceptance test certificates 3.1 for the chemical composition and a test certificates 2.2 for the mechanical-technological properties) and, if at all possible, supplied with CE marks with declarations of conformity from accredited testing agencies and proof of the testing of the welded joint (e.g. approval certificate / data sheet / procedure qualification test). For military products in BK 1, BK 2, the welding consumables must be traceable back to the welding
13	Consent to inclusion in the Internet directory On the cover page of the application, the plant confirms its consent to inclusion in a directory. In so far as it does not want to do this, it must be expressly indicated on the cover page.
16	Area of application of DIN 2303 Paragraph 1 - Area of application is supplemented as follows: "Hoisting devices, fabrication equipment, in-plant transport equipment and similar operating equipment for fabrication/assembly, dismantling/maintenance and repair are only included in the scope of validity of this standard if this is demanded in contractual law."
17	Military products Paragraph 3.1 - Military products is supplemented as follows: "Military products as well as their subassemblies and components in the terms of this standard are only those which are in the base plant and in use."
18	Extensions of welder qualification tests according to DIN EN ISO 9606-1 An extension of the qualification according to Procedure 9.3 c is **not** permissible.
19	Amendment to 5.2.1: Operators of automatic thermal spraying installations need certificates according to DIN EN ISO 14918.
20	Demand for Class Q2: If the customer demands a Q2 certificate irrespective of the material, the following is applicable: ▪ The certificate is issued for Class Q1. ▪ In the text section, Class Q2 is specified as a supplement. The following must be noted on the rear side of the certificate: *"In addition, the quality requirements for the processing of military products with particular requirements in Class Q2 are satisfied."*
21	Calibration: Special reference is made to the requirements for calibrated welding equipment according to DIN EN ISO 17662

22	Base materials: Materials for components BK 1 and BK 2 must be proven, at least, with 3.1 certificates according to DIN EN 10204 unless anything else is demanded in supplementary specific requirements. Materials for components BK 3 and BK 4 must be proven, at least, with 2.2 certificates according to DIN EN 10204.
23	Normative references: Para. 2 in DIN 2303 is adjusted: - DIN ISO 24394 for DIN 29591 - DIN ISO 16338 for DIN 29878 - DIN 65118 for DIN 65118-1 and -2 - DIN ISO 11745 for DIN 65228 - DIN EN ISO 9606-1 for DIN EN 287-1 - DIN EN ISO 9712 for DIN EN 473 - DIN EN ISO 14732 for DIN EN 1418 - DIN EN ISO 13585 for DIN EN 13133 - DVS 2715 for DVS 2715-1 - DVS 2721 for DVS 2715-2 - DIN 29595 applies to developments up to 2024. DIN ISO 17927-1 and -2 applies to developments from 2025 onwards after consultation with WTD 61 - DIN EN ISO 14922 for DIN EN ISO 14922 (-1 to -4),
29	Recognition of welding procedure specifications DIN 2303 makes reference to DIN EN ISO 15607. According to this, all possibilities for recognising welding procedure specifications are permissible. Procedure qualification tests according to DIN EN ISO 15614-1 ff (stipulations according to Level 2) / pre-production work specimens according to DIN EN ISO 15613 must be fulllfilled, • for materials which must be assigned to Class Q2 (if necessary, pay attention to BV 1050); • for automated welding processes (from full mechanical), irrespective of the materials. • for BK1 and BK 2, mechanical technological properties must be proven • further requirements apply to categories Q3 and Q4 Companies that have more than 5 qualified welding instructions must include and keep them in an up-to-date overview list. The relevant differences from the "Reports on the Qualification of Welding Processes (WPQR)" in the areas of application are to be presented here.

