

BUREAU OF INDIAN STANDARDS

Program of Work

MTD 21 : Non-Destructive Testing Sectional Committee

Scope: Standardization in the field of non-destructive testing

Liaison: **ISO TC-135 (P): Non-destructive testing ISO TC-135 SC-2 (P): Surface methods ISO TC-135 SC-3 (P): Ultrasonic testing ISO TC-135 SC-4 (P): Eddy current testing ISO TC-135 SC-5 (P): Radiographic testing ISO TC-135 SC-5 (Convenorship): Gammatopography of shielding integrity ISO TC-135 SC-6 (P): Leak testing ISO TC-135 SC-7 (P): Personnel qualification ISO TC-135 SC-8 (P): Thermographic testing ISO TC-135 SC-9 (P): Acoustic emission testing**

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10543:1983 ISO 9934-1:2016	Method for dry powder magnetic particle testing	February, 2020	-	Not Equivalent
2	IS 11612:2004	Code of practice for eddy current testing of non-ferrous seamless pipes and tubes (First Revision)	February, 2020	-	Indigenous
3	IS 11626:2005 Reviewed In : 2020	Recommended practice for ultrasonic testing and acceptance for plain carbon and low alloy forging quality steel blooms (First Revision)	February, 2020	-	Indigenous
4	IS 11630:2005 Reviewed In : 2020	Method for ultrasonic testing of steel plates for pressure vessels and special applications (First Revision)	February, 2020	-	Indigenous
5	IS 11655:1986 Reviewed In : 2020	Procedure for stray flux testing of ferrous magnetic seamless steel tubular products	February, 2020	-	Indigenous
6	IS 1182:1983 Reviewed In : 2020	Recommended - Practice for radiographic examination of fusion welded butt joints in steel plates (Second Revision)	February, 2020	-	Indigenous
7	IS 12147:2013	Recommended practice for wet magnetic particle examination (First Revision)	February, 2020	-	Indigenous
8	IS 12148:1987 Reviewed In : 2020	Guidelines for requirements of non-destructive testing agencies	February, 2020	-	Indigenous
9	IS 12666:2018 Reviewed In : 2024 ISO 16831:2012	Performance assessment of ultrasonic flaw detection equipment (First Revision)	March, 2024	-	Not Equivalent
10	IS 12710:1989 Reviewed In : 2020 ISO 12716	Acoustic emission testing - Glossary of terms	February, 2020	-	Not Equivalent

11	IS 12782:1989 Reviewed In : 2020	Guidelines for using thermography for monitoring of industrial components	February, 2020	-	Indigenous
12	IS 12860:1989 Reviewed In : 2020	Metallic coating thickness by X-ray fluorescence technique method - Determination	February, 2020	-	Indigenous
13	IS 12889:2018 Reviewed In : 2024 ISO 3452-2:2013	Performance evaluation of materials used for liquid penetrant test (First Revision)	March, 2024	-	Not Equivalent
14	IS 12965:1990 Reviewed In : 2020 ISO 12718:2008	Glossary of terms used in electro magnetic (Eddy Current) testing	February, 2020	-	Not Equivalent
15	IS 13190:1991 Reviewed In : 2020 ISO 15548-2:2013	Recommended practice for eddy current examination by rotating probe method of round steel bars	February, 2020	-	Not Equivalent
16	IS 13805:2004 Reviewed In : 2020 ISO 9712	General standard for qualification and certification of non - Destructive testing personnel - Specification (First Revision)	February, 2020	1	Not Equivalent
17	IS 14669:1999 Reviewed In : 2020	Thermal neutron radiography - Recommended practices	February, 2020	-	Indigenous
18	IS 14670:1999 Reviewed In : 2020	Recommended practice for acoustic emission inspection during hydrostatic pressure testing of system	February, 2020	-	Indigenous
19	IS 14800:2000 ISO 20669:2017	Recommended practice for sorting of ferrous/non - Ferrous materials using electromagnetic (Eddy Current) technique	February, 2020	-	Not Equivalent
20	IS 15404:2003 Reviewed In : 2020	Recommended practice for measuring ultrasonic velocity in materials	February, 2020	-	Indigenous
21	IS 15435:2003 Reviewed In : 2020 ISO 16809:2017	Recommended practice for measuring thickness using ultrasonic method	February, 2020	-	Not Equivalent
22	IS 15452:2004	Recommended practice for flaw sizing by ultrasonic DGS method	February, 2020	-	Indigenous
23	IS 15468:2004 Reviewed In : 2020 ISO 16831:2012	Performance evaluation of ultrasonic thickness gauges	February, 2020	-	Not Equivalent
24	IS 15531:2004 Reviewed In : 2020	Recommended practice for ultrasonic testing of weld fillets of non-linear joints	February, 2020	-	Indigenous
25	IS 15539:2004	Recommended practice for magnetic particle examination of steam turbine rotor blades	February, 2020	-	Indigenous
26	IS 15540:2004	Recommended practice for eddy current testing of installed non-ferromagnetic heat exchanger tubing using dual frequency method	February, 2020	-	Indigenous
27	IS 15643:2006 Reviewed In : 2020	Non - Destructive examination of polymer based composite materials - Code of practice	February, 2020	-	Indigenous
28	IS 15775:2008 Reviewed In : 2020	Glossary of terms for signal analysis related to non-destructive testing	February, 2020	-	Indigenous
29	IS 15987:2013	Non - Destructive testing of	February, 2020	-	Indigenous

