

List of accredited standards in the scope of flexible accreditation			
Serial No.	Test standard	Title/Activity	Issue CURRENT
Visual inspection			
1	DIN EN 13018	Non-destructive testing – Visual testing – General principles (here: Sections 5 and 6)	2016-06
2	DIN EN ISO 17637	Non-destructive testing of welds – Visual testing of fusion-welded joints, (here: Section 6)	2017-04
3	DIN EN 12799	Brazing – Non-destructive examination of brazed joints (here: Section 4)	2000-12
Ultrasonic testing			
4	DIN EN ISO 16810	Non-destructive testing – Ultrasonic testing – General principles - Part 1 (here: Section 9)	2014-07
5	DIN EN ISO 16823	Non-destructive testing – Ultrasonic testing – Transmission technique - Part 3	2014-07
6	DIN EN ISO 17640	Non-destructive testing of welds – Ultrasonic testing – Techniques, testing levels, and assessment	2019-02
7	DIN EN ISO 22825	Non-destructive testing of welds – Ultrasonic testing – Testing of welds in austenitic steels and nickel-based alloys	2018-02
8	DIN EN 10160	Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)	1999-09
9	DIN EN 10228-3	Non-destructive testing of steel forgings – Part 3: Ultrasonic testing of ferritic or martensitic steel forgings	2016-10
10	DIN EN 10228-4	Non-destructive testing of steel forgings – Part 4: Ultrasonic testing of austenitic and austenitic-ferritic stainless steel forgings	2016-10
11	DIN EN 12680-1	Founding - Ultrasonic examination - Part 1: Steel castings for general purposes	2003-06
12	DIN EN 12680-2	Founding — Ultrasonic examination — Part 2: Steel castings for highly stressed components	2003-06
13	DIN EN 12680-3	Ultrasonic testing – Part 3: Spheroidal graphite cast iron castings	2012-02
14	DIN EN ISO 16809	Non-destructive testing – Ultrasonic thickness measurement	2020-02
15	AD 2000-Merkblatt HP 5/3, Anlage 1	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods (here: ultrasonic testing)	2020-12
Radiographic testing			
16	DIN EN ISO 10893-6	Non-destructive testing of steel tubes – Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections	2019-06
17	DIN EN ISO 17636-1	Non destructive testing of welds – Radiographic testing – Part 1: X- and gamma-ray techniques with film	2022-10
18	DIN EN ISO 5579	Non-destructive testing – Radiographic testing of metallic materials using film and X- or gamma rays – Basic rules (here: Section 6)	2014-04
19	DIN EN 12681-1	Founding – Radiographic testing – Part 1: Film techniques	2018-02
20	AD 2000-Merkblatt HP 5/3, Anlage 1	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods (here: radiographic testing)	2020-12
Magnetic particle testing			
21	DIN EN ISO 9934-1	Non-destructive testing – Magnetic particle testing – Part 1: General principles (here: Section 7 to 14)	2017-03
22	DIN EN 1369	Founding – Magnetic particle testing	2013-01
23	DIN EN 10228-1	Non-destructive testing of steel forgings – Part 1: Magnetic particle inspection	2016-10
24	DIN EN ISO 17638	Non-destructive testing of welds – Magnetic particle testing	2017-03
25	DIN EN ISO 10893-5	Non-destructive testing of steel tubes – Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections	2011-07
26	AD 2000-Merkblatt HP 5/3, Anlage 1	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods (here: magnetic particle inspection)	2020-12
Penetrant testing			
27	DIN EN 1371-1	Founding – Liquid penetrant testing – Part 1: Sand, gravity die and low pressure die castings	2012-02
28	DIN EN 1371-2	Founding – Liquid penetrant testing – Part 2: Investment castings	2015-04
29	DIN EN 10228-2	Non-destructive testing of steel forgings – Part 2: Penetrant testing	2016-10
30	DIN EN ISO 10893-4	Non-destructive testing of steel tubes – Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections	2011-07
31	DIN EN ISO 3452-1	Non-destructive testing – Penetrant testing – Part 1: General principles (here: Section 8)	2022-02
32	AD 2000-Merkblatt HP 5/3, Anlage 1	Non-destructive testing of welded joints - Minimum requirements for non-destructive testing methods (here: penetrant testing)	2020-12
Strain measurement using Strain gauges			
33	VdTÜV-MB BERE 803	Guidelines for implementation and evaluation of strain measurements with Strain gauges (DMS) - calculation 803	2008-10

