

## ECLA EUROPEAN CLASSIFICATION

**G01M TESTING STATIC OR DYNAMIC BALANCE OF MACHINES OR STRUCTURES; TESTING STRUCTURES OR APPARATUS NOT OTHERWISE PROVIDED FOR** [N: (devices for testing the performance of portable percussive tools with fluid-pressure drive [B25D9/00B](#))]

[N: **WARNING** The following IPC groups are not used in the internal ECLA classification scheme. Subject matter covered by these groups is classified in the following ECLA groups: - G01M/38 covered by [G01M1/14](#) and [G01M1/30](#) and subgroups [N1012]  
]

### Note

Attention is drawn to the Note following the title of Class G01.

**G01M1/00 Testing static or dynamic balance of machines or structures** (balancing rotary bowls of centrifuges [B04B9/14](#); apparatus characterised by the means for holding wheels or parts thereof [B60B30/00](#); determining the stability factors of ships [B63B](#); stabilising of aircraft [B64C17/00](#); control systems for balancing automatically in operation [G05](#); balancing rotors of dynamo-electric machines [H02K15/16](#))

[N: **WARNING**  
[N1207]Groups [G11M11/30](#) - [G11M11/39](#) do not correspond to former or future IPC groups. Concordance ECLA : IPC for these groups is as follows: - [G01M11/30-G01M11/39](#) : [G01M11/00](#)  
]

- G01M1/02 . Details of balancing machines or devices
- G01M1/04 . . Adaptation of bearing support assemblies for receiving the body to be tested [N: (tyre chucks in general [G01M17/02A](#))]
- G01M1/04B . . . [N: the body being a vehicle wheel]
- G01M1/06 . . Adaptation of drive assemblies for receiving the body to be tested
- G01M1/08 . . Instruments for indicating directly the magnitude and phase of the unbalance (measuring electrical variables in general [G01R](#))
- G01M1/10 . Determining the moment of inertia
- G01M1/12 . Static balancing; Determining position of centre of gravity (by determining unbalance [G01M1/14](#))
- G01M1/12B . . [N: Determining position of centre of gravity]
- G01M1/12B4 . . . [N: of aircraft]
- G01M1/12B4B . . . . [N: during the flight]
- G01M1/14 . Determining unbalance ([G01M1/30](#), [G01M1/38](#) take precedence)
- G01M1/16 . . by oscillating or rotating the body to be tested
- G01M1/18 . . . and running the body down from a speed greater than normal
- G01M1/20 . . . and applying external forces compensating forces due to unbalance
- G01M1/22 . . . and converting vibrations due to unbalance into electric variables (measuring

- vibrations in general [G01H](#); microphones or like acoustic electromechanical transducers [H04R](#))
- G01M1/22D . . . . [N: for vehicle wheels (in situ [G01M1/28](#))]
  - G01M1/24 . . . performing balancing on elastic shafts, e.g. for crankshafts
  - G01M1/26 . . . with special adaptations for marking, e.g. by drilling
  - G01M1/28 . . . with special adaptations for determining unbalance of the body in situ, e.g. of vehicle wheels
  
  - G01M1/30 . Compensating unbalance ([G01M1/38](#) takes precedence; counterweights [F16F15/28](#))
  - G01M1/32 . . by adding material to the body to be tested, e.g. by correcting-weights (correcting-weights per se [F16F15/32](#))
  - G01M1/32A . . . [N: using balancing liquid]
  - G01M1/32B . . . [N: the body being a vehicle wheel]
  - G01M1/34 . . by removing material from the body to be tested, e.g. from the tread of tyres
  - G01M1/36 . . by adjusting position of masses built-in the body to be tested
  - G01M1/36A . . . [N: using balancing liquid]
  
  - G01M3/00** **Investigating fluid-tightness of structures** (investigating permeability of porous material, investigating the presence of flaws in general [G01N](#)) [N: membrane leak detection in blood dialysis [A61M1/16L](#); detecting infusion flow leakage [A61M5/168D](#)]
  
  - G01M3/00B . [N: by using thermal means]
  - G01M3/00C . [N: using pigs or moles ([G01M3/24B2](#), [G01M3/28A4](#) take precedence)] [C9804]
  - G01M3/00D . [N: Leak detector calibration, standard leaks ([G01M3/20M](#) takes precedence)] [N0603]
  
