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NAB-MALTA

TECHNICAL GUIDE

ATG04 - Classification System for Testing and Calibration

Revision 2


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FOREWORD

NAB-MALTA accreditation is granted to laboratories for performing testing and calibration work to documented procedures. Frequently these will be National or International Standards, but testing or calibration to proprietary specifications, or to procedures published in the technical literature, are also covered.

When applying for accreditation a laboratory is asked to define as precisely as possible each of the tests for which it seeks accreditation. Following a successful first assessment, the laboratory is issued with a Certificate which sets out the scope of accredited testing in similarly precise terms. In addition to these definitions, each test is given a classification number, as defined in this publication, which facilitates the NAB-MALTA in administering the scheme (e.g. production of registers of accredited laboratories, selection of appropriate technical assessors). Applicant laboratories are therefore asked to quote the relevant class number for each test when completing their application form.

The classification scheme used by the NAB-MALTA closely follows that employed by the National Association of Testing Laboratories (NATA) in Australia. It first splits tests into ten main 'fields' (e.g. chemical, mechanical, etc). Within each field the tests are sub-divided into 'classes', depending on the nature of the test and/or the items to which it is applied. Applications for accreditation may be made for one or more classes of test, or for one or more items or specific tests within a particular class.

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1. METROLOGY

The field of Metrology is broadly divided into two main areas of measurement, engineering metrology which covers the measurement of size, angle, shape, relative positioning and the like and the examination of machines and instruments used in such measurements, and physical metrology which covers the measurement of mass, volume, density, fluid flow and pressure and the examination of machines and instruments used in these measurements.

Accreditation is not restricted to high precision measurements. It can be obtained for comparatively large measurement uncertainties if this is appropriate for the work being done by the laboratory

The classes of test are:

101 Limit Gauges

- .01 Plain plug gauges
- .02 Plain ring gauges
- .03 Plain gap gauges
- .04 Taper plug gauges
- .05 Taper ring gauges
- .11 Parallel screw plug gauges
- .12 Parallel screw ring gauges
- .13 Adjustable thread calliper gauges for taper threads
- .21 Taper screw plug gauges
- .22 Taper screw ring gauges
- .23 Adjustable thread calliper gauges for taper threads
- .31 Profile gauges
- .41 Position and receiver gauges
- .61 Spline and serration gauges
- .99 Other limit gauges

102 Jigs, Fixtures, Cutting Tools and Components

- .01 Jigs and fixtures
- .11 Cutting tools
- .21 Components


103 Measuring Instruments and Tools

- .01 Surface plates
- .02 Toolmakers' flats
- .03 Straightedges
- .04 Squares
- .05 Angle plates
- .06 Bevel protractors
- .07 Parallels
- .08 Precision spirit levels

- .09 Micrometer water levels
- .10 Precision Vee blocks
- .11 Optical flats
- .12 Optical parallels
- .13 Thread measuring accessories
- .14 Sine bars and sine tables
- .15 Dividing head and tables
- .16 Eccentric mandrels
- .21 Micrometer heads
- .22 External micrometers
- .23 Internal micrometers
- .24 Micrometer height and depth gauges
- .25 Electronic indicators, dial gauges and test indicators
- .26 Bore gauges
- .27 Electronic and Vernier callipers
- .28 Electronic and Vernier height and depth gauges
- .29 Feeler gauges
- .30 Extensometers
- .31 Steel rules and measuring tapes
- .32 Micrometer setting gauges
- .99 Other measuring instruments and tools

104 Machine Tools

- .01 Geometric features

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- .02 Positioning accuracy
- .03 Performance tests

105 Surface Topography

- .01 Surface texture
- .02 Roundness
- .03 Roundness standards

106 Gears, Splines and Serrations

107 Hardness of Metal Products

110 Length and Angle Standards

- .01 Angle gauges and precision polygons
- .02 External cylindrical standards
- .03 Internal cylindrical standards
- .04 Gauge blocks and accessories
- .05 Length bars and accessories
- .09 Precision circular scales
- .10 Precision gratitudes
- .11 Precision linear scales
- .12 Surface finish reference standards
- .13 Screw pitch reference standards
- .14 Spherical standards

111. Precision Instruments

- .01 Auto collimators
- .02 Theodolites
- .03 Alignment telescopes
- .04 Optical plumb lines
- .05 Optical levels
- .06 Photogrammetric cameras
- .07 Laser alignment and levelling equipment
- .21 Electronic levels
- .26 Engineers' comparators
- .31 Height setting micrometers
- .32 Length measuring machines
- .33 Coordinate length measuring machines
- .34 Screw diameter measuring machines
- .35 Screw pitch measuring machines
- .36 Gear and hob measuring equipment
- .37 Precision projection apparatus
- .38 Dial gauge calibrators
- .39 Extensometer calibrators
- .40 Displacement instruments

120 Masses

- .01 Laboratory mass standards
- .02 Industrial mass standards
- .51 Determination of mass

121 Weighing Devices

- .01 Precision laboratory balances
- .02 Industrial balances
- .03 Industrial weighing appliances
- .04 Hopper weighing systems

130 Volumetric Equipment

- .01 Volumetric glassware
- .02 Special laboratory volumetric apparatus
- .03 Industrial volumetric proving measures
- .11 Standard measures
- .12 Pipe provers
- .13 Industrial storage tanks
- .14 Road and rail tankers
- .99 Other equipment

131 Density

- .01 Density of solids
- .02 Density of liquids
- .03 Density of gases

132 Hydrometers


- .01 Density Hydrometers
- .02 Alcoholometers
- .03 Brix hydrometers
- .04 LPG hydrometers
- .99 Other hydrometers

133 Densitometers

- .01 Liquid densitometers
- .02 Gas densitometers

134 Flow Measuring Devices

- .01 Anemometers
- .02 Sonic nozzles
- .03 Orifice meters
- .04 Gas meters
- .11 Liquid meters
- .21 Current meters
- .22 Open channel water meters
- .23 Weir type structures
- .99 Other meter types

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135 Oil and Gas Measurement Systems

136 Pattern Approval (Type) Tests on Measuring Instruments

- .01 Non-automatic weighing devices
- .02 Liquid measuring instruments
- .03 Liquor dispensers
- .04 Length measuring instruments
- .05 Area measuring instruments
- .06 Farm milk tanks
- .07 Load cells
- .08 Weighing-in-motion systems
- .09 Belt conveyor weighers
- .10 Totalising hopper weighers
- .11 Automatic catchweighers
- .12 Multi-dimensional measuring instruments
- .13 Automatic tank level gauges
- .14 Gas measuring instruments

140 Barometers

- .01 Aneroid barometers
- .02 Barographs
- .03 Mercury barometers
- .04 Gauge barometers
- .11 Altimeters
- .99 Other barometers

141 Pressure and Vacuum Measuring Devices

- .01 Pressure gauges
- .02 Vacuum gauges
- .11 Pressure transducers
- .12 Pressure recorders
- .21 Mercury manometers
- .22 Other liquid manometers
- .23 Digital manometers

142 Pressure Gauge Testers

- .01 Air operated piston gauges
- .02 Oil operated piston gauges
- .09 Other high precision gauges

143 Pressure Tests

- .11 Hydrostatic pressure tests
- .12 Pulsating pressure tests
- .13 head loss tests

150 Force Measuring Devices

- .01 Calibrating devices
- .02 Elastic force measuring devices
- .04 Load cells,
- .99 Other devices

151 Speed Measuring Devices

- .01 Tachometers
- .11 Speedometers
- .12 Velocity transducers


152 Torque Measuring Devices

- .01 Torque wrenches
- .02 Torque transducers

153 Testing Machines

- .01 Tension and universal machines in tension
- .02 Compression and universal machines in compression
- .11 Vickers hardness machines
- .12 Rockwell hardness machines
- .13 Brinell hardness machines
- .14 Rockwell superficial hardness machines
- .15 Vickers low-load hardness machines (HVO.2 to HVS)
- .16 Vickers micro-hardness machines (less than HVO.2)
- .21 Izod impact machines
- .22 Charpy impact machines
- .25 Resilience testing machines
- .31 Deadweight rubber hardness testers
- .32 Deadweight micro-hardness rubber testers
- .33 Rubber hardness meters (durometers)
- .34 Plastics hardness testers
- .41 Torsion machines
- .42 Tension-torque machines
- .71 Road friction testers
- .99 Other testing machines

154 Ancillary Mechanical Testing Equipment

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- .01 Portable Brinell measuring microscopes
- .02 Indenters for hardness machines

- .11 Hardness blocks for metals testing
- .12 Hardness blocks for rubber and plastic testing
- .21 Thickness gauges for textiles, rubber and plastics
- .22 Specimen cutters for rubber and plastics
- .61 Torque wrenches
- .99 Other equipment

155 Ancillary Testing Equipment for Construction Materials

- .11 Test sieves
- .21 Ovens
- .31 Vicat apparatus
- .35 Penetrometers and penetration cones
- .36 Penetration needles


- .41 Nuclear moisture/density gauges
- .99 Other equipment

156 Ancillary Testing Equipment for Paints and Petroleum Products

- .11 Wet film thickness gauges
- .12 Fineness of grind gauges
- .13 Viscometers
- .14 Flow cups
- .15 Scratch needles
- .21 ovens
- .83 Pensky- Martens apparatus
- .99 Other equipment

157 Motor Vehicles

- .01 Determination of mass
- .02 Determination of dimensions
- .03 Determination of front external projections
- .04 Other measurements

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2. MECHANICAL TESTING

The field of Mechanical Testing covers a wide variety of tests on raw materials, semi-finished goods, and final products. In addition to conventional mechanical tests, it includes metallographic and corrosion testing.

