



# **Mechanical Testing Classes of Test**

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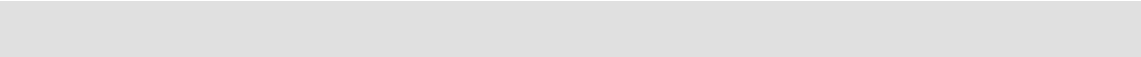
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# Mechanical Testing

## Classes of Test

The following is a listing of the classes and subclasses of tests available in the field of Mechanical Testing.

Testing of products or materials to published standards will be identified within Scopes of Accreditation by listing the specific standards. The use of 'and similar standards' is not acceptable. While Mechanical Testing scopes are generally expressed in terms of testing standards, where requested by a laboratory, consideration may be given to expressing the scope in terms of listed product standards.

Some tests are listed in the fields of Chemical Testing and Performance and Approvals Testing as well as in the field of Mechanical Testing. Accreditation for these tests may be granted in whichever field of testing is more appropriate.

### 13.01 Metals and metal products

- .11 Tension tests on test pieces
- .15 Tension tests on components and materials
- .21 Brinell hardness tests
- .22 Rockwell hardness tests
- .23 Vickers hardness tests
- .24 Microhardness tests
- .25 Superficial Rockwell hardness tests
- .31 Impact tests
- .41 Drop-weight tests
- .45 Fracture toughness tests
- .51 Compression, transverse and shear tests
- .58 Bend tests
- .61 Tests on reinforcement for concrete
- .71 Tests on wire
- .81 Tests on tubes
- .99 Other tests

### 13.02 Metallic corrosion tests

- .01 Intergranular corrosion tests
- .02 Hydrogen induced cracking tests
- .03 Pitting corrosion tests
- .04 Stress corrosion tests
- .06 Dezincification tests for brass
- .07 Detrimental phase tests
- .10 Salt spray tests
- .11 Environmental tests

### 13.03 Welds and welded test specimens

- .11 Tension tests
- .21 Hardness tests
- .31 Impact tests
- .41 Drop weight tests
- .45 Fracture toughness tests

- .51 Shear tests
- .58 Bend tests
- .61 Fillet-break tests
- .62 Nick-break tests
- .71 Cracking tests
- .91 Macroscopic examinations
- .99 Other tests
- 13.05 Lifting gear and tensioning and staying systems
  - .41 Cranes
  - .51 Lifting appliances
  - .52 Lifting clutches for concrete elements
  - .61 Anchorages and supports
  - .71 Chain
  - .72 Wire rope
  - .73 Fibre rope
  - .74 Synthetic webbing flat slings
  - .75 Chain slings
  - .76 Wire rope slings
  - .77 Fibre rope slings
  - .78 Synthetic fibre roundslings
  - .81 Fittings
  - .82 Jacks and stands
  - .85 Cargo restraint systems
  - .91 Containers, pallets and nets
  - .99 Other products and assemblies
- 13.07 Springs and energy absorbing devices
  - .11 Tension tests
  - .12 Compression tests
  - .13 Torsion tests
  - .99 Other tests
- 13.08 Threaded fasteners
  - .11 Tension tests
  - .12 Proof tests
  - .13 Tension-torque tests
  - .14 Stripping tests
  - .15 Torsion tests
  - .21 Drive tests
  - .99 Other tests
- 13.19 Timber and timber products
  - .11 Bending tests
  - .21 Stress grading timber tests
  - .99 Other tests
- 13.20 Building boards and plywood
  - .11 Particle board
  - .12 Hardboard
  - .21 Plywood
  - .99 Other building boards