  - G01M3/02 . by using fluid or vacuum
  - G01M3/02B . . [N: Test plugs for closing off the end of a pipe (means for stopping flow from pipes [F16L55/10](#))] [N9605]
  - G01M3/02E . . [N: Details with respect to the testing of engines or engine parts] [N9605]
  - G01M3/02F . . [N: Details with respect to the testing of elastic elements, e.g. gloves, condoms] [N9605]
  - G01M3/04 . . by detecting the presence of fluid at the leakage point
  - G01M3/04B . . . [N: by using materials which expand, contract, disintegrate, or decompose in contact with a fluid ([G01M3/12](#) takes precedence)]
  - G01M3/04B2 . . . . [N: with electrical detection means]
  - G01M3/04B2B . . . . . [N: with photo-electrical detection means, e.g. using optical fibres]
  - G01M3/06 . . . by observing bubbles in a liquid pool
  - G01M3/08 . . . . for pipes, cables or tubes; for pipe joints or seals; for valves; [N: for welds]
  - G01M3/08B . . . . . [N: for cables]
  - G01M3/08C . . . . . [N: for tubes]
  - G01M3/08D . . . . . [N: for pipe joints or seals ([G01M3/08F](#) takes precedence)]
  - G01M3/08E . . . . . [N: for valves]
  - G01M3/08F . . . . . [N: for welds]
  - G01M3/10 . . . . for containers, e.g. radiators

G01M3/10B	. . . . .	[N: for flexible or elastic containers]
G01M3/10C	. . . . .	[N: for radiators]
G01M3/12	. . . . .	by observing elastic covers or coatings e.g. soapy water
G01M3/14	. . . . .	for pipes, cables or tubes; for pipe joints or seals; for valves; [N: for welds; for containers, e.g. radiators]
G01M3/14B	. . . . .	[N: for cables]
G01M3/14C	. . . . .	[N: for tubes]
G01M3/14D	. . . . .	[N: for pipe joints or seals]
G01M3/14E	. . . . .	[N: for valves]
G01M3/14F	. . . . .	[N: for welds]
G01M3/14G	. . . . .	[N: for containers, e.g. radiators]
G01M3/14G2	. . . . .	[N: for flexible or elastic containers]
G01M3/14G4	. . . . .	[N: for radiators]
G01M3/16	. . . . .	using electric detection means ( <a href="#">G01M3/06</a> , <a href="#">G01M3/12</a> , <a href="#">G01M3/20</a> , <a href="#">G01M3/24</a> , <a href="#">G01M3/26</a> take precedence) [N: <a href="#">G01M3/04B2</a> takes precedence]
G01M3/16B	. . . . .	[N: by means of cables or similar elongated devices, e.g. tapes (construction of cables in general <a href="#">H01B</a> )]
G01M3/18	. . . . .	for pipes, cables or tubes; for pipe joints or seals; for valves; [N: for welds; for containers, e.g. radiators]
G01M3/18B	. . . . .	[N: for cables]
G01M3/18C	. . . . .	[N: for tubes]
G01M3/18D	. . . . .	[N: for pipe joints or seals]
G01M3/18E	. . . . .	[N: for valves]
G01M3/18F	. . . . .	[N: for welds]
G01M3/18G	. . . . .	[N: for containers, e.g. radiators]
G01M3/18G2	. . . . .	[N: for flexible or elastic containers]
G01M3/18G4	. . . . .	[N: for radiators]
G01M3/20	. . . . .	using special tracer materials, e.g. dye, fluorescent material, radioactive material
G01M3/20B	. . . . .	[N: mass spectrometer detection systems (mass spectrometers <a href="#">H01J 49/26</a> )]
G01M3/20B4	. . . . .	[N: accessories and associated equipment, pump constructions (pumps <a href="#">F04</a> )]
G01M3/20M	. . . . .	[N: calibration arrangements]
G01M3/22	. . . . .	for pipes, cables or tubes; for pipe joints or seals; for valves; [N: for welds; for containers, e.g. radiators]
G01M3/22B	. . . . .	[N: for cables]
G01M3/22C	. . . . .	[N: for tubes]
G01M3/22D	. . . . .	[N: for pipe joints or seals]
G01M3/22E	. . . . .	[N: for valves]
G01M3/22F	. . . . .	[N: for welds]
G01M3/22G	. . . . .	[N: for containers, e.g. radiators]
G01M3/22G2	. . . . .	[N: for flexible or elastic containers]
G01M3/22G4	. . . . .	[N: for radiators]
G01M3/22G6	. . . . .	[N: removably mounted in a test cell (test cells also in <a href="#">G01M3/32E</a> and