Some of the tests listed below are also listed in the fields of Chemical Testing or Metrology. Accreditation for these tests may be listed under either, or both, classifications, depending on which arrangement best suits the laboratory concerned.

The classes of test are:

201 Metals and Metal Products

- .11 Tension tests on test pieces
- .12 Stress rupture tests
- .15 Tension tests on products
- .21 Brinell hardness tests
- .22 Rockwell hardness tests
- .23 Vickers hardness tests
- .24 Microhardness tests
- .25 Superficial Rockwell hardness tests
- .26 Rebound 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 wires
- .81 Tests on tubes
- .99 Other tests

202 Metal Powders and Sintered Products

203 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
- .81 Corrosion tests
- .91 Macroscopic examinations
- .99 Other tests

205 Lifting Gear and Tensioning and Staying Systems

- .11 Proof tests
- .21 Tension tests
- .49 Other tests
- .51 Lifting appliances
- .61 Anchorages
- .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 round slings
- .81 Fittings
- .85 Cargo restraint systems
- .91 Containers, pallets and nets
- .99 Other products

206 Fibre rope and cordage

- .11 Tension tests
- .99 Other tests

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207 Springs and energy absorbing devices

- .11 Tension tests
- .12 Compression tests
- .13 Torsion tests
- .99 Other tests

208 Threaded Fasteners

- .11 Tension tests
- .12 Proof tests
- .13 Tension-torque tests
- .14 Stripping tests
- .15 Torsion tests
- .21 Drive tests
- .99 Other tests

219 Timber and Timber Products

- .11 Bending tests
- .21 Stress grading timber tests
- .99 Other tests

220 Building Boards and Plywood

- .11 Particle boards
- .12 Hardboard
- .21 Plywood
- .99 Other building boards

221 Glass and Glass Products

- .11 Glass
- .21 Glass products
- .31 Glass fibre

223 Gypsum and Gypsum Products

- .11 Gypsum plaster
- .21 Plaster boards
- .99 Other products

226 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
- .99 Other products

227 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

228 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
- .22 Tear tests
- .31 Flammability tests
- .41 Swelling in liquids
- .46 Density and specific gravity
- .49 Other tests
- .51 Belting
- .61 Elastomeric bearings
- .99 Other products

229 Plastics and Related Products

- .01 Sampling
- .11 Tensions tests

- .12 Tear tests
- .13 Burst tests

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- .14 Impact tests
- .15 Hardness tests
- .16 Low temperature tests
- .17 Heat distortion tests
- .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
- .99 Other products

230 Leather and Leather Products

231 Gaskets, Seals and Packings

232 Adhesives and Sealers

233 Adhesive Tapes

234 Barrier Materials

235 Pedestrian Surfaces

- .01 Wet

236 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

240 Other Materials

241 Motor Vehicle Safety Tests

- .02 Door latches and hinges


- .03 Seat anchorages
- .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 restraint anchorages
- .35 Commercial vehicle braking system
- .62 Mechanical connections between vehicles
- .66 Seat strength, seat anchorage strength and padding
- .68 Occupant protection in buses
- .69 Full frontal vehicle occupant protection
- .99 Other tests

242 Seat Belts and Similar Devices

- .01 Seat belt assemblies
- .11 Child restraints
- .21 Industrial safety harnesses
- .61 Components for seat belts
- .99 Other devices

243 Protective 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 clothing

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244 Mechanical Tests on Assemblies

- .01 Windows and doors
- .02 Wall, floor and ceiling panels
- .05 Trusses
- .11 Cranes
- .21 Insulator and conductor fittings
- .22 Transmission towers
- .31 Aircraft structures
- .41 Structural bearings
- .50 Toys
- .52 Playground equipment
- .54 Sporting goods
- .60 Cots
- .62 Highchairs
- .64 Prams and strollers
- .70 Ladders
- .81 Slide fasteners
- .90 Fences, gates and guardrails
- .92 Safes
- .99 Other assemblies

245 Environmental Tests

246 Packages and Containers

247 Plumbing and Drainage Fittings

248 Furniture

249 Force Measurements and Weighing

- .01 Weight of structures and assemblies
- .02 Centre of gravity of structures and assemblies
- .49 Other tests

250 Force Measuring Devices

- .03 Load cells
- .04 Force dynamometers
- .05 Compression jacks
- .06 Cable tension meters
- .99 Other devices

251 Displacement Measuring Devices

- .01 Extensometers
- .21 Dial gauges and electronic indicators
- .99 Other devices

252 Speed Measuring Devices

- .01 Tachometers
- .11 Speedometers
- .12 Velocity transducers

254 Mechanical Testing Equipment

- .01 Performance tests on hardness machines
- .02 Performance tests on impact machines
- .11 Nuclear moisture/density gauges
- .99 Other equipment

259 Pressure Measuring Devices

- .01 Pressure gauges
- .11 Pressure transducers
- .12 Pressure recorders

264 Pipelines

265 Pipes, Hoses, Valves and Fittings

- .11 Hydraulic pressure tests
- .12 Pneumatic pressure tests
- .13 Head loss tests
- .27 Calibration of jets
- .51 Fire hose
- .99 Other tests


266 Cylinders and other Pressure Vessels

- .11 Hydrostatic pressure tests
- .12 Pulsating pressure tests
- .51 Bomb calorimeters

267 Air and Gas Filters

268 Respiratory Protective Devices

- .01 Respirators
- .11 Underwater breathing apparatus

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269 Controlled Environments

- .01 Clean rooms and work stations
- .02 Biological safety cabinets
- .03 Fume cupboards
- .11 Air-conditioning and ventilation system
- .99 Other air handling systems

275 Fans and Blowers

276 Compressors

277 Pumps

278 Engines

279 Industrial, earthmoving and agricultural vehicles

285 Cutting tools

- .01 Twist drills
- .11 Hacksaw blades
- .99 Other cutting tools

286 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

290 Micro structural 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 of cast irons

- .17 Corrosion resistance of austenitic stainless steels

- .99 Other tests

291 Micro structural 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
- .21 Tests on welds
- .99 Other tests

292 Micro structural Tests on Copper and Copper Alloys

- .11 Grain size
- .12 Proportion of phases
- .13 Resistance to stress corrosion cracking
- .14 Hydrogen embrittlement
- .15 Depth of surface defects
- .16 Susceptibility of brass to dezincification
- .99 Other tests

293 Microstructural Tests on other Metals and Alloys

- .11 Grain size
- .12 Depth of surface defects
- .99 Other tests

294 Coatings

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

295 Corrosion Tests

299 Other tests

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3. ELECTRICAL TESTING

The field of Electrical Testing covers test of an essentially electrical nature performed on instruments, equipment, appliances, components and materials. It includes the calibration of electrical and electronic instruments and equipment. Calibration work is not restricted to high precision instruments. It can be obtained for comparatively large measurement uncertainties if this is appropriate for the work being done by the laboratory.

The classes of test are:

301 Conducting Materials, Conductors and Resistance Alloys

- .01 Resistivity and conductivity
- .02 Resistance of length of conductor
- .03 Temperature coefficient
- .04 Physical properties
- .99 Other tests

302 Resistors, Resistance Boxes and Potential Dividers

- .01 Precision resistors, resistance boxes and conductance boxes
- .02 Volt ratio boxes and potential dividers
- .03 DC shunts
- .04 AC shunts
- .99 Other tests

303 Insulating Materials and Insulators

- .01 Electric strength tests
- .02 Insulation resistance tests
- .03 Surface and volume resistivity tests
- .04 Loss tangent tests
- .05 Relative permittivity tests
- .06 Direct voltage tests
- .07 Alternating voltage tests
- .08 Tracking
- .09 Dielectric dispersion coefficient
- .11 Moisture absorption
- .13 Ageing
- .14 partial discharge tests
- .20 Impulse voltage tests
- .31 Thermal stability tests
- .99 Other tests

304 Capacitors

- .01 Precision capacitors

- .02 Capacitance attenuators
- .03 Capacitance potential dividers

305 Magnetic Materials and Instruments

- .01 Magnetic Materials
- .02 Magnets, solenoids and Helmholtz coils
- .03 Magnetic permeaters
- .04 Magnetic frames and squares
- .05 Fluxmeters
- .06 Magnetometers and search coils
- .07 Hibbert magnetic standards and other flux linkage generators
- .08 Flux density meters

306 Inductors and Transformers

- .01 Inductors, self and mutual
- .02 Radio transformers
- .11 Power transformers and reactors
- .12 Current transformers and protective current transformers
- .14 Voltage transformers and protective voltage transformers
- .16 Audio transformers
- .17 R.F. transformers
- .18 Pulse transformers
- .19 Auto transformers
- .20 Phase shifting transformers
- .21 Reference ballasts
- .22 Neutral earthing transformers

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307 Voltage Standards

- .01 Standard cells
- .11 Electronic e.m.f. reference devices

308 Precision Transfer Instruments

- .01 A.C./D.C. transfer instruments

309 Instrument Calibrators

- .01 D.C. voltage
- .02 A.C. voltage
- .03 DC current
- .04 AD current
- .51 Resistance