30	Subcontracted welding coordinator WC and dWC may be recognized for other companies (maximum 3) in exceptional cases. Conditions: ▪ The designated people must have decided on this after examination on a case-by-case basis. ▪ The WCs must be marked as "external" in the audit report. ▪ The details within the meaning of DIN EN ISO 14731 must be contractually regulated. ▪ In principle, certificates are only issued for one year **for companies Q2 or higher with** an external WC (with only 2 WCs). The external WCs are obliged to provide written proof of their activities. This proof must always be available in the company for which the external SAP has been recognized. All welding coordinators who are not directly (locally) employed in the welding company are considered "subcontracted welding supervisors". This also applies to part-time employees whose working hours are less than 50% of the normal working hours in the company **Now public determination**
31	Second fabrication facility In exceptional cases, the "nominated person" makes the decisions about the inclusion of a second fabrication facility in the certificate according to DIN 2303. Conditions: • The second fabrication facility was taken into account within the framework of the plant audit. • The audit report must clearly reflect the audited scope. • The nominated coordinator is responsible for proper execution and provision of proof.
34	Qualification of the coordination personnel Welding inspectors with comprehensive knowledge (IWI-C (International Welding Inspector)) can be recognised as coordinators for Component Class BK3. -
37	People responsible for engineering, fabrication, subcontracting (purchasing), quality assurance as well as sales and project management People responsible for fabrication, subcontracting (purchasing), quality assurance as well as sales and project management in plants where there are no close contacts between the departments due to the company size/structure must be trained by the responsible welding coordinator at least every three years. Proof of the training (with an indication of the contents of the relevant arrangements in DIN 2303) must be presented in the course of the audit. A named circle of people must be included in the distribution of **the tasks and the responsibility according to DIN EN ISO 14731** in compliance with the existing plant organisation.

38	<u>Purchasing and sales of subassemblies according to DIN 2303 (exclusive subcontracting cases for welding operations)</u> **It is possible** to certify plants (purchasing/sales) for subassemblies according to DIN 2303 even if these do not operate their own welding workshops and exclusively purchase/subcontract welding operations. These suppliers must prove welding technology knowledge acc. table 2 DIN 2303 with at least one employee. The certificate must include the following note on the first page: **After an application and a subsequent plant audit, the plant ... has proven that it satisfies the quality requirements on suppliers (without their own welding workshops) for military products by means of welding / brazing / thermal spraying.**
39	<u>Visual inspection of components according to DIN 2303</u> A visual inspection must be carried out on 100% of the components manufactured within the scope of DIN 2303 in accordance with applicable standards. The following persons are considered capable of performing visual inspections on welds: • Personnel qualified according to DIN EN ISO 9712 (with the appropriate level according to the tasks assigned in each case); • a recognized welding coordinator; • a qualified welding inspector (e.g. E/IWI-C/S). For BK 3 and BK 4, personnel who have received specific training (this must be documented) for visual inspections in accordance with DIN EN ISO 17637 can also be used; worker self-inspection is possible. A confirmation of visual acuity is required.
43	<u>Change or succession of supervisor and deputy welding coordinators</u> If, during an audit, the situation arises that one of the coordinators. entered in the certificate in accordance with DIN 2303, in the course of the validity period, a) reaches the statutory retirement or pension age or b) there is a foreseeable time-out or change in personnel. a personnel concept for the coordinators (at least for the intended certificate validity period) must be presented by a person responsible for personnel during the audit.
44	<u>Resistance welding</u> For resistance welding, process number 2 according to DIN EN ISO 4063:2023, DIN EN ISO 14554-1:2014, Welding Quality Requirements – Resistance Welding of Metallic Materials, is to be applied analogously with regard to the quality requirements for welding, instead of DIN EN ISO 3834-2. Since the DIN EN ISO 14554 series of standards does not provide for an intermediate specification analogous to DIN EN ISO 3834-3, DIN EN ISO 14554-2:2014 applies to manufacturer qualification class Q1.

46	Welder examinations The welding coordination personal are responsible for the qualification procedures of welders and operators of welding equipment. If the qualification is carried out by external testing bodies, this must comply with the rules according to EN ISO/IEC 17024 (proof of accreditation or notification). Welding coordinators are allowed to act as internal examiners after approval by the recognized body and entry in the DIN 2303 certificate (see A-Z Collection, point 4).
47	Additive Manufacturing Companies that carry out additive manufacturing can be approved according to the rules of DIN 2303 (based on).
48	Manufacturer qualification class for guided missiles Guided missiles can fall into two manufacturer qualification classes: 1. Q4: Fly with an aircraft and are launched from there 2. Q2: Are launched from land-based or sea-based systems It is important that guided missiles are launched with the aim to explode and that no landing is planned.