- G01M3/36B)] [N0603] [C0605]
- G01M3/24 . . . using infrasonic, sonic, or ultrasonic vibrations
- G01M3/24B . . . . [N: for pipes] [N9509] [C9803]
- G01M3/24B2 . . . . . [N: using pigs or probes travelling in the pipe] [N9803]
- G01M3/26 . . by measuring rate of loss or gain of fluid, e.g. by pressure-responsive devices, by flow detectors
- G01M3/28 . . . for pipes, cables or tubes; for pipe joints or seals; for valves [N: for welds (not used)] [C9902]
- G01M3/28A . . . . [N: for pipes ([G01M3/28G](#), [G01M3/30](#) take precedence)] [N9804]
- G01M3/28A2 . . . . . [N: using pressure measurements] [N9804]
- G01M3/28A4 . . . . . [N: using pigs or moles traveling in the pipe] [N9804]
- G01M3/28A6 . . . . . [N: for double-walled pipes] [N9804]
- G01M3/28B . . . . . [N: for cables ([G01M3/30](#) takes precedence)]
- G01M3/28C . . . . . [N: for tubes ([G01M3/30](#) takes precedence)]
- G01M3/28D . . . . . [N: for pipe joints or seals ([G01M3/30](#) takes precedence)]
- G01M3/28D2 . . . . . [N: for pipe sections by testing its exterior surface] [N9605]
- G01M3/28D4 . . . . . [N: for seals not incorporated in a pipe joint]
- G01M3/28E . . . . . [N: for valves ([G01M3/30](#) takes precedence)]
- G01M3/28F . . . . . [N: for welds ([G01M3/30](#) takes precedence)]
- G01M3/28G . . . . . [N: for underground fuel dispensing systems ([G01M3/30](#) takes precedence)]
- G01M3/30 . . . . . using progressive displacement of one fluid by another
- G01M3/32 . . . for containers, e.g. radiators
- G01M3/32A . . . . . [N: Details, e.g. container closure devices]
- G01M3/32B . . . . . [N: for flexible or elastic containers]
- G01M3/32C . . . . . [N: for radiators]
- G01M3/32D . . . . . [N: by monitoring the interior space of the containers]
- G01M3/32D2 . . . . . [N: using a level monitoring device ([G01M3/32D8](#) takes precedence)]
- G01M3/32D4 . . . . . [N: using a flow detector ([G01M3/32D2](#), [G01M3/32D8](#) take precedence)]
- G01M3/32D6 . . . . . [N: using a differential pressure detector ([G01M3/32D2](#), [G01M3/32D8](#) take precedence)]
- G01M3/32D8 . . . . . [N: for verifying the internal pressure of closed containers]
- G01M3/32E . . . . . [N: removably mounted in a test cell]
- G01M3/32E2 . . . . . [N: for verifying the internal pressure of closed containers]
- G01M3/34 . . . . . by testing the possibility of maintaining the vacuum in containers, e.g. in can-testing machines
- G01M3/36 . . by detecting change in dimensions of the structure being tested
- G01M3/36B . . . . [N: the structure being removably mounted in a test cell] [N9504]
- G01M3/36D . . . . [N: by isolating only a part of the structure being tested] [N9504]
- G01M3/38 . . by using light ([G01M3/02](#) takes precedence)
- G01M3/40 . . by using electric means, e.g. by observing electric discharges
- G01M5/00** **Investigating the elasticity of structures, e.g. deflection of bridges, air-craft wings**  
([G01M9/00](#) takes precedence; strain gauges [G01B](#))