310 Indicating and Recording Instruments

- .01 D.C. voltmeters
- .02 A.C. voltmeters
- .03 D.C. ammeters
- .04 A.C. ammeters
- .05 Wattmeters
- .06 Varimeters
- .07 Phase angle indicators
- .08 Power factor meters
- .09 Ohmmeters
- .10 LCR meters
- .11 Galvanometers and null detectors
- .21 Electricity meters
- .81 Graphic recording instruments
- .82 Digital storage recorders
- .83 Instrumentation tape recorders
- .84 Electric field strength meters

311 Bridges, Potentiometers, Test Sets

- .01 D.C. bridges
- .02 D.C. potentiometers
- .11 A.C. bridges
- .12 A.C. potentiometers
- .21 Ratiometers
- .31 Current transformer testing sets
- .32 Voltage transformer testing sets
- .33 Partial discharge test equipment
- .34 High voltage test sets

312 Frequency and Time Measuring Instruments and Standards

- .01 Frequency meters
- .02 Wavemeters
- .11 Counters
- .12 Time interval-meters
- .13 Clocks and watches
- .14 Stroboscopes
- .15 Tachometers
- .21 Frequency standards
- .31 Calibration of frequency
- .32 Time interval calibration
- .33 Coordinated Universal Time (UTC)

313 Waveform Measuring Instruments

- .01 Frequency characteristics
- .02 Input characteristics
- .03 Timing characteristics
- .04 Distortion
- .05 Other characteristics
- .99 Other characteristics

320 Cells and Batteries

- .01 Primary cells
- .02 Accumulators

321 Power Supplies and Stabilizers


- .01 Power supplies
- .02 Stabilizers
- .03 Power conditioners

322 Signal Sources

- .01 Frequency characteristics
- .02 Output characteristics
- .03 Modulation characteristics
- .04 Sweep characteristics
- .05 Other characteristics

323 Power Rectifiers

- .01 Rotary, vibratory and other mechanical types
- .02 Silicon controlled rectifiers and allied control devices
- .03 Vacuum tube rectifiers
- .04 Semiconductor rectifiers

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324 Electronic Components

- .01 Fixed resistors
- .02 Capacitors
- .03 Semi-conductor devices
- .04 Printed circuits
- .05 Connectors
- .06 Relays
- .07 Integrated circuits
- .11 Other components and sub-assemblies

325 Communications Equipment

- .01 Line transmission measuring equipment
- .02 Radio transmission measuring equipment
- .03 Field intensity measuring equipment
- .04 Electrical noise and interference measuring equipment
- .05 Impedance and reflection measuring equipment
- .06 Spectrum analysis measuring equipment
- .07 Data transmission equipment
- .08 Power measuring equipment
- .09 Attenuators and amplifiers
- .11 Waveguide and coaxial components
- .12 Communications systems
- .13 Data acquisition systems
- .14 Processor controlled systems
- .99 Other equipment

326 Electronic Equipment

- .01 High voltage impulse and disturbance tests
- .10 Transducer indicators and calibrators
- .11 Charge amplifiers
- .20 Doppler radar equipment
- .30 Miscellaneous equipment and tests

330 Electrical Machines and Auxiliary Apparatus

- .01 Motors, generators and other rotating machines
- .02 Starters, controllers, regulators
- .03 Power supply electrical equipment
- .99 Other equipment

331 Switching, Control and Protective Equipment for Power System

- .01 Circuit breakers and controllers
- .02 Protection and control relays

- .03 Switches and isolators
- .04 Time switches
- .05 Fuses and fuse links
- .06 Surge diverters

335 Cables and Feeders

- .01 Conductor resistance tests
- .02 Insulation resistance tests
- .03 Capacitance tests
- .04 Direct voltage tests
- .05 Alternating voltage tests
- .06 Spark tests
- .07 Partial discharge tests
- .08 Dielectric tests
- .10 Electric field intensity tests
- .11 Magnetic field flux density tests
- .20 Sequence impedance tests
- .30 Electrical tests on fittings
- .31 Mechanical tests on fitting
- .99 Other tests

336 Power Supply Equipment and Systems

- .01 Electric parameters
- .02 Waveform characteristics
- .03 Power system disturbances
- .10 Temperature rise and thermal rating tests
- .99 Other tests

340 High Voltage Testing

- .11 Direct voltage tests
- .12 Alternating voltage tests
- .13 Impulse voltage tests
- .14 Impulse current tests
- .15 Partial discharge tests
- .16 Dielectric tests
- .17 Switching impulse voltage tests
- .99 Other tests

341 Electromagnetic Compatibility – Emission Testing

- .01 Conducted interference
- .02 Radiated interference
- .99 Other tests

342 Electromagnetic compatibility – immunity testing

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343 RF and Microwave Radiation Hazard Measurement

344 RF Shielding Effectiveness

345 High Power Testing

- .01 Short time withstand and peak withstand current tests
- .02 Short circuit making and breaking capacities
- .03 Making and breaking capacities
- .04 Overload performance
- .05 Electrical endurance
- .07 Arcing fault tests due to internal fault
- .08 Determination of cut-off current characteristics
- .09 Determination of joule integral characteristic
- .12 Temperature rise tests
- .99 Other tests

350 Optical Fibre Systems

- .01 Optical power
- .02 Optical attenuation
- .03 Optical wavelength
- .04 Optical time-domain reflectometry
- .05 Optical bandwidth
- .06 Optical fibre systems components
- .07 Fibre and core geometry
- .99 Other tests

360 Environmental Tests

- .11 Cold tests
- .12 Dry heat tests
- .13 Damp heat tests
- .14 Impact tests
- .15 Vibration tests
- .16 Acceleration tests
- .17 Storage tests
- .18 Mould growth tests
- .19 Corrosion tests
- .20 Low air pressure tests
- .21 Change of temperature tests
- .22 Sealing tests
- .23 Solar radiation tests
- .24 Soldering tests
- .25 Robustness of terminations tests
- .31 Combined tests
- .99 Other tests

365 Miscellaneous Electrical Tests

- .01 Insulating gloves and tools
- .02 High voltage operating equipment
- .03 Insulated platform vehicles
- .10 Fire extinguishers
- .21 Fire detection and alarm systems
- .99 Other tests

370 Antistatic Materials for Industrial Applications

- .01 Flooring
- .02 Other products

375 Approval Tests on Telecommunications Equipment

376 Approval Tests on Radio communications Equipment

380 Approval Tests on Electrical Appliances & Accessories

385 Performance Tests on Electrical Appliances and Accessories

390 Electrical Equipment for Explosive Atmospheres

395 Electromedical Equipment

- .11 Approval tests
- .12 Performance tests

396 Medical Treatment Areas

- .02 patient equipotential areas

398 European Regulatory Requirements

- .01 Low voltage equipment directive
- .02 Telecommunications terminal equipment directive
- .03 Electromagnetic compatibility directive

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4. OPTICS AND RADIOMETRY

The field of Optics and Radiometry covers the testing of geometrical and optical properties of components and systems; radiometric measurements of irradiance and distribution temperature; spectrophotometric measurements; luminous intensity and luminous flux measurement on lamps and luminaires; the measurement of luminance, illuminance, luminous transmittance, luminous reflectance, luminance factor and colour.

The classes of test are:

401 Geometry of Optical Components and Systems

- .01 Rear view mirrors
- .11 Eye protection wear
- .12 Sunglasses

402 Optical Quality

- .01 Windows
- .02 Windscreens

403 Calibration of Polarimetric Instruments

- .01 Polarimeters
- .02 Saccharimeters
- .03 Quartz control plates

404 Refractive Index

- .01 Calibration of abbe refractometers
- .02 Measurement of refractive index

420 Radiant Flux (Radiant Power)

- .01 Radiant power of laser sources
- .02 Radiant power of incoherent sources

421 Calibration of Irradiance Measuring Instruments

- .01 Pyrheliometers
- .02 Pyranometers
- .03 Ultraviolet pyranometers
- .04 Pyrradiometers
- .05 Albedometers
- .06 Pyro-albedometers
- .07 Calibration of ultraviolet radiometers

- .08 Calibration of infrared radiometers
- .09 Calibration of ultraviolet dosimeters

422 Broad Band Irradiance

- .01 Measurement of ultraviolet irradiance
- .02 Measurement of infrared irradiance
- .03 Field measurements of ultraviolet irradiance
- .04 Field measurements of infrared irradiance

430 Luminous Intensity

- .01 Incandescent lamps
- .02 Other sources

431 Distribution of Luminous Intensity


- .01 Road lighting luminaires
- .02 Interior lighting luminaires
- .03 Flood lighting luminaires
- .04 Emergency evacuation lighting luminaires
- .05 Traffic signal lanterns
- .06 Motor vehicle signal lamps
- .09 Other luminaires

432 Luminous Flux

- .01 Incandescent lamps
- .02 Other sources

433 Luminance

- .01 Measurement of luminance
- .02 Calibration of luminance meters
- .03 Field measurement of luminance

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434 Illuminance

- .01 Measurement of illuminance
- .02 Calibration of illuminance meters
- .03 Field measurement of illuminance

435 Broad Band Visible Light Measurements

- .01 Transmittance
- .02 Reflectance
- .03 Luminance factor
- .04 Chromaticity
- .05 Correlated colour temperature
- .06 Haze
- .07 Gloss
- .08 Calibration of transmittance densitometers
- .09 Calibration of reflectance densitometers
- .10 Calibration of incident light tricolorimeters
- .11 Calibration of reflectance tricolorimeters
- .12 Calibration of colour temperature meters
- .13 Calibration of hazemeters
- .14 Calibration of gloss meters

