



MECHANICAL TESTING OF METALS

Liaison ISO/TC 164 Mechanical Testing of Metals

STANDARDS PUBLISHED

SI No.	IS No.	Title	Reaffirmed Date	Amd.
1	IS 1403(Part 1):1993 / ISO 7799:1985	Mechanical testing of metals - Reverse bend test Part 1 Sheet & strip (second revision)	11 2003	
2	IS 1499:1977	Method for charpy impact test (U-notch) for metals (first revision)	11 2003	1
3	IS 1500:2005 / ISO 6506-1:1999	Metallic materials - Brinell hardness test - Test method (third revision)		
4	IS 1501:2002 / ISO 6507-1:1997	Method for Vickers hardness test for metallic materials (third revision) (Superseding IS 1501(Part 1):1984, IS 1501(Part 2):1984, IS 1501 (Part 3):1987, IS 10927 (Part 1):1984, IS 10927(Part 2):1984 and IS 10927(Part 3):1991)		
5	IS 1586:2000	Method for Rockwell hardness test for metallic material (Scales A-B-C-D-E-F-G-H-K) (third revision) (Superseding IS 3754, IS 3804, IS 5072, IS 5073 and IS 5076)		
6	IS 1598:1977	Method for izod impact test of metals (first revision)	11 2003	
7	IS 1599:1985	Method for bend test (second revision) (Superseding IS 1692:1974, IS 3260:1960 and IS 4598:1968)	03 2001	
8	IS 1608:2005 / ISO 6892:1998	Metallic materials - Tensile testing at ambient temperature (third revision)		
9	IS 1716:1985	Method for reverse bend test for metallic wire (second revision) (Superseding IS 6878:1973)	03 2001	
10	IS 1717:1985	Method for simple torsion test for wire (second revision) (Superseding IS 4176:1971 and IS 6253:1971)	03 2001	
11	IS 1754:2002 / ISO 6507-2:1997	Method for verification of vickers hardness testing machines (third revision) (Amalgating IS 1754(Part 1 & 2):1986)		
12	IS 1755:1983	Method for wrapping test for metallic wire (first revision) (Superseding IS 3398:1965 and IS 4168:1967)	03 2001	
13	IS 1757:1988	Method for charpy impact test (V notch) for metallic material (second revision)	11 2003	1
14	IS 1828(Part 1):1991 / ISO 7500-1 : 1986	Metallic materials - Verifications of static uniaxial testing machines Part 1 Tensile testing machines (second revision)	11 2003	
15	IS 1828(Part 2):2002 / ISO 7500-2:1996	Metallic materials -verification of static uniaxial testing machines-Tension creep testing machine verification of the applied load		
16	IS 2281:1983	Method for verification of Brinell hardness testing machines (second revision)	03 2001	



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17	IS 2328:2005 / ISO/FDIS 8492:1998	Metallic materials - Tube flattening test (second revision)		
18	IS 2329:2005 / ISO 8491:1998	Metallic materials - Tube (in full section) - Bend test (second revision)		
19	IS 2330:1986	Method for flanging test on metallic tubes (first revision)	03 2001	
20	IS 2335:2005 / ISO/FDIS 8493:1998	Metallic materials - Tube drift expanding test (second revision)		
21	IS 2854:1990	Determination of young's modulus, tangent modulus and chord modulus - Test method (first revision)	03 2001	
22	IS 2855:1991	Thermostat metals - Determination of flexivity (first revision)	03 2001	
23	IS 3394:1985	Method for accelerated life test of electrical resistance alloys for heating elements (first revision)	03 2001	
24	IS 3407(Part 1):1983	Method for creep testing of steel at elevated temperature Part I Tensile creep testing (first revision) (Superseding IS 3408:1965)	03 2001	
25	IS 3407(Part 2):1983	Part 2 Tensile creep stress rupture testing (first revision) (Superseding IS 3409:1965)	03 2001	
26	IS 3410:1993	Metallic materials - Determination of linear thermal expansion (first revision)	11 2003	
27	IS 3711:1990	Wrought steel - Selection and preparation of samples and test pieces for mechanical tests (first revision)	03 2001	
28	IS 3766:1977	Method for calibration of pandulum impact testing machines for testing metals (first revision)	11 2003	2
29	IS 3803(Part 1):1989 / ISO 2566-1 : 1984	Steel - Conversion of elongation values Part I Carbon & low alloy steels (second revision)	03 2001	
30	IS 3803(Part 2):1989 / ISO 2566-2 : 1984	Part 2 Austenitic steels (second revision)	03 2001	
31	IS 3848:1981	Method for end quench test for hardenability of steel (first revision)	11 2003	
32	IS 4132:1984	Method for calibration of standardized blocks to be used for Brinell hardness testing machines (first revision)	03 2001	
33	IS 4133(Part 0):2002 / ISO 6507-3:1997	Method for calibration of standardized blocks to be used for Vickers hardness testing machines (second revision)		
34	IS 4169:1988	Method for calibration of force-proving instruments used for the verification of uniaxial testing machines (first revision)	11 2003	
35	IS 4258:1982	Hardness conversion tables for metallic materials (first revision)	11 2003	1
36	IS 5069:1982	Glossary of terms relating to methods of mechanical testing of metals (first revision)	11 2003	
37	IS 5070:1985	Method for beam unnotched impact test for grey cast iron (first revision)	03 2001	