- G01M5/00B . [N: of bridges]
- G01M5/00C . [N: of aircraft wings or blades] [C1004]
- G01M5/00E . [N: of elongated objects, e.g. pipes, masts, towers or railways ([G01M5/00N2E](#) takes precedence)] [N1004]
- G01M5/00M . [N: by determining damage, crack or wear] [N1004]
- G01M5/00N . [N: by determining deflection or stress] [N1004]
- G01M5/00N2 . . [N: by means of external apparatus, e.g. test benches or portable test systems] [N1004]
- G01M5/00N2E . . . [N: of elongated objects, e.g. pipes, masts, towers or railways] [N1004]
- G01M5/00P . [N: by exciting or detecting vibration or acceleration ([vibration testing of structures G01M7/00](#))] [N1004]
- G01M5/00Q . [N: by means of external apparatus, e.g. test benches or portable test systems ([G01M5/00N2](#) takes precedence)] [N1004]
- G01M5/00R . [N: by measuring variation of impedance, e.g. resistance, capacitance, induction] [N1004]
- G01M5/00S . [N: by using electromagnetic excitation or detection] [N1004]
  
- G01M7/00** **Vibration-testing of structures; Shock-testing of structures** ([G01M9/00](#) takes precedence; [N: generating vibrations B06, G10, H04R; vibration measurement G01H; material testing [G01N3/00](#)])
  
- G01M7/02 . Vibration-testing [N: by means of a shake table]
- G01M7/02B . . [N: Vibration control arrangements, e.g. for generating random vibrations]
- G01M7/02D . . [N: Measuring arrangements]
- G01M7/02F . . [N: Specimen mounting arrangements, e.g. table head adapters]
- G01M7/04 . . Monodirectional test stands
- G01M7/04B . . . [N: in a circular direction]
- G01M7/06 . . Multidirectional test stands
  
- G01M7/08 . Shock-testing
  
- G01M9/00** **Aerodynamic testing; Arrangements in or on wind tunnels** (building aspects Section E; investigating properties of materials in general [G01N](#))
  
- G01M9/02 . Wind tunnels
- G01M9/04 . . Details
  
- G01M9/06 . Measuring arrangements specially adapted for aerodynamic testing
- G01M9/06B . . [N: Wind tunnel balances; Holding devices combined with measuring arrangements ([measuring components of force in general G01L5/16](#))]

- G01M9/06D . . [N: dealing with flow (measuring volume flow [G01F](#); measuring speed of fluids [G01P5/00](#))]
- G01M9/06D2 . . . [N: visualisation]
- G01M9/08 . Aerodynamic models
  
- G01M10/00** **Hydrodynamic testing; Arrangements in or on ship-testing tanks or water tunnels** (building aspects Section E; investigating properties of materials in general [G01N](#); [N: methods for designing, building, maintaining, converting, refitting, repairing or determining properties of vessels, not otherwise provided for and using towing tanks or model basins for designing [B63B9/02](#); for determining vessel properties with respect to stability or balance [B63B 9/08](#); apparatus for indicating vessel attitude, e.g. inclination or duration of roll [B63B39/00](#)])
  
- G01M11/00** **Testing of optical apparatus; Testing structures by optical methods not otherwise provided for**

[N: **WARNING**  
[N1207]

Groups [G11M11/30](#) - [G11M11/39](#) do not correspond to former or future IPC groups.  
Concordance ECLA : IPC for these groups is as follows:  
- [G01M11/30-G01M11/38](#) : [G01M11/00](#)  
]
- G01M11/00C . [N: Testing of reflective surfaces, e.g. mirrors]
- G01M11/02 . Testing of optical properties [N: of lenses]
- G01M11/02A . . [N: Details of measuring devices] [N9603]
- G01M11/02A2 . . . [N: Details of devices holding the object to be tested] [N0911]
- G01M11/02B . . [N: by determining the optical axis or position of lenses] [N9603]
- G01M11/02C . . [N: by measuring refractive power] [N9603]
- G01M11/02C2 . . . [N: by measuring multiple properties of lenses, automatic lens meters] [N9603]
- G01M11/02D . . [N: by measuring geometrical properties or aberrations] [N9603]
- G01M11/02D2 . . . [N: by determining the shape of the object to be tested (measuring contours or curvatures by optical means [G01B11/24](#))] [N0911]
- G01M11/02D4 . . . [N: by analyzing the image formed by the object to be tested] [N0911]
- G01M11/02D4A . . . . [N: by using targets or reference patterns] [N0911]
- G01M11/02D6 . . . [N: by using interferometric methods] [N0911]
- G01M11/02D8 . . . [N: Detecting defects of the object to be tested, e.g. scratches or dust (investigating the presence of flaws or contamination on materials by optical means [G01N21/88](#))] [N0911]
- G01M11/02E . . [N: by measuring material or chromatic transmission properties ([G01M11/02F](#) takes precedence)] [N9603]
- G01M11/02F . . [N: of objectives by measuring the optical modulation transfer function (photometry [G01J](#))]
- G01M11/04 . . Optical benches
- G01M11/06 . . Testing of alignment of vehicle head-light devices

