

International Standards on Non-Destructive Testing

Besides the European Union Standards (ENs) which have now almost completely replaced British Standards, there are also ISOs (International Standards Organisation) which are not much used in the UK and which are not mandatory. Most industrial countries in the world are members of ISO and many use these standards.

Committee ISO/TC44/SC5 has a Work Programme to produce and up-date these ISO standards on NDT of welds, with a worldwide international membership. The membership of this committee from European Union countries tends to be similar to the membership of the CEN committees on NDT standards, and consequently there are many cases where the EN and ISO Standards are now very similar or identical.

ISO/TC44/SC5 Work Programme on NDT of Welds. September 2003. Published Standards

Document	Title	Comments
ISO 1027:1983	Radiographic image quality indicators for non-destructive testing – Principles and identification.	Transferred to ISO/TC 135/SC5 for withdrawal/ replace with EN 462
ISO 1106-1:1984	Recommended practice for radiographic examination of fusion welded joints – Part 1: Fusion welded butt joints in steel plates up to 50 mm thick.	Withdraw on publication of ISO 17636
ISO 1106-2:1985	Recommended practice for radiographic examination of fusion welded joints – Part 2: Fusion welded butt joints in steel plates thicker than 50 mm and up to and including 200 mm in thickness.	Withdraw on publication of ISO 17636
ISO 1106-3:1984	Recommended practice for radiographic examination of fusion welded joints – Part 3: Fusion welded circumferential joints in steel pipes of up to 50 mm wall thickness.	Withdraw on publication of ISO 17636
ISO 2437:1972	Recommended practice for the X-ray inspection of fusion welded butt joints for aluminium and its alloys and magnesium and its alloys 5 to 50 mm thick.	Systematic review started April 2002 – probably WID and replace by ISO 17636?
ISO 17635:2003	Non-destructive examination of welds – General rules for metallic materials.	Review in 2008
ISO 17637:2003	Non-destructive examination of fusion welds – Visual examination.	Review in 2008
ISO 17638:2003	Non-destructive examination of welds – Magnetic particle examination of welds.	Review in 2008
ISO 17636 EN 1435	Non-destructive examination of welds – Radiographic examination of welded joints.	Ballot closed 2003-05-06 publication expected (stage 60 2003-05-13)



ISO 17640.2 EN 1714	Non-destructive examination of welds – Ultrasonic examination of welded joints.	Passed 2nd ballot, comments to be addressed at meeting
ISO 17643.2 EN 1711	Non-destructive examination of welds – Eddy current examination of welds by complex plane analysis.	Documents for 2nd DIS passed assessment of ISO/CS (sent 2003-07-14) waiting for ballot to start
ISO 7963:1985	Welds in steel – Calibration block No 2 for ultrasonic examination of welds.	Passed CD ballot. Comments to be addressed at meeting
ISO 22825 EN ISO 22825	Non-destructive examination of welds – Ultrasonic methods – Examination of welds in austenitic steels.	CEN WIs 188, 189, 190 and 191 merged into one WI 188 as per CEN/TC121 resolution 15/2000. Parallel enquiry (DIS) approved by SC5 03-2003

CEN work - No ISO/TC 44 work item at present.

Document	Title	Comments
EN 12517	Non-destructive examination of welds – Radiographic examination of welded joints – Acceptance levels.	CEN asked for a revision due to changes in ISO 5817 (EN 25817). Not decided if will be adopted in ISO or done under the IIW/VA sub-committee
EN 1712	Non-destructive examination of welds – Acceptance criteria for ultrasonic examination of welded joints.	Revision requested in CEN. No decision yet if this will be IIW/VA sub-committee
EN 1291	Non-destructive examination of welds – Magnetic particle testing of welds – Acceptance levels and criteria.	AMD to be published in CEN first. Then Fast-track in ISO – Electronic figures and text required for ISO version?
EN 1289	Non-destructive examination of welds – Penetrant testing of welds – Acceptance levels and criteria.	AMD to be published in CEN first. Then Fast-track in ISO – Electronic figures and text required for ISO version?
EN 1713	Non-destructive examination of welds – Ultrasonic examination – Characterisation of imperfections in welds.	AMD to be published in CEN first. Then Fast-track in ISO – Electronic figures and text required for ISO version?
WI 00121377	Welding – Use of time-of-flight diffraction technique (TOFD) for testing of welds.	To be adopted as a TS in CEN. Nothing currently in ISO
EN WI 102	Design and non-destructive examination of welds. (CEN/Technical report).	Adopted as CEN technical report by res 24/1997. Not going to be adopted in ISO/TC 44/SC5