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38	IS 5074:1969	Method for axial load fatigue testing of steel	03 2001	
39	IS 5075:1985	Method of rotating bar bending fatigue testing of metals (first revision)	03 2001	
40	IS 5242:1979	Method of test for determining shear strength of metals (first revision)	03 2001	
41	IS 5699:1970	Method for chill testing of cast iron	11 2003	
42	IS 6243:1985	Method of hydrogen embrittlement test for copper (first revision)	03 2001	
43	IS 6885:1973	Method for Knoop hardness testing of metals	03 2001	
44	IS 6886:1973	Method for dynamic force calibration of axial load fatigue testing machines by means of a strain gauge technique	03 2001	
45	IS 7095:1973	Method for verification of Knoop hardness testing machines	03 2001	
46	IS 7096:1981	Method for scleroscope hardness testing for metallic materials (first revision)	11 2003	
47	IS 7097:1973	Method for calibration of standardized blocks for verification of Knoop hardness testing machines	03 2001	
48	IS 7172:1984	Method for verification of scleroscope hardness testing machines (first revision)	03 2001	
49	IS 8632:1977	Method for identification of test-piece axes	11 2003	
50	IS 10166:1982	Method for calibration of standardized test block for verification of scleroscope hardness testing equipments	03 2001	
51	IS 10167:1982	Method for upsetting test on metallic materials	03 2001	
52	IS 10175(Part 1):1993 / ISO 8490:1986	Mechanical testing of metals -Modified erichsen cupping test - sheet and strip Pt 1 Thickness upto 2 mm (first revision)	11 2003	
53	IS 10180:1982	Method for plain strain fracture toughness testing of metals	03 2001	
54	IS 10181:1982	Method for determination of magnetic permeability of iron and steel	03 2001	
55	IS 10588:1983	Tables of Brinell hardness values for use in test made on flat surfaces	03 2001	
56	IS 10623:1983	Drop weight tear test on ferritic steels and line pipe	03 2001	
57	IS 10636(Part 1):1983	Measurement of abrasive wear properties of metallic materials Part I Test method for gouging abrasion resistance (Jaw crusher test)	03 2001	
58	IS 10636(Part 2):1983	Part2 Test method for high stress abrasion	03 2001	
59	IS 10636(Part 3):1983	Part 3 Test method for low stress abrasion	03 2001	
60	IS 11083:1984	Method for evaluation of friction and wear properties of materials against steel surface	03 2001	
61	IS 11240:1985	Method for falling weight test on metallic materials	03 2001	
62	IS 11999:1987	Method for determination of plastic strain ratio 'r' for steel sheets	11 2003	
63	IS 12260:1987	Method for ring expanding test on metallic tubes	11 2003	



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	/ ISO 8495 : 1986			
64	IS 12261:1987	Method for reverse torsion test for metallic wire	11 2003	
65	IS 12278:1988	Method for ring tensile test on metallic tubes	11 2003	
66	IS 12514:1988	Method for torsional stress fatigue testing	11 2003	
67	IS 12872:1990 / ISO 9513 : 1989	Metallic materials - Verification of extensometers used in uniaxial testing	03 2001	
68	IS 13237:1991	Metallic foils - Tension testing	11 2003	
69	IS 13838:1993	Mechanical testing of metals - Determination of poisson's ratios	03 2001	
70	IS 15420:2003	Metallic materials-charpy pendulum impact test - preparation and characterization of charpy V-reference test pieces for verification of test machines		