	Reviewed In : 2020	concrete structures using impact - Echo technique - Recommended practice			
30	IS 16168:2014 Reviewed In : 2020	Guidelines for infrared thermography inspection of electrical installations	February, 2020	-	Indigenous
31	IS 16241:2018 Reviewed In : 2024	Realtime radiosopic examination of weldments	March, 2024	-	Indigenous
32	IS 16979:2018 Reviewed In : 2024	Guidelines for visual inspection using borescopes and videoscopes	March, 2024	-	Indigenous
33	IS 17069 (Part 1):2019 ISO 14096-1 : 2005 Reviewed In : 2024 ISO 14096-1:2005	Non - Destructive testing - Qualification of radiographic film digitization systems: Part 1 definitions, quantitative measurements of image quality parameters, standard reference film and qualitative control	March, 2024	-	Identical under dual numbering
34	IS 17069 (Part 2):2019 ISO 14096-2 : 2005 Reviewed In : 2024 ISO 14096-2 : 2005	Non - Destructive testing - Qualification of radiographic film digitization systems: Part 2 minimum requirements	March, 2024	-	Identical under dual numbering
35	IS 17180:2020	Guidelines for Using Infrared Thermography for Condition of Rotating Components		-	Indigenous
36	IS 17181:2020 Nil	Remote Field Eddy Current Testing of Steam Generator and Heat Exchanger Tubes		-	Not Equivalent
37	IS 17182:2020	X-ray Diffraction Based Residual Stress Measurements		-	Indigenous
38	IS 17537 (Part 1):2021 ISO 15708-1 : 2017 ISO 15708-1 : 2017	Non-destructive testing - Radiation methods for computed tomography - Part 1: Terminology		-	Identical under dual numbering
39	IS 17537 (Part 2):2021 ISO 15708-2 : 2017 ISO 15708-2 : 2017	Non-destructive testing - Radiation methods for computed tomography - Part 2 Principles, equipment and samples		-	Identical under dual numbering
40	IS 18115:2023 ISO 16827 : 2012 ISO 16827 : 2012	Non-destructive testing - Ultrasonic testing - Characterization and sizing of discontinuities		-	Identical under dual numbering
41	IS 18907:2024	MICRO-FOCAL RADIOGRAPHY FOR INDUSTRIAL COMPONENTS RECOMMENDED PRACTICES		-	Indigenous
42	IS 19362:2025	Non-destructive testing Eddy Current TestingDetermination of Electrical Conductivity of Non-magnetic Metals		-	Indigenous
43	IS 2417:2003 Reviewed In : 2020 ISO 5577:2017	Glossary of terms used in ultrasonic non-destructive testing (Second Revision)	February, 2020	-	Not Equivalent
44	IS 2478:1991 Reviewed In : 2020	Glossary of terms relating to industrial radiology (Second Revision)	February, 2020	-	Indigenous