436 Retroreflection

- .01 Reflex reflectivity
- .02 Chromaticity

438 Performance Tests on Luminaires

- .01 Road lighting luminaires
- .02 Interior lighting luminaires
- .03 Flood lighting luminaires
- .04 Emergency evacuation lighting luminaires
- .09 Other products

439 Performance of Lighting Installations

- .01 Road lighting

440 Spectral Measurements of Light Sources

- .01 Spectral radiance
- .02 Spectral irradiance
- .03 Chromaticity
- .04 Correlated colour temperature
- .05 Distribution temperature
- .06 Calibration of spectroradiometers

460 Spectrophotometry

- .01 Spectral transmittance
- .02 Spectral reflectance
- .03 Chromaticity
- .04 Calibration of spectrophotometers

461 Detectors

- .01 Broad-band responsivity
- .02 Response linearity
- .03 Spectral responsivity
- .04 Cosine correction

470 Ionising Radiation


- .01 Measurement of alpha, beta, gamma, neutron radiations
- .02 Calibration of ionising radiation survey instruments
- .03 Measurements of x-rays
- .04 Calibration of dosimeters

485 Performance Tests on Lasers and High Radiant Sources

- .01 Visible
- .02 Infrared
- .03 Ultraviolet
- .04 Laser power/energy meters

492 Other Tests

- .01 Ballasts
- .02 Maintenance testing of lamps
- .03 Particle size counters
- .04 Power a.c. and d.c.
- .09 Image intensification devices
- .10 Optical power of fibre optic systems

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5. HEAT AND TEMPERATURE MEASUREMENT

The field of Heat & Temperature Measurement covers those tests which require measurements of heat flow, temperature or humidity. It includes calibration of temperature or humidity measuring equipment, examination of heated enclosures and tests on building materials and structures, fire prevention systems, heating and cooling appliances and air-conditioning units and components,

The classes of test are:

501 Calibration of Temperature Measuring Equipment

- .01 Rare metal thermocouples
- .02 Base metal thermocouples
- .03 Temperature fixed points
- .05 Metallic resistance thermometers
- .06 Semi-conductor thermometers
- .11 Liquid-in-glass thermometers
- .12 Optical pyrometers
- .13 Radiation pyrometers and thermometers
- .21 Vapour pressure thermometers
- .22 Filled metal systems
- .23 Bimetallic systems
- .31 Digital quartz frequency units.
- .41 Digital temperature indicator system

503 Calibration of Ancillary Temperature Measuring Instruments

- .01 Portable potentiometers
- .02 Digital voltmeters
- .03 Resistance bridges
- .04 Indicators, recorders and controllers
- .05 Transmitters
- .11 Strip lamps
- .12 Blackbody sources
- .90 Other equipment

505 Calibration of Clinical Thermometers

- .01 Liquid-in-glass
- .02 Disposable
- .03 Electronic

510 Testing of Temperature Controlled Enclosures

- .01 Ovens, furnaces and baths
- .02 Incubators
- .03 Autoclaves and sterilising ovens
- .04 Industrial freezers

520 Determination of Thermal Properties of Materials

- .01 Thermal conductivity
- .02 Thermal expansion
- .03 Specific and latent heat
- .04 Latent heat

530 Tests on Fire Prevention Systems


- .02 Thermally-released links
- .03 Fire extinguishers
- .04 Fire sprinkler heads
- .05 Heat and smoke release vents

531 Tests on Fire Detection Systems

- .01 Heat detectors
- .02 Smoke detectors
- .03 Flame detectors
- .04 Control indicating equipment
- .05 Bells and bell sounders
- .06 Manual call points

540 Fire Tests on Building Materials and Structures

- .01 Combustibility
- .02 Flammability

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- .03 Early fire hazard properties – ignitability, spread of flame, heat evolved, smoke developed
- .04 Tests for fire resistance of building elements

541 Fire Tests on Textiles and Related Materials

- .01 Ignitability
- .02 Flammability
- .03 Flame propagation
- .04 Smoke release
- .05 Thermal properties

542 Fire Tests on Plastic and Plastic Products

- .01 Ignitability
- .03 Flame propagation

550 Performance Tests on Gas Appliances and Components

- .01 Gas consumption, turndown consumption, maintenance rate
- .02 Determination of CO/CO₂ ratio
- .03 Ventilation tests
- .04 Slip of unburnt gas (catalytic heaters)
- .05 Flue draft and spillage
- .06 Emission tests
- .11 Thermal efficiency, radiant efficiency
- .12 Temperature hazards
- .13 Oven baking evenness
- .14 Heat flux
- .15 Cooking oil temperature test
- .16 Cabinet temperature (refrigerator)
- .17 Ice making test
- .18 Heat resistance, durability
- .19 Flue gas temperatures
- .20 Stratification tests
- .21 Test on thermostats, regulators, shut-off valves, pressure limit devices
- .22 Flow rate (components)
- .23 Voltage variation (components)
- .24 Fan performance (ducted air heaters)
- .25 Temperature variation (components)

- .31 Wind generator tests (outdoor and room sealed appliances)
- .32 Rain test (outdoor appliance)
- .33 Energy efficiency
- .41 Hydrostatic pressure tests (hoses and components)
- .42 Resistance to kinking, pull, bending, flexing, ageing, ignitability and gas (hoses)
- .43 Resistance to corrosion, water, drying, vibration and gas (jointing compounds)
- .44 Resistance to hydrocarbons, oxygen
- .51 Visual inspection
- .52 Gas leakage
- .53 Ignition and flame safeguard tests
- .54 Linting tests
- .55 Drying performance (laundry dryers)
- .56 Heating up time
- .57 Safety shut down
- .61 mechanical strength and operating effort
- .62 Mechanical stability


552 Performance Tests on Oil Appliances and Components

553 Performance Tests on Solid Fuel Appliances and Components

- .01 Surface temperatures
- .02 Heat output, efficiency
- .03 Fuel consumption
- .04 Radiant heat output
- .05 Heat exchangers
- .11 Clearance tests (installations)
- .21 Determination of gaseous emissions in flue
- .22 Particulates in flue gas
- .31 Performance of components

554 Performance Tests on Electrical Appliances and Components

- .01 Surface temperature
- .02 Air temperature
- .03 Liquid temperature
- .10 Boiling time and efficiency
- .11 Heat loss and heat-up time
- .12 Temperature control
- .13 Pull down time
- .14 Ice-making tests

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- .15 Catalytic cleaning tests
- .17 Thermal shock
- .18 Temperature limits in dryers
- .19 Temperature distribution
- .20 Steaming rate
- .21 Moisture removal and evaporation rate
- .22 Microwave energy distribution
- .23 Total head output
- .24 Radiant heat output
- .25 Energy efficiency
- .30 Electrical voltage, current, power
- .31 Electrical energy consumption
- .40 Strength and dimensions of guarding
- .41 Strength and dimensions of components
- .42 Surface areas
- .43 Cabinet and chamber volumes
- .44 Stability
- .45 Endurance and life tests
- .46 Sealing and cleaning of enclosures
- .47 Air flow velocity and volume
- .48 Load capacity
- .49 Water consumption
- .50 Cycle times
- .51 Washing or soil removal
- .52 Drying effectiveness
- .53 Whiteness retention
- .54 Rinsing effectiveness
- .55 Water extraction effectiveness
- .56 Water pressure range
- .57 Mechanical shock
- .58 Vibration
- .59 Pressure measurement
- .70 Colour chart and grey scale comparisons
- .80 Food preparation and cooking tests

556 Performance Tests on Solar Appliances and Components

- .01 Water heaters
- .02 Solariums

- .03 Sun lamps

558 Performance Tests on Air-Conditioning Units and Components

- .01 Sensible cooling effect
- .02 Dehumidifying effect
- .03 Total cooling effect
- .04 Sensible heating effect
- .05 Volumetric air flow rate
- .06 Electrical energy consumption
- .07 Thermal capacity check tests
- .08 Maximum operating tests
- .09 Freeze-up tests
- .10 Enclosure sweat tests
- .11 Condensate disposal tests
- .12 Electrical rating and starting tests
- .13 Noise measurements

560 Hygrometry


- .10 Calibration of humidity measuring devices
- .20 Measurement of relative humidity
- .25 Measurement of dew point
- .30 Testing of environmental chambers

580 Motor Vehicle Safety Tests

- .01 Demisters
- .02 Air conditioning tests

590 Environmental Tests

- .01 Cold tests
- .02 Dry heat tests
- .03 Damp heat tests
- .11 Change of temperature tests
- .13 Solar radiation tests

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6. NON-DESTRUCTIVE TESTING


The field of Non-destructive Testing covers examination of materials, components and assemblies by means of non-destructive testing techniques at field sites, in workshops and in laboratories. It includes examination for assessment of material quality and examination to determine internal construction and dimensions.

Accreditation is available for automated non-destructive testing. When such registration is granted, the automated tests are specifically identified in the terms of accreditation of the testing laboratory.

In the classification below radiographic examination covers X-radiography, gamma-radiography and neutron-radiography.