- G01M11/06A . . . [N: Details of the mechanical construction of the light measuring system ([G01M11/06C](#) takes precedence)] [N0810]
- G01M11/06B . . . [N: using an indicator mounted on the head-light] [N9502]
- G01M11/06C . . . [N: by using camera or other imaging system for the light analysis] [N0810]
- G01M11/06C2 . . . . [N: details about the image analysis] [N0810]
- G01M11/06D . . . [N: Details of the vehicle positioning system, e.g. by using a laser] [N0810]
- G01M11/06E . . . [N: with part of the measurements done from inside the vehicle] [N0810]
  
- G01M11/08 . Testing of mechanical properties [N: ([G01M11/00C](#) takes precedence)]
- G01M11/08A . . [N: by using a contact-less detection method, i.e. with a camera] [N0910]
- G01M11/08B . . [N: by using an optical fiber in contact with the device under test (DUT)] [N0910]
- G01M11/08B2 . . . [N: the optical fiber being on or near the surface of the DUT] [N0910]
- G01M11/08B4 . . . [N: Details about the embedment of the optical fiber within the DUT] [N0910]
- G01M11/08F . . [N: of optical fibres; Mechanical features associated with the optical testing of optical fibres (material testing in general [G01N](#))]
  
- G01M11/30 . [N: Testing of optical devices, constituted by fibre optics or optical waveguides (measuring a given physical parameter of optical fibres, see the relevant subclasses, e.g. G01B, G01N; equipment for monitoring, testing or fault measuring in optical transmission systems H04B10/07 )] [N1204]
- G01M11/31 . . [N: with a light emitter and a light receiver being disposed at the same side of a fibre or waveguide end-face, e.g. reflectometers] [N1204]
- G01M11/31A . . . [N: Reflectometers detecting the back-scattered light in the time-domain, e.g. OTDR] [N1204]
- G01M11/31A2 . . . . [N: using coded light-pulse sequences] [N1204]
- G01M11/31A4 . . . . [N: using multiple or wavelength variable input source] [N1204]
- G01M11/31A6 . . . . [N: for testing of multiple fibers] [N1204]
- G01M11/31A8 . . . . [N: Details of the optoelectronics or data analysis] [N1204]
- G01M11/31A10 . . . . [N: Details of the opto-mechanical connection, e.g. connector or repeater] [N1204]
- G01M11/31A12 . . . . [N: by measuring dispersion] [N1204]
- G01M11/31B . . . [N: Reflectometers detecting the back-scattered light in the frequency-domain, e.g. OFDR, FMCW, heterodyne detection] [N1204]
- G01M11/31C . . . [N: Reflectometers dealing with polarisation] [N1204]
- G01M11/31D . . . [N: Reflectometers using stimulated back-scatter, e.g. Raman or fibre amplifiers] [N1204]
- G01M11/33 . . [N: with a light emitter being disposed at one fibre or waveguide end-face, and a light receiver at the other end-face] [N1204]
- G01M11/33A . . . [N: by using interferometer] [N1204]
- G01M11/33B . . . [N: using discrete input signals (G01M11/33C takes precedence)] [N1204]
- G01M11/33C . . . [N: using modulated input signals] [N1204]
- G01M11/33C2 . . . . [N: with light chopping means] [N1204]
- G01M11/33D . . . [N: using two or more input wavelengths] [N1204]
- G01M11/33E . . . [N: by measuring polarization mode dispersion [PMD]] [N1204]
- G01M11/33F . . . [N: by measuring polarization dependent loss [PDL]] [N1204]
- G01M11/33G . . . [N: by measuring dispersion other than PMD, e.g. chromatic dispersion] [N1204]