45	IS 2595:2008	Industrial radiographic testing - Code of practice (Second Revision)	February, 2020	-	Indigenous
46	IS 2953:1985	Glossary of terms used for interpretation of welds and castings radiographs (First Revision)	February, 2020	-	Indigenous
47	IS/ISO 3057:1998 ISO 3057:1998	Non - Destructive testing - Metallographic replica techniques of surface examination	February, 2020	-	Identical under single numbering
48	IS 3415:1998 ISO 12707:2016	Glossary of terms used in magnetic particle flaw detection (Second Revision)	February, 2020	-	Not Equivalent
49	IS 3657:2018 Reviewed In : 2024 ISO 19232-1:2013	Specification for radiographic image quality indicators (Second Revision)	March, 2024	-	Not Equivalent
50	IS 3658:1999 Reviewed In : 2020	Code of practice for liquid penetrant flaw detection (Second Revision)	February, 2020	-	Indigenous
51	IS 3664:1981 ISO 18175 ISO 2400 ISO 7963	Code of practice for ultrasonic pulse echo testing by contact and immersion methods (first revision)	February, 2020	-	Not Equivalent
52	IS 3703:2023	Recommended practice for magnetic particle flaw detection Third Revision		-	Indigenous
53	IS 4225:2021 ISO 17577 : 2016	Steel — Ultrasonic Testing of Steel Flat Products of Thickness Equal to or Greater than 6 mm (Third Revision)		-	Identical under dual numbering
54	IS 4260:2004 Reviewed In : 2021	Recommended practice for ultrasonic testing of butt welds in ferritic steel (Third Revision)	March, 2021	-	Indigenous
55	IS 4853:1982 Reviewed In : 2020	Recommended practice for radiographic inspection of fusion welded butt joints in steel pipes (First Revision)	February, 2020	-	Indigenous
56	IS 4904:2006 Reviewed In : 2023 ISO 16946:2017	Calibration blocks for use in ultrasonic non - Destructive testing - Specification (Fourth Revision)	March, 2023	-	Not Equivalent
57	IS 5334:2014 Reviewed In : 2020	Magnetic particle flaw detection of welds - Code of practice (Third Revision)	February, 2020	-	Indigenous
58	IS/ISO 5580:1985 Reviewed In : 2023 ISO 5580:1985	Non - Destructive testing - Industrial radiographic illuminators - Minimum requirements	March, 2023	-	Identical under single numbering
59	IS 6394:2006 Reviewed In : 2023	Ultrasonic testing of seamless metallic tubular products by contact and immersion methods - Code of practice (Second Revision)	March, 2023	-	Indigenous
60	IS 6398 (Part 2):2020 ISO 10893-2 : 2011 ISO 10893-2:2011	Non-Destructive Testing of Steel Tubes Part 2 Automated Eddy Current Testing of Seamless and Welded (Except Submerged Arc-Welded) Steel Tubes for the Detection of imperfections (Second Revision)	-	1	Identical under dual numbering
61	IS 6410:2013 ISO 9934-2	Magnetic flaw detection inks and powders - Specification (Second	February, 2020	-	Not Equivalent

		Revision)			
62	IS 6752:2014	Code of practice for magnetic particle flaw detection of ferrous pipes and tubes (Second Revision)	February, 2020	-	Indigenous
63	IS 7343:1986	Code of practice for ultrasonic testing of ferrous welded pipes and tubular products - (First Revision)	February, 2020	-	Indigenous
64	IS 7666:1988 Reviewed In : 2020	Ultrasonic examination of ferritic castings of carbon and low alloy steel - Recommended procedure (First Revision)	February, 2020	-	Indigenous
65	IS 7743:2006 Reviewed In : 2023	Recommended practice for magnetic particle testing and inspection of steel forgings (First Revision)	March, 2023	-	Indigenous
66	IS 7810:1999	Code of practice for radiographic examination of resistance spot welds on aluminium and its alloys (First Revision)	February, 2020	-	Indigenous
67	IS 8780:2004	Non - Destructive testing of steel castings - Code of practice (First Revision)	February, 2020	-	Indigenous
68	IS 8791:1978 Reviewed In : 2020	Code of practice for ultrasonic flaw detection of ferritic steel forgings	February, 2020	-	Indigenous
69	IS 8973:1991 Reviewed In : 2020 ISO 20484:2017	Leak detection techniques glossary (First Revision)	February, 2020	-	Not Equivalent
70	IS 9902:2004 Reviewed In : 2020	Recommended practice for leak testing (First Revision)	February, 2020	-	Indigenous

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

SI. No.	Doc No.	Title
1	MTD 21 (26454)	NON-DESTRUCTIVE TESTING OF STEEL WIRES AUTOMATED EDDY CURRENT TESTING OF STEEL WIRES FOR DETECTION OF SURFACE IMPERFECTIONS
2	MTD 21 (28532)	Non-destructive testing Gamma scanning method of highly attenuating container walls Evaluation of the integrity of various shielding structures by using gamma topography technique

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print		
SI. No.	Doc No.	Title
No Records Found		

Total Published Standards:68 Total Standards Under development:2

Aspect Wise Report

Product : 1

Code of Practices : 37

Methods of Test : 16

Terminology : 10

Dimensions : 1

System Standard : 0

Safety Standard : 0

Others : 5

Service Specification : 0

Process Specification : 0

Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 2598:1966	Safety code for industrial radiographic practice
2	IS 7281:1974	Code of practice for immersed ultrasonic testing by the reflection method using pulse longitudinal waves
3	IS 9346:1979 Reviewed In : 1993	Recommended practice for certification of NDT personnel for ultrasonic examination

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 6410:2013 ISO 9934-2	Magnetic flaw detection inks and powders - Specification Second Revision