- 13.21 Glass and glass products
  - .11 Glass
  - .21 Glass products
  - .31 Glass fibre
- 13.23 Gypsum and gypsum products
  - .21 Plaster boards
- 13.26 Textiles and related products
  - .01 Sampling
  - .11 Tension tests
  - .12 Tear tests
  - .13 Burst tests
  - .14 Flammability tests
  - .49 Other tests
  - .51 Coated fabrics
  - .61 Webbing
  - .71 Carpets
  - .81 Wool packs
  - .82 Fibre
  - .83 Yarn
  - .84 Fabric
  - .85 Slide fasteners
  - .99 Other products
- 13.27 Pulpwood, pulp, paper, paperboard and products
  - .01 Sampling
  - .11 Tension tests
  - .12 Tear tests
  - .13 Burst tests
  - .14 Compression tests
  - .15 Permeability
  - .16 Liquid absorption
  - .17 Surface properties
  - .18 Adhesives
  - .19 Optical properties
  - .48 Mechanical properties
  - .49 Physical tests
  - .60 Visual assessment
  - .99 Other tests
- 13.28 Rubber and related products
  - .01 Sampling
  - .11 Tension tests
  - .12 Tear tests
  - .13 Tension set tests
  - .14 Compression set tests
  - .15 Hardness tests
  - .16 Flexing tests
  - .17 Low temperature brittleness
  - .21 Ageing and environmental tests
  - .31 Flammability tests
  - .41 Swelling in liquids
  - .46 Density and specific gravity
  - .49 Other tests

- .51 Belting
- .61 Elastomeric bearings
- .99 Other products
- 13.29 Plastics and related products
  - .01 Sampling
  - .11 Tension tests
  - .12 Tear tests
  - .13 Burst tests
  - .14 Impact tests
  - .15 Hardness tests
  - .16 Low temperature tests
  - .17 Thermal evaluation
  - .18 Bend tests
  - .19 Shear tests
  - .20 Compression tests
  - .21 Flammability tests
  - .22 Specific gravity
  - .23 Ageing and environmental tests
  - .24 Wear and abrasion tests
  - .31 Flow properties
  - .49 Other tests
  - .51 Flexible foams
  - .61 Rigid foams
  - .71 Plastic films
  - .81 Pipe and related products
  - .82 Decorative laminates
  - .83 Cables
  - .85 Fibre reinforced plastics products
  - .99 Other products
- 13.30 Leather and leather products
- 13.32 Adhesives and sealers
- 13.34 Membranes, pliable underlays, geotextiles and related items for construction applications
- 13.35 Pedestrian surfaces
  - .01 Slip resistance
- 13.36 Wool
  - .01 Wool types
  - .02 Sampling
  - .10 Conditioning
  - .20 Fibre diameter
  - .21 Yield
  - .22 Length and strength
  - .23 Colour
  - .50 Test certificates
  - .60 Sample handling
  - .99 Other tests

13.41 Vehicle safety tests

- .02 Door latches and hinges
- .03 Seat anchorages
- .04 Seat belts and seat belt assemblies
- .05 Seat belt anchorages
- .07 Hydraulic brake hoses
- .10 Steering columns
- .11 Sun visors
- .14 Rear view mirrors
- .16 Windscreen wipers and washers
- .17 Fuel systems for goods vehicles
- .20 Safety rims
- .21 Instrument panels
- .22 Head restraints
- .23 Tyres
- .24 Tyre selection
- .25 Anti-theft locks
- .29 Side door strength
- .31 Hydraulic braking systems
- .33 Motor cycle and moped braking systems
- .34 Child restraints and child restraint anchorages
- .35 Commercial vehicle braking systems
- .62 Mechanical connections between vehicles
- .66 Seat strength, seat anchorage strength and padding
- .68 Occupant protection in buses
- .69 Full frontal vehicle occupant protection
- .72 Dynamic side impact occupant protection
- .73 Offset frontal impact occupant protection
- .99 Other items

13.42 Industrial restraint devices

- .21 Harnesses
- .22 Fall arrest lanyards
- .23 Shock absorbers
- .24 Attachment hardware
- .25 Fixed lifeline and rail systems
- .99 Other restraint devices

13.43 Protective equipment and clothing

- .01 Safety boots and shoes
- .02 Safety gloves
- .03 Safety helmets
- .04 Eye protectors
- .05 Hearing protectors
- .11 Life jackets and buoyancy vests
- .99 Other equipment and clothing

13.44 Structural assemblies

- .04 Protective enclosures, fences & safety barriers
- .05 Scaffolding & scaffolding components
- .06 Ladders
- .21 Insulator & conductor fittings
- .41 Structural bearings
- .99 Other structural assemblies