- G01M11/35 . . [N: in which light is transversely coupled into or out of the fibre or waveguide, e.g. using integrating spheres (G01M11/31 takes precedence)] [N1204]
- G01M11/37 . . [N: in which light is projected perpendicularly to the axis of the fibre or waveguide for monitoring a section thereof] [N1204]
- G01M11/39 . . [N: in which light is projected from both sides of the fiber or waveguide end-face] [N1204]

**G01M13/00**      **Testing of machine parts** (investigating the cutting power of tools, G01N, e.g. [G01N3/58](#))

- G01M13/00B . [N: Testing of sealing rings]
- G01M13/02 . Testing of gearing or of transmission mechanisms (measuring efficiency [G01L](#))
- G01M13/02B . . [N: of gearings]
- G01M13/02C . . [N: of power-transmitting couplings or clutches]
- G01M13/02D . . [N: of power-transmitting endless elements, e.g. belts, chains]
- G01M13/02H . . [N: Test-benches using a rotational drive and loading means; Load/drive simulation]
- G01M13/02H2 . . . [N: of the mechanical closed-loop type]
- G01M13/02J . . [N: Test-benches using force applying means, e.g. loading of drive shafts along several directions]
- G01M13/02M . . [N: Acoustic or vibration analysis]
- G01M13/04 . Testing of bearings
- G01M13/04B . . [N: by acoustic or vibration analysis] [N0509]

**G01M15/00**      **Testing of engines** [C0410]

**Note**

[N0410] Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Measurement of mechanical vibrations in general G01H

Analysing gases in general G01N

Arrangements for testing electrical properties; Arrangements for locating electric faults;

Arrangements for electrical testing characterised by what is being tested not provided for elsewhere [G01R31/00](#).

- G01M15/02 . Details or accessories of testing apparatus [N0410]
- G01M15/04 . Testing of internal-combustion engines, e.g. diagnostic testing of piston engines [N0410]

**Note**

[N0410] Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Monitoring or diagnostic devices for exhaust-gas treatment apparatus [F01N11/00](#)

Indicating or supervising devices of internal-combustion engines [F02B77/08](#)

Running in of internal-combustion engines [F02B79/00](#)

Controlling combustion engines F02D

Apparatus for testing, tuning or synchronising carburettors, e.g. carburettor flow stands [F02M19/01](#)  
 Testing fuel-injection apparatus [F02M65/00](#)  
 Testing internal-combustion engine ignition, e.g. timing [F02P17/00](#)  
 Devices for determining the value of power, e.g. by measuring and simultaneously multiplying the values of torque and revolutions per unit of time, by multiplying the values of tractive or propulsive force and velocity [G01L3/24](#)  
 Determining the characteristic of torque in relation to revolutions per unit of time [G01L5/26](#)  
 Devices for detecting or indicating knocks in internal-combustion engines [G01L23/22](#)  
 Devices for measuring pressure in inlet or exhaust ducts of internal combustion engines [G01L23/24](#)  
 Means for indicating positions of pistons or cranks of internal-combustion engines by measuring pressure [G01L23/30](#).

**Note**

[N0410] [N: IPC8] Group [G01M15/05](#) takes precedence over groups [G01M15/04D](#) and [G01M15/06](#) to [G01M15/12](#).