Accreditation in the various classes of radiographic examination normally covers the taking and processing of radiographs, and their interpretation. If required, however, accreditation may be granted for either the taking and processing of radiographs or for the interpretation of radiographs provided by another laboratory. These restricted accreditations are available only under the following conditions :

- (a) A laboratory which takes and processes radiographs shall provide an endorsed report covering their work
- (b) A laboratory which interprets radiographs shall provide an endorsed interpretation report. This report shall identify the laboratory which produced the radiographs, and shall record the serial number(s) of the endorsed report(s) covering the taking and processing of the radiographs.
- (c) The reports referred to in (a) and (b) above shall both clearly state which laboratory is responsible for retaining the radiographs.
- (d) The Interpreter shall be provided with a copy of the job record covering the taking and processing, and shall have the ability to assess the quality of the radiographs.
- (e) Standards shall be available which specify the radiographic technique and the product quality requirements. The radiographic technique used and the quality of the radiographs produced shall comply with the requirements of the standards.
- (f) Both laboratories shall have adequate radiographic viewing equipment and film density standards.

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The classes of test are:

601 Radiographic Examination of Ferrous Metals

- .01 Welded joints
- .02 Castings
- .04 Forgings
- .05 Riveted and bolted joints
- .99 Other specified products

602 Radiographic Examination of Aluminium Alloys

- .01 Welded joints
- .02 Castings
- .03 Riveted and bolted joints
- .99 Other specified products

603 Radiographic Examination of Magnesium Alloys

- .01 Welded joints
- .02 Castings
- .99 Other specified products

604 Radiographic Examination of Copper Alloys

- .01 Welded joints
- .02 Castings
- .99 Other specified products

605 Radiographic Examination of Zinc Alloys

- .01 Die castings
- .99 Other specified products

606 Radiographic Examination of Nickel, Chromium, Cobalt Alloys

- .01 Welded joints
- .02 Castings
- .99 Other specified products

607 Radiographic Examination of Titanium Alloys

- .01 Welded joints
- .02 Castings
- .99 Other specified products

610 Radiographic Examination of Other Specified Metals

612 Radiographic Examination of Rubber and Plastics

613 Radiographic Examination of Timber

614 Radiographic Examination of other Specified Non-metals

623 Radiographic Determination of Thickness

- .01 Wall-thickness and profile radiography
- .02 Corrosion pitting in pipe

624 Radiographic Examination of Bonded Metals

- .01 Soldered and brazed joints
- .02 Hard faced components
- .99 Other specified components

625 Radiographic Examination of Metal Inserts in Non-metals

- .01 Reinforcing in concrete
- .11 Reinforcing in conveyor belts, hoses and other specified rubber products
- .99 Other specified products


626 Radiographic Examination of Assemblies

- .01 Machinery
- .12 Electrical circuitry and components
- .13 Munitions
- .99 Other specified assemblies

627 Radiographic Examination of Specified Dissimilar Metals

631 Ultrasonic Examination of Ferritic Steels

- .01 Flat rolled products
- .02 Welded joints
- .03 Castings
- .04 Forgings
- .05 Rail sections

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- .06 Semi-finished rolled products
- .07 Other rolled products
- .99 Other specified products

632 Ultrasonic Examination of Aluminium Alloys

- .01 Rolled products
- .02 Welded joints
- .03 Castings
- .04 Forgings
- .05 Extruded products
- .06 Other wrought products
- .99 Other specified products

633 Ultrasonic Examination of Austenitic Steels

- .01 Rolled products
- .02 Welded joints
- .03 Castings
- .04 Forgings
- .99 Other specified products

634 Ultrasonic Examination of Clad Steels

- .11 Welded joints in clad and overlaid steels

639 Ultrasonic Examination of other Specified Metals

641 Ultrasonic Examination of Ceramics and Refractories

642 Ultrasonic Examination of Rubber and Plastics

- .01 Rubber products
- .02 Plastic products
- .11 Plastic laminates

643 Ultrasonic Examination of Timber

- .11 Plywood

649 Ultrasonic Examination of other Specified Non-metals

651 Ultrasonic Thickness Measurement

652 Ultrasonic Examination of Bonded Metals

- .01 Machine bearings
- .02 Welded hard facings
- .03 Friction welded components
- .99 Other specified components

654 Ultrasonic Examination of Finished Components in Service

- .01 Screw thread components
- .02 Gears and splined components
- .51 Railway lines

655 Ultrasonic Examination of Specified Dissimilar Metals

659 Acoustic Emission Testing

- .01 Fibre composites
- .99 Other specified materials

661 Magnetic Particle Testing

- .01 Magnetic flow method
- .02 Current flow method
- .03 Coil method

662 Magnetic Flux Leakage Testing by Instrumental Indication

- .01 Wire rope

671 Penetrant Testing


- .01 Water washable method
- .02 Solvent removable method
- .03 Post emulsifiable method

681 Eddy Current Testing of Ferromagnetic Materials

- .11 Surface flaw detection
- .12 Thickness measurement
- .13 Sorting of materials and components
- .21 Sub-surface flaw detection
- .99 Other specified tests

682 Eddy Current Testing of Non-magnetic Materials

- .11 Surface flaw detection
- .12 Thickness measurement

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- .13 Sorting of materials and components
- .21 Sub-surface flaw detection
- .99 Other specified tests

686 Underwater Non-destructive Tests.

- .11 Radiographic examination
- .12 Ultrasonic examination
- .13 Ultrasonic thickness measurement
- .14 Magnetic particle testing
- .99 Other specified tests

691 Visual Inspection of Materials

- .01 Rolled products
- .02 Welded joints
- .03 Castings
- .04 Forgings
- .99 Other specified products

695 Automated Non-Destructive Testing Systems

699 Other Non-Destructive Tests

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7. CHEMICAL TESTING

The field of Chemical Testing covers analysis and chemical testing of materials and products. Some of the tests classified below are also listed in the fields of Biological Testing or Mechanical Testing. Accreditation for these tests may be listed under either, or both, classifications, depending on which arrangement best suits the laboratory concerned.

The classes of test are:

701 Metals and Alloys

- .01 Ferrous materials
- .11 Copper and copper alloys
- .12 Aluminium and aluminium alloys
- .13 Tin and tin alloys
- .14 Lead and lead alloys
- .15 Magnesium and magnesium alloys
- .16 Zinc and zinc alloys
- .17 Nickel, chromium, cobalt and their alloys
- .18 Titanium and titanium alloys
- .19 Tungsten and tungsten alloys
- .31 Precious metals
- .71 Sampling
- .91 Other tests
- .99 Other metals and alloys
- .11 Chromium ores
- .12 Uranium ores
- .13 Magnesium ores
- .18 Precious metal ores
- .19 Other ores
- .30 Silicate rocks
- .31 Mineral sands
- .32 Silica sands
- .33 Limestone and dolomite
- .34 Gypsum
- .35 Phosphate rock
- .36 Asbestos
- .39 Other minerals
- .61 Metallurgical products
- .71 Sampling
- .81 Sieve analysis
- .82 Heavy liquid tests
- .91 Thermal analyses
- .99 Geochemical samples for trace elements

702 Metallic Coating and Treatment Solutions

- .01 Metallic coatings
- .02 Conversion coatings
- .11 Plating solutions
- .21 Anodising solutions
- .31 Metal finishing materials
- .71 Sampling

708 Corrosion Tests


- .01 Salt spray tests
- .02 Dezincification tests
- .10 Other tests

703 Ores and Minerals

- .01 Iron ores
- .02 Copper ores
- .03 Aluminium ores
- .04 Tin ores
- .05 Lead ores
- .06 Zinc ores
- .07 Nickel ores
- .08 Manganese ores
- .09 Molybdenum ores
- .10 Tungsten ores

711 Cements, Concrete and Related Products

- .01 Portland cement
- .02 Blended cement
- .03 Masonry cement
- .11 Pozzolans
- .31 Concrete
- .32 Mortar
- .33 Fibre cement
- .41 Aggregates
- .51 Other materials
- .71 Sampling

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712 Clays, Ceramics and Related Materials

- .01 Clays
- .02 Ceramics
- .03 Refractories
- .04 Lime
- .05 Glass
- .71 Sampling

714 Oil Shale

- .01 Sampling
- .11 Chemical tests
- .99 Other tests

715 Crude Petroleum

- .01 Sampling
- .11 Chemical tests

716 Fuels

- .01 Gaseous fuels
- .02 Liquid fuels
- .03 Coals and coke
- .04 Charcoal
- .05 Other solid fuels
- .11 Octane number rating
- .71 Sampling

717 Lubricants

- .01 Oils and greases
- .02 Solid lubricants
- .71 Sampling

719 Bituminous Materials

- .01 Bitumens and asphalts
- .02 Tars and tar products
- .13 Bituminous mixtures
- .71 Sampling

720 Solvents

- .01 Sampling
- .11 Chemical tests
- .12 Physical tests

721 Miscellaneous Petroleum Products

- .01 Waxes
- .02 Petrolatums
- .03 White oils
- .04 Antifreeze and de-icing fluids
- .05 Hydraulic fluids
- .06 Additives to fuels and lubricants
- .07 Temporary corrosion preventives
- .08 Electrical insulating oils and compounds
- .09 Petrochemical feedstocks
- .10 Soluble and emulsifying oils
- .71 Sampling

722 Trace Analysis in Petroleum Products

726 Paints and Related Surface Coatings

- .11 Chemical tests
- .21 Physical tests
- .31 Outdoor weathering tests
- .32 Marine underwater tests
- .33 Fresh water immersion tests
- .34 Underground tests
- .35 Humidity tests
- .36 Salt spray tests
- .37 Artificial weathering tests
- .71 Sampling
- .81 Paint driers
- .82 Paint removers