- 13.45 Architectural products
  - .01 Windows, doors and related products
  - .02 Wall, floor and ceiling panels
  - .03 Locksets
  - .99 Other architectural products
- 13.46 Packages and containers
- 13.47 Plumbing and drainage fittings
  - .01 Baths, basins, sinks, showers
  - .02 Sanitary ware
  - .03 Taps and valves
  - .04 Pipes, controllers, connections and other fittings
- 13.48 Furniture
- 13.49 Force measurements and weighing
  - .01 Weight of structures and assemblies
  - .02 Centre of gravity of structures and assemblies
  - .49 Other tests
- 13.50 Products for children and infants
  - .01 Cots
  - .02 Highchairs
  - .03 Prams and strollers
  - .10 Toys
  - .20 Playground equipment
  - .99 Other children and infant products
- 13.64 Pipelines
  - .11 Water pipelines
  - .12 Sewers
  - .13 Low pressure oil and gas pipelines
  - .14 High pressure oil and gas pipelines
- 13.65 Pipes, hoses, valves and fittings
  - .11 Hydrostatic pressure tests
  - .12 Pneumatic pressure tests
  - .13 Head loss tests
  - .99 Other tests
- 13.66 Cylinders and other pressure vessels
  - .11 Hydrostatic pressure tests
  - .12 Pneumatic pressure tests
  - .13 Pulsating pressure tests
- 13.67 Air and gas filters
- 13.69 Controlled environments
  - .01 Clean rooms and workstations
  - .02 Biological safety cabinets
  - .03 Fume cupboards
  - .11 Air-conditioning and ventilation systems
  - .99 Other air handling systems
- 13.75 Fans and blowers
- 13.77 Pumps and compressors
- 13.78 Engines



13.86 Hand tools

- .01 Open end and adjustable wrenches
- .02 Torque wrenches
- .11 Hand hammers
- .21 Screwdrivers
- .31 Pliers, pincers and nippers
- .41 Woodworking saws
- .51 Axes and hatchets
- .61 Chisels
- .99 Other hand tools

13.90 Microstructural tests on ferrous materials

- .11 Grain size
- .12 Case depth and depth of decarburisation
- .13 Depth of surface defects
- .14 Non-metallic inclusion content
- .15 Macroscopic examination of steels
- .16 Graphite type and distribution in cast irons
- .18 General microstructure, phase identification and proportion
- .99 Other tests

13.91 Microstructural tests on aluminium and aluminium alloys

- .11 Grain size
- .12 Depth of cladding
- .13 Macroscopic examination of wrought products
- .14 Depth of surface defects
- .15 Anodizing thickness
- .18 General microstructure and phase identification
- .99 Other tests

13.92 Microstructural tests on copper and copper alloys

- .11 Grain size
- .12 Proportion of phases
- .14 Hydrogen embrittlement
- .15 Depth of surface defects
- .18 General microstructure and phase identification
- .99 Other tests

13.93 Microstructural tests on other metals and alloys

- .11 Grain size
- .12 Depth of surface defects
- .18 General microstructure and phase identification
- .99 Other tests

13.94 Coatings

- .01 Metallic coatings
- .11 Conversion coatings
- .21 Organic coatings
- .99 Other coatings

13.99 Other materials and products

**Note:** Coverage under Class 13.01 for the listed generic tests on metal products does not extend to product-specific performance tests which are recognised within other distinct classes, including 13.03 (Welds and welded test specimens), 13.05 (Lifting gear and tensioning and staying systems), 13.07 (Springs and energy absorbing devices), 13.08 (Threaded fasteners), 13.41 (Vehicle safety tests), 13.42 (Industrial restraint devices) and 13.44 (Structural assemblies), for which expert knowledge of products and/or industry standards is required.

| <b>Amendments</b>  |
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| Subclass 13.01.12 deleted                                  |
| Subclass 13.01.15 amended from 'Tension tests on products' |
| Subclass 13.29.17 amended from 'Heat distortion tests'     |
| Note added in relation to Class 13.01                      |
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