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Residual stress measurement			
34	ASTM E 837-20	Standard Test Method for Determining Residual Stresses by the Hole-Drilling Strain-Gage Method	2020-11
35	Kockelmann Method, Metrological Letters, HBM 29, Issue 2	The hole drilling method - A method for the experimental determination of residual stresses that is optimal for many areas of application - T. Schwarz, H. Kockelmann Die Bohrlochmethode - Ein für viele Anwendungsbereiche optimales Verfahren zur experimentellen Ermittlung von Eigenspannungen - T. Schwarz, H. Kockelmann	1993
Hardness tests			
36	DIN EN ISO 6506-1	Metallic materials – Brinell hardness test – Part 1: Test method	2015-02
37	DIN EN ISO 6507-1	Metallic materials – Vickers hardness test – Part 1: Test method	2024-01
38	DIN EN ISO 6508-1	Metallic materials – Rockwell hardness test – Part 1: Test method	2024-04
39	DIN EN 9015-1	Destructive tests on welds in metallic materials – Hardness testing – Part 1: Hardness test on arc welded joints	2011-05
40	DIN 50159-1	Metallic materials – Hardness testing with the UCI method – Part 1: Test method	2022-06
Tensile testing			
41	DIN EN ISO 4136	Destructive tests on welds in metallic materials – Transverse tensile test	2022-09
42	DIN EN ISO 6892-1	Metallic materials – Tensile testing – Part 1: Method of test at room temperature (here: test procedure B)	2020-06
43	DIN EN ISO 6892-2	Metallic materials – Tensile testing – Part 2: Method of test at elevated temperature (here: test procedure B)	2018-09
Bend test			
44	DIN EN ISO 7438	Metallic materials – Bend test	2021-03
45	DIN EN ISO 5173	Destructive tests on welds in metallic materials – Bend tests	2023-05
46	DIN EN ISO 9017	Destructive tests on welds in metallic materials – Fracture test	2018-04
Impact test			
47	DIN EN ISO 148-1	Metallic materials – Charpy pendulum impact test – Part 1: Test method	2017-05
48	DIN EN ISO 9016	Destructive tests on welds in metallic materials – Impact tests – Test specimen location, notch orientation and examination	2022-07
Creep test			
49	DIN EN ISO 204	Metallic materials – Uniaxial creep testing in tension – Method of test	2023-10
50	DIN EN 10319-1	Metallic materials Tensile stress relaxation testing Part 1: Procedure for testing machines	2003-09
51	ASTM E139-11	Standard Test Methods for Conducting Creep, Creep-Rupture and Stress-Rupture Tests of Metallic Materials	2011
52	ASTM E 292-18	Standard Test Methods for Conducting Time-for-Rupture Notch Tension Tests of Materials	2018
fatigue testing			
53	DIN 50100	Load controlled fatigue testing – Execution and evaluation of cyclic tests at constant load amplitudes on metallic specimens and components (here: staircase method)	2022-12
54	ASTM E 606/E606M-21	Standard Test Method for Strain-Controlled Fatigue Testing	2021
Metallography			
55	DIN EN ISO 643	Steels – Micrographic determination of the apparent grain size	2020-06
56	DIN EN ISO 945-1	Microstructure of cast irons – Part 1: Graphite classification by visual analysis	2019-10
57	DIN EN ISO 1463	Metallic and oxide coatings – Measurement of coating thickness – Microscopical method	2021-08
58	DIN EN ISO 3651-2	Determination of resistance to intergranular corrosion of stainless steels - Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steels - Corrosion test in media containing sulfuric acid	1998-08
59	DIN EN ISO 17639	Destructive tests on welds in metallic materials – Macroscopic and microscopic examination of welds	2022-05
60	ASTM G 48-11	Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution (hier: Methode A und E)	2015
61	ASTM E 562-19	Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count	2019-09
62	VGB-S-517-00	Guidelines for rating the microstructural composition and creep rupture damage of creep-resistant steel for high pressure pipelines and boiler components and their weld connections	2014-11
63	VdTÜV-MB DAMP 451-83/6	Analysis of the surface microstructure of components subject to long-term stress in accordance with TRD 508	1983-08
X-ray fluorescence analysis			
64	SPG-AA ILP-040*	Mobile X-ray fluorescence analysis (Positive Material-Identifikation PMI)	2019

*as an in-house procedure not in the flexibly accredited area