727 Resins

- .01 Sampling
- .11 Chemical tests
- .12 Physical tests

728 Pigments

- .01 Sampling
- .11 Chemical tests
- .12 Physical tests

731 Explosives and Associated Materials

- .11 Chemical analysis
- .12 Stability testing

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- .13 Physical testing
- .71 Sampling

735 Carbon Black

- .01 Sampling
- .11 Chemical tests
- .12 Physical tests

736 Rubber

- .11 Chemical analysis
- .12 Dispersion of carbon black
- .13 Resistance to chemicals
- .14 Swelling in liquids
- .15 Permeability
- .16 Water vapour absorption
- .21 Density and specific gravity
- .22 Flammability tests
- .23 Hardness
- .24 Electrical resistance
- .31 Accelerated weathering tests
- .32 Outdoor weathering tests
- .81 Sampling
- .99 Other tests

737 Plastics

- .11 Chemical analysis
- .12 Resistance to chemicals
- .13 Water vapour transmission
- .14 Permeability
- .21 Density and specific gravity
- .22 Flammability tests
- .23 Electrical resistance
- .24 Thermal properties
- .25 Flow properties
- .26 Thermal analysis
- .31 Colour fastness
- .41 Accelerated weathering tests
- .42 Outdoor weathering tests
- .81 Sampling
- .99 Other tests

738 Leather

- .11 Chemical analysis
- .12 Physical tests
- .71 Sampling

739 Adhesives and Sealants

- .11 Chemical analysis

- .12 Physical tests
- .71 Sampling

746 Textiles and Related Products

- .11 Identification of fibres
- .12 Quantitative analysis of mixtures and blends
- .13 Chemical tests
- .21 Electrical resistance
- .22 Flammability tests
- .23 Resistance to insect attack
- .31 Colour fastness
- .71 Sampling
- .99 Other tests

747 Paper, Paperboard and Pulp

- .11 Fibre composition
- .12 Chemical analysis
- .13 Water vapour transmission
- .81 Sampling
- .99 Other tests

751 Foods

- .01 Cereal products
- .02 Nuts and nut products
- .03 Dairy products
- .04 Meat and meat products
- .05 Fish, crustaceans and molluscs
- .06 Sugar and sugar products
- .07 Confectionery
- .08 Fruit, jams and other fruit products
- .09 Vegetables and vegetable products
- .10 Alcoholic beverages
- .11 Soft drinks and cordials
- .12 Fruit juices
- .13 Edible fats and oils
- .14 Margarine
- .15 Eggs and egg products
- .21 Pet foods
- .31 Antioxidants in foods
- .32 Colorants in foods
- .33 Preservatives in foods
- .35 Other food additives
- .49 Other food products
- .51 Vitamins in foods
- .61 Shelf-life tests
- .71 Sensory evaluation tests

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.81 Sampling

752 Residues in Foods and Agricultural Materials

- .01 Elements
- .02 Pesticides
- .03 Antibiotics
- .04 Insect infestation
- .05 Mycotoxins
- .06 Agricultural chemicals
- .07 Polyhalogenated biphenyls
- .81 Sampling
- .99 Other residues

756 Drugs and Pharmaceuticals

- .01 Drugs
- .02 Medicinal and veterinary preparations
- .03 Vitamins
- .04 Antibiotics
- .05 Hormones
- .06 Vaccines and sera
- .07 Enzymes
- .08 Chemicals used in compounding pharmaceuticals
- .71 Sampling

757 Cosmetics, Perfumes and Essential Oils

- .01 Cosmetics
- .02 Perfumes
- .03 Essential oils
- .71 Sampling

758 Fats, Oils and Waxes

- .01 Animal sources
- .02 Vegetable sources
- .71 Sampling

759 Detergents and Related Products

- .01 Soaps
- .02 Synthetic detergents
- .03 Wetting and emulsifying agents.
- .04 Biodegradability tests
- .11 Fire prevention foams
- .71 Sampling

761 Agricultural Products and Materials

- .01 Cereal grains and by-products
- .02 Oil-seeds and by-products
- .03 Stockfoods
- .04 Vitamins in stockfoods
- .05 Wood and timber treatment materials
- .11 Insecticides and acaricide formulations
- .12 Herbicide formulations
- .13 Fungicide formulations
- .19 Tobacco and tobacco products
- .21 Fertilisers and liming materials
- .22 Soils
- .23 Plant tissue
- .71 Sampling
- .99 Other agricultural products

766 Waters


- .01 Waters for potable and domestic purposes
- .02 Waters for irrigation and stock
- .03 Waters for industrial and steam raising purposes
- .04 Sewage
- .05 Trade wastes
- .06 Saline waters
- .07 Bore waters
- .71 Sampling
- .99 Other waters

770 Gases and Aerosols

- .01 Industrial gases
- .02 Gases for medical use and diving gases
- .03 Reference gases and mixtures
- .04 Industrial fumes and emissions
- .05 Atmospheric pollution
- .06 Air in confined spaces
- .71 Sampling
- .99 Other gases and mixtures

771 Biological Monitoring

- .01 Blood alcohol
- .02 Elements

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.03 Fluorid

- .11 Pesticide residues
- .12 Agricultural Chemical residues
- .21 Drugs and drug metabolites
- .71 Sampling
- .99 Other substances

775 Calibration of Instruments

- .01 Gas analysers
- .03 Particulate air samples
- .04 Flow measurement devices
- .05 Dynamic gas blenders
- .11 Hydrometers

778 Mine Safety Equipment

- .01 Gas instruments
- .02 Respirators

781 Constituents of the Environment

- .11 Waters other than saline
- .12 Saline waters
- .21 Air
- .31 Soils
- .32 Sediments
- .33 Solid waste
- .35 Leachate procedures
- .41 Atmospheric dust fall
- .44 Respirable dust
- .51 Biota
- .71 Sampling

782 Workplace Environment and Hazards

- .01 Asbestos fibre counting
- .02 Respirable quartz
- .03 Inspirable dust
- .04 Respirable dust
- .05 Organic vapours
- .06 metals and metal compounds
- .07 Inorganic gases
- .08 Synthetic mineral fibres
- .09 Welding fumes and gases
- .10 Air in confined spaces
- .11 Mine atmospheres
- .12 Mine roadway dusts
- .13 Isocyanates
- .21 Engine emissions

.31 Asbestos identification

- .71 Sampling
- .81 Volume measurement (air)
- .99 Other substances

784 Residues in Constituents of the Environment

- .01 Elements
- .02 Pesticides
- .03 Polyhalogenated biphenyls
- .04 Halogenated hydrocarbons
- .05 Phenols
- .06 Phthalates
- .11 Hydrocarbons
- .12 Petroleum hydrocarbons
- .13 Mineral oils
- .21 Monocyclic aromatic hydrocarbons
- .22 Polycyclic aromatic hydrocarbons
- .23 Chlorinated dioxins and dibenzofurans
- .31 Mineral pollutants
- .35 Cyanide
- .41 Explosives
- .51 Nutrients
- .71 Sampling
- .99 Other substances

790 Motor Vehicles

- .01 Vehicle emissions
- .02 Fuel consumption tests
- .99 Other tests


794 Particle Sizing


795 Laboratory Reagents

- .11 Chemical tests
- .12 Physical tests
- .71 Sampling

797 Miscellaneous Materials and Products

- .11 Chemical tests
- .12 Physical tests
- .71 Sampling
- .99 Other tests

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8. BIOLOGICAL TESTING

The field of Biological Testing covers pharmacological and microbiological tests, and includes various other biological testing on a variety of raw materials and products. Some of the tests listed below are also listed under Chemical Testing. Accreditation for these tests may be listed under either, or both, classifications, depending on which arrangement best suits the laboratory concerned.

The classes of test are:

801 Tests on Human Pharmaceutical and Biological Products

- .10 Endotoxin tests
- .11 Toxicity tests
- .12 Pyrogen tests
- .13 Bioassays of immunological products
- .14 Bioassays of hormones
- .15 Bioassays of vitamins
- .17 Bioassays of enzymes
- .18 Assay of blood products
- .19 Physiochemical tests
- .20 Potency of immunological products
- .21 Safety of immunological products
- .22 Quality control testing
- .30 Microscopy
- .99 Other tests

802 Tests on Veterinary Pharmaceutical and Biological Products

- .11 Bioassays of hormones
- .12 Bioassays of vitamins
- .13 Bioassays of enzymes
- .14 Bioassays of immunological products
- .19 Physiochemical tests
- .20 Potency of immunological products
- .21 Safety of immunological products
- .22 Quality control testing
- .99 Other tests

803 Tests on Foods/Stockfoods and their Additives

- .11 Toxicity tests

- .12 Bioassays
- .13 Antibiotics
- .99 Other tests

804 Pharmacological Tests on other Materials

- .11 Toxicity tests
- .12 Bioassays
- .99 Other tests

805 Sterility Tests on Pharmaceuticals


- .01 Filterable solutions and soluble preparations (membrane filtration)
- .02 Surgical dressings and devices
- .03 Non-filterable preparations, including ointments

806 Microbiological Tests on Veterinary Products

- .12 Microbial count
- .13 Preservative efficacy
- .21 Microbioassays of vitamins
- .22 Microbioassays of antibiotics
- .99 Other tests

807 Microbiological Tests on Pharmaceuticals

- .11 Sterility tests

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- .12 Microbial counts
- .13 Preservative efficacy
- .21 Microbioassays of vitamins
- .22 Microbioassays of enzymes
- .23 Microbioassays of chemotherapeutic agents
- .24 Microbioassays of antibiotics
- .99 Other tests