- G01M15/04D . . [N: by monitoring a single specific parameter not covered by groups [G01M15/06](#) to [G01M15/12](#)] [N0410]
- G01M15/04D2 . . . [N: by monitoring power, e.g. by operating the engine with one of the ignitions interrupted; by using acceleration tests] [N0410]
- G01M15/04D8 . . . [N: by monitoring revolutions (for detecting misfire [G01M15/11](#))] [N0410]
- G01M15/04D10 . . . [N: by monitoring temperature] [N0410]
- G01M15/05 . . by combined monitoring of two or more different engine parameters [N0410]
- G01M15/06 . . by monitoring positions of pistons or cranks [N0410]
- G01M15/08 . . by monitoring pressure in cylinders [N0410]
- G01M15/09 . . by monitoring pressure in fluid ducts, e.g. in lubrication or cooling parts [N0410]
- G01M15/10 . . by monitoring exhaust gases [N: or combustion flame (analyses of gases per se G01N)] [N0410]
- G01M15/10E . . . [N: by monitoring exhaust gases] [N0410]
- G01M15/10E2 . . . . [N: using oxygen or lambda-sensors (testing catalytic converters [F01N3/18](#), [F01N7/00E](#))] [N0410]
- G01M15/10E4 . . . . [N: using pressure sensors] [N0410]
- G01M15/10E6 . . . . [N: using optical methods] [N0410]
- G01M15/11 . . by detecting misfire [N0410]
- G01M15/12 . . by monitoring vibrations [N0410]
- G01M15/14 . Testing of gas-turbine plants or jet-propulsion plants [N0410]

**Note**

[N0410] [N: IPC8] Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group: Rocket-engine plants characterised by specially adapted arrangements for testing or measuring [F02K9/96](#).

**G01M17/00**

**Testing of vehicles** ([G01M15/00](#) takes precedence; testing fluid tightness [G01M3/00](#); testing elastic properties of bodies or chassis, e.g. torsion testing [G01M5/00](#); testing alignment of vehicle head-lighting devices [G01M11/06](#); [N: testing brakes [G01L5/28](#)])

- G01M17/007 . [N: of wheeled or endless-tracked vehicles ([G01M17/08](#) takes precedence)]
- G01M17/007B . . [N: the wheels of the vehicle co-operating with rotatable rolls ([G01M17/02B](#), [G01M17/04B](#), [G01M17/06B](#) take precedence)] [C9602]
- G01M17/007B2 . . . [N: Details, e.g. roller construction, vehicle restraining devices] [N9602]
- G01M17/007B4 . . . [N: for two-wheeled vehicles] [N9602]
- G01M17/007C . . [N: Shock-testing of vehicles (shock-testing of structures in general [G01M7/08](#), [G01N3/30](#))]
- G01M17/013 . . of wheels
- G01M17/02 . . of tyres
- G01M17/02A . . . [N: Tyre supporting devices, e.g. chucks (for balancing [G01M1/04](#))]
- G01M17/02B . . . [N: the tyre co-operates with rotatable rolls]
- G01M17/02B2 . . . . [N: combined with tyre surface correcting or marking means (compensating unbalance [G01M1/30](#); marking location of unbalance [G01M1/26](#))]
- G01M17/02E . . . [N: using infrasonic, sonic or ultrasonic vibrations (for material testing in general [G01N29/00](#))]
- G01M17/02G . . . [N: using light, e.g. infra-red, ultra-violet, holographic techniques (for material testing in general [G01N21/00](#))]
- G01M17/02J . . . [N: using X-rays (for material testing in general [G01N23/00](#))]
- G01M17/03 . . of endless-tracks
- G01M17/04 . . of suspension or of damping
- G01M17/04B . . . [N: the vehicle wheels co-operating with rotatable rollers]
- G01M17/06 . . of steering behaviour; of rolling behaviour (measuring steering angles [G01B](#); measuring steering forces [G01L](#))
- G01M17/06B . . . [N: the vehicle wheels co-operating with rotatable rolls]
- G01M17/08 . of railway vehicles
- G01M17/10 . . of suspensions, axles or wheels

**G01M99/00**      **Subject matter not provided for in other groups of this subclass** [N1012]

- G01M99/00A . [N: Testing of furniture, e.g. seats or mattresses] [N1012]
- G01M99/00B . [N: Thermal testing (flaw detection [G01N25/72](#))] [N1012]
- G01M99/00C . [N: Testing the effects of speed or acceleration] [N1012]
- G01M99/00D . [N: Testing of complete machines, e.g. washing-machines or mobile phones (testing of machine parts [G01M13/00](#); testing of electric apparatus or components [G01R31/02](#))] [N1012]
- [N: **Notes**  
[N1012]  
This group covers mechanical testing of complete machines]
- G01M99/00E . [N: by applying a load, e.g. for resistance or wear testing ([G01M19/00A](#) takes precedence; testing the elasticity of structures [G01M5/00](#))] [N1012]
- G01M99/00F . [N: by doing functionality tests] [N1012]