809 Effectiveness Tests on Biocides

- .01 Fungicides
- .02 Bactericides
- .03 Algacides
- .04 Viricides
- .05 Sporicides
- .06 Nappy sanitiser
- .07 Insecticides

810 Microbiological Tests on Cosmetics, Perfumes, Essential Oils

- .12 Microbial counts on cosmetics
- .13 Preservative efficacy
- .22 Microbial counts on perfumes
- .32 Microbial counts on essential oils

811 Microbiological Tests on Foods

- .01 Cereal products
- .02 Nuts and nut products
- .03 Dairy products
- .04 Meat and meat products
- .05 Poultry and poultry products
- .06 Eggs and egg products
- .07 Fish, crustaceans and molluscs
- .08 Edible fats and oils
- .10 Heat-processed foods in hermetically sealed containers
- .11 Sugar products, honey and confectionery
- .12 Vegetables and vegetable products
- .13 Fruit and fruit products
- .14 Beverages
- .17 Animal feeds
- .20 Mixed foods

- .24 Nutritional supplements
- .25 Additives to foods
- .26 Gelatine and other gums
- .27 Herbs and spices

- .28 Pet foods
- .49 Other food products
- .81 Sample collection
- .82 Sampling plan
- .99 Other tests

812 Meat And Fish Species Testing

- .01 Immunological techniques
- .02 Isoelectric focussing
- .03 ELISA
- .04 Electrophoresis

815 Media Quality Control

- .01 Bacteriology media – general purpose
- .02 Bacteriology media – selective
- .03 Bacteriology media – antibiotic sensitivity
- .04 Bacteriology media – biochemical test media
- .05 Mycology media
- .06 Mycobacteriology media
- .07 Virology media

817 Testing of Surface in Abattoirs

- .01 Meat surfaces
- .02 Product contact surfaces
- .03 Sampling


818 Microbiological Tests for Factory Hygiene Purposes

- .01 Surfaces
- .02 Air
- .03 Water

819 Microbiological Tests on other Materials

- .01 Surgical dressings and related materials
- .02 Medical devices
- .03 Diagnostic kits
- .11 Lubricants
- .12 Fuels and oils

- .15 Detergents
- .20 Pulp and paper
- .21 Packaging materials
- .31 Clinical specimens
- .50 Soils

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.99 Other materials

820 Resistance to Microbial Attack

- .01 Textiles and fabrics
- .02 Electrical components
- .03 Paints and surface coatings
- .04 Adhesives, glues and other bondings
- .05 Paper and paper pulp
- .15 Detergents
- .99 Other materials

821 Resistance to Insect Attack

- .01 Textiles and fabrics
- .02 Timber and allied materials
- .99 Other materials

822 Insect Infestation

830 Sensory Evaluation Tests on Foods

831 Industrial Cultures

- .01 Dairy starter cultures
- .02 Meat starter cultures
- .10 Rhizobial cultures
- .11 Yeasts
- .99 Other cultures

840 Plant Growth Regulating Substances

- .01 Plant hormones
- .02 Herbicides

841 Plant and Plant Materials for Freedom from Disease

- .01 Identification of bacterial pathogens
- .02 Identification of fungal pathogens
- .03 Identification of viral pathogens

845 Seed Testing

- .01 Sampling
- .12 Moisture
- .13 Purity
- .14 Germination
- .15 Tetrazolium
- .16 Fluorescence
- .99 Other tests

846 Commodity Seed Testing

- .01 Sprouting test
- .02 Mung Bean Export Oversoak Test
- .03 Chickpea/Chickpea splits Export Purity Test
- .04 Grain/Legume Purity Test
- .05 Bird Seed Export Quality Grain Test
- .06 Oil seeds purity, moisture and oil content

860 Terrestrial Biology

- .01 Identification and enumeration of biota
- .21 Ecosystem studies
- .22 Ecotoxicology
- .31 Bioassays, including toxicity tests
- .99 Other tests

861 Aquatic Biology – Inland Waters


- .01 Identification and enumeration of biota
- .21 Ecosystem studies
- .22 Ecotoxicology
- .31 Bioassays, including toxicity tests
- .99 Other tests

862 Aquatic Biology – Marine Systems


- .01 Identification and enumeration of biota
- .21 Ecosystem studies
- .22 Ecotoxicology
- .31 Bioassays, including toxicity tests
- .99 Other tests

870 Waters, including Effluents

- .11 Bacteriological condition of potable waters
- .12 Bacteriological condition of industrial waters (treated, recirculating)
- .13 Bacteriological condition of sewage
- .14 Bacteriological condition of trade wastes
- .15 Bacteriological condition of swimming pools and spas

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- .16 Bacteriological condition of environmental waters
 - .22 Biochemical oxygen demand of industrial waters
 - .23 Biochemical oxygen demand of sewage
 - .24 Biochemical oxygen demand of trade wastes
 - .31 Phycological condition of potable waters
 - .32 Phycological condition of industrial waters
 - .33 Phycological condition of sewage
 - .34 Phycological condition of trade wastes
 - .35 Phycological condition of swimming pools and spas
 - .36 Phycological condition of environmental waters
 - .41 Mycological condition of potable waters
 - .42 Mycological condition of industrial waters
 - .43 Mycological condition of sewage
 - .44 Mycological condition of trade wastes
 - .51 Virological condition of potable waters
 - .52 Virological condition of industrial waters
 - .53 Virological condition of sewage
 - .54 Virological condition of trade wastes
 - .55 Virological condition of swimming pools and spas
 - .56 Virological condition of environmental waters
 - .61 Protozoological condition of potable waters
 - .62 Protozoological condition of industrial waters
 - .63 Protozoological condition of sewage
 - .64 Protozoological condition of trade wastes
 - .65 Protozoological condition of swimming pools and spas
 - .66 Protozoological condition of environmental waters
 - .67 Protozoological condition of biosolids and sediments
 - .71 Macroinvertebrates in potable waters
 - .72 Macroinvertebrates in environmental waters
 - .73 Macroinvertebrates in sewage waters
 - .81 Sampling collection
 - .82 Sampling plan
 - .99 Other tests
- 880 Tests on Substances for Potential Genetic Activity**
- .11 Bacterial mutagenicity tests
 - .12 Sister chromatid exchange tests
 - .13 Transformation assays in cell culture
 - .99 Other tests
- 890 Cell Culture**
- .01 Cytotoxicity tests

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9. ACOUSTIC AND VIBRATION MEASUREMENT

The field of Acoustic & Vibration Measurement covers those tests which require measurement and analysis of sound pressure levels and signals proportional to acceleration, velocity and displacement. It includes measurement of environmental noise and mechanical vibration, calibration of acoustic and vibration measuring equipment, acoustic and vibration characteristics of materials and structures, audiometry, measurement of sound power, acoustic and vibration performance tests and dynamic balancing.

The classes of test are:

901 Acoustic Measuring and Calibration Equipment

- .01 Microphones
- .02 Sound level
- .03 Sound spectrum analysers
- .04 Band pass filters
- .05 Acoustic calibrators
- .06 Reference sound sources
- .07 Sound level recording systems
- .08 Tape recorders
- .09 Audiometers
- .10 Dose meters for sound
- .91 Other acoustic measuring equipment

902 Laboratory Determination of Acoustic Characteristics of Materials and Building Elements

- .01 Reverberation
- .11 Sound absorption
- .21 Sound transmission

904 Audiometric Testing

- .11 Monitoring audiometry
- .21 Reference audiometry

905 Field Measurement of Sound

- .01 Room acoustics
- .02 Community noise assessments
- .03 Occupational noise exposure
- .04 Noise on board vessels
- .05 Noise in occupied spaces


- .06 Noise on building and construction sites
- .07 Acoustic performance and building elements
- .08 Long term noise monitoring

906 Determination of Sound Power

- .01 Free field
- .02 Free field above a reflecting plane
- .03 Diffuse field
- .04 Semireverberant field
- .05 Near field
- .06 Free field associated with two or three reflecting planes

907 Acoustic Performance Tests

- .01 Aircraft
- .02 Motor vehicles
- .03 Industrial, earth moving and agricultural vehicles
- .04 Railway vehicles
- .05 Vessels
- .11 Electrical machines
- .12 Machinery other than electrical machinery
- .13 Air distribution and conditioning systems
- .14 Components of air distribution and conditioning systems
- .15 Fans and blowers
- .21 Ear protectors
- .22 Hearing aids
- .23 Acoustic enclosures and booths

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- .31 Sound recording and reproducing systems
- .32 Communications equipment
- .41 Plumbing
- .42 Domestic appliances
- .43 Electric power tools
- .44 Explosive power tools
- .45 Pneumatic power tools
- .71 Toys
- .99 Other products

910 Calibration of Vibration Measuring and Calibration Equipment

- .01 Vibration transducers
- .02 Vibration measuring systems
- .03 Vibration analysers
- .04 Vibration filters
- .05 Vibration recording systems
- .06 Vibration calibrators
- .99 Other vibration measuring equipment

911 Determination of Vibration Characteristics of Materials, Components, Assemblies and Structures.

- .01 Dynamic stiffness

- .11 Damping
- .21 Natural frequencies and modes of vibration

915 Measurement of Mechanical Vibration


- .01 Steady state vibration
- .02 Transient vibration
- .03 Torsional vibration
- .04 Vibration surveys

916 Vibration Performance Tests

920 Dynamic Balancing

- .01 In balancing machines
- .11 In situ

921 Dynamic Balancing Machines

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10. MEDICAL TESTING

The field of Medical Testing is divided into seven main classes of test, as listed below. More detailed sub-classifications may be developed in the future, should the need arise.

Some tests are also listed in the field of Biological Testing. Accreditation for these tests may be listed under either, or both, classifications, depending on which arrangement best suits the laboratory concerned.

The classes of test are as follows:

1010 Microbiology

1011 Bacteriology

- .01 Preparation of films for microscopic examination
- .02 Inoculation of cultures
- .03 Microscopic examination of clinical specimens
- .04 Identification of organisms including antibiotic sensitivity testing
- .05 Identification of organisms excluding antibiotic sensitivity testing
- .06 Detection of bacterial antigens
- .07 Specialised antibiotic procedures
- .99 Miscellaneous tests

1012 Parasitology

- .01 Detection and provisional identification of parasites
- .02 Definitive identification of parasites
- .99 Miscellaneous tests

1013 Virology

- .01 Non-cultural methods of detection
- .02 Isolation of viruses
- .03 Definitive identification of viruses
- .99 Miscellaneous tests

1014 Mycology

- .01 Microscopic examination of clinical specimens
- .02 Culture of specimens
- .03 Limited identification of isolates
- .04 Definitive identification of isolates
- .05 Sensitivity tests to antifungal agents
- .99 Miscellaneous tests

1015 Mycobacteriology


- .01 Microscopic examination of clinical specimens
- .02 Culture of specimens
- .03 Limited identification of isolates
- .04 Definitive identification of isolates
- .05 Sensitivity tests to antifungal agents
- .99 Miscellaneous tests

1016 Serology of Infection

- .01 Limited serological testing
- .02 General serological testing
- .03 Specialised or uncommon serological testing procedures
- .99 Miscellaneous tests

1019 Miscellaneous

- .01 General clinical microscopy
- .02 Semen analysis (Screening Test)
- .03 Antibiotic assays
- .04 Snake venom detection

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.99 Miscellaneous tests

1020 Immunohaematology

- .01 Blood grouping including ABO, Rh(D)
- .03 Blood group antibody screen
- .04 Identification of blood group antibodies
- .05 Determination of compatibility of donor units using appropriate techniques including the investigation of transfusion reactions
- .06 Red cell phenotyping
- .07 Antibody elution
- .10 Storage and distribution of blood and blood components
- .99 Miscellaneous tests

1030 Haematology


- .01 Blood counts
- .02 Visual examination of blood films
- .03 Erythrocyte sedimentation rate
- .05 Automated differential leucocyte counts
- .06 Automated reticulocyte counts
- .08 Blood film examinations involving special staining procedures
- .09 Examination for malarial parasites
- .20 Bone marrow examination
- .25 Progenitor cell transplantation procedures
- .30 Tests for haemoglobin variants and thalassaemia
- .31 Tests for foetal Hb
- .35 Tests to investigate haemolysis
- .36 Screening tests for G6Pd deficiency
- .37 Red cell enzyme assays
- .40 Limited haemostasis related tests
- .41 General haemostasis related tests
- .45 Tests of platelet function
- .51 *In vivo* radioisotopic haematological tests
- .55 Iron studies
- .57 Screening test for infectious mononucleosis
- .58 Vitamin B12 and folate (serum and red cell)
- .59 Cryoglobulins

- .61 b2-microglobulin
- .62 Plasma viscosity
- .70 Immunophenotyping
- .80 Molecular genetic studies
- .90 Electron microscopy
- .99 Miscellaneous tests

1040 Immunology

- .01 Quantitative investigation of immunoglobulins G, A, M and D in body fluids
- .02 Qualitative investigation of immunoglobulins G, A, M and D in body fluids
- .03 Total IgE
- .04 Allergen – specific IgE
- .06 Investigation of complement
- .08 Detection of immune complexes in body fluids and biopsy material
- .10 Rheumatoid factor – quantitative assays
- .12 Detection of autoantibodies in body fluids and biopsy material
- .20 Tests of cellular immunity - quantisation of lymphocytes
- .22 Tests of cellular immunity – delayed hypersensitivity skin tests
- .24 Tests of cellular immunity – *in vitro* lymphocyte function tests
- .26 Tests of cellular immunity – lymphokine assays
- .30 Assessment of neutrophils and monocytes – quantitation
- .32 Assessment of neutrophils and monocytes – *in vitro* functional tests
- .34 Natural killer cell assay by radioisotope release from target cells
- .36 Cell markers
- .40 Tissue typing
- .60 Simple slide tests for biochemical and immunological analytes
- .99 Miscellaneous tests

1050 Anatomical Pathology

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1051 Histopathology

- .01 Histopathology of biopsy material
- .02 Immediate frozen section diagnosis
- .03 Immunohistochemical investigation

1052 Cytopathology

- .01 Gynaecological (cervical)
- .02 Non-gynaecological
- .03 Fine needle aspiration biopsy specimens
- .04 Gynaecological (other than cervical)

1054 Examination by Electron Microscopy

1056 Autopsy Service

1057 Autopsy Facilities

1059 Miscellaneous tests

1060 Chemical Pathology

- .01 Analytes in general use in cardiac, liver function, lipid, renal and other profiles and metabolic studies
- .02 Proteins, quantitative analysis
- .03 Proteins, qualitative and semi quantitative analysis
- .05 CO-oximetry
- .06 Blood pH and gas tensions
- .07 Other analytes performed on a blood gas analyser
- .08 Haem-related pigments and precursors
- .09 Trace elements
- .10 Drugs for therapeutic monitoring
- .15 Drugs for toxicological purposes
- .16 Drugs for toxicological purposes to AS 4308 (1995)
- .20 Hormones
- .24 Hormone receptor assays
- .30 Catecholamines and related metabolites
- .33 Amniotic fluid analytes
- .35 Assays of neonatal specimens
- .40 Iron studies
- .50 Vitamin B12 and folate
- .60 Simple slide tests for biochemical and immunological analytes

- .65 Pregnancy tests – qualitative
- .66 Glycohaemoglobin
- .67 Sweat electrolytes
- .68 Faecal fats
- .69 Carcinoembryonic antigen
- .70 Vitamin assays
- .71 Occult blood
- .72 Fructosamine
- .73 5-Hydroxyindole acetic acid
- .99 Miscellaneous tests

1070 Genetic Testing

1071 Cytogenetics


- .01 Blood
- .02 Bone marrow
- .03 Amniotic fluid
- .04 Chorionic villus tissue
- .05 Prenatal diagnosis of fragile X chromosome
- .06 Other tissues – non malignant
- .20 Other tissues – malignant
- .99 Miscellaneous tests

1075 Molecular Genetics

- .01 Diagnostic service for detection of DNA polymorphisms
- .02 Linkage analysis and mutation analysis
- .03 Family studies, carrier detection and prenatal diagnosis of inherited disorders
- .04 Long term storage of DNA – DNA banking
- .99 Miscellaneous tests

1076 Parentage testing

- .01 Red cell antigen blood grouping
- .02 Red cell enzyme blood grouping
- .03 HLA tissue typing
- .04 Serum markers
- .05 DNA typing – RFLP
- .06 DNA typing – PCR

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1080 Blood Transfusion Service

- .01 Collection of blood from donors, routine
- .02 Collection and storage of autologous blood donations
- .03 Collection and storage of directed/dedicated blood donations
- .04 Collection of cells or plasma by automated means
- .05 Therapeutic venesection
- .06 Operation of a mobile collection unit
- .10 Preparation of blood components
- .11 Storage and distribution of blood and blood components.
- .12 Freezing and thawing of cellular components for transfusion
- .13 Preparation of leucocyte-poor red cells
- .20 Blood grouping including ABO, Rh(D) and other antigens by manual methods
- .21 Blood grouping including ABO, Rh(D) and other antigens by automated methods
- .22 Examination of serum for Rh(D) and other blood group antibodies at reference laboratory level
- .23 Determination of compatibility of donor units using appropriate techniques including the investigation of transfusion reactions at reference laboratory level
- .25 Automated blood grouping and antibody screening
- .35 Screening of donor blood for markers of transfusion transmitted disease
- .80 Tissue typing
- .99 Miscellaneous tests.

1090 Medical Practice Pathology

- .01 Analytes available on the Ektachem DT60 analyser
- .02 Analytes available on the Reflotron analyser
- .03 Analytes available on the Vision analyser
- .10 Haemoglobin
- .15 Dipstick urine chemistry
- .16 Dipslide culture
- .17 Rapid streptococcal identification test
- .20 Urine pregnancy test
- .21 Serum pregnancy test
- .25 Screening test for infectious mononucleosis
- .26 Screening test for rheumatoid factor
- .50 Microbiology
- .60 Haematology
- .70 Chemical pathology
- .99 Miscellaneous tests

1095 Assisted Reproduction Procedures

- .01 Semen analysis
- .02 In Vitro Fertilisation (IVF) procedures
- .03 Gamete Intrafallopian Transfer (GIFT) procedures
- .04 Zygote Intrafallopian Transfer (ZIFT) procedures
- .05 Intracytoplasmic sperm injection (ICSI) techniques
- .06 Sperm antibodies
- .07 Detection of leucocytes in semen
- .08 Sperm preparation for In Vitro Fertilisation
- .09 Embryo and semen cryopreservation
- .12 Tests for semen/sperm-cervical mucus interaction
- .99 Miscellaneous

END