

SECTION G — PHYSICS

G01 MEASURING; TESTING

G01M TESTING STATIC OR DYNAMIC BALANCE OF MACHINES OR STRUCTURES; TESTING OF STRUCTURES OR APPARATUS, NOT OTHERWISE PROVIDED FOR

Note(s)

Attention is drawn to the Notes following the title of class G01.

Subclass index

TESTING STATIC OR DYNAMIC BALANCE OF MACHINES OR STRUCTURES.....1/00
 INVESTIGATING FLUID-TIGHTNESS; ELASTICITY.....3/00, 5/00
 VIBRATION- OR SHOCK-TESTING.....7/00
 SPECIAL APPLICATIONS
 Aerodynamic; hydrodynamic testing.....9/00, 10/00
 Optical testing.....11/00
 Mechanical or engine testing.....13/00, 15/00, 17/00
 SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....99/00

<p>1/00 Testing static or dynamic balance of machines or structures [1, 2006.01]</p> <p>1/02 • Details of balancing machines or devices [1, 2006.01]</p> <p>1/04 • • Adaptation of bearing support assemblies for receiving the body to be tested [1, 2006.01]</p> <p>1/06 • • Adaptation of drive assemblies for receiving the body to be tested [1, 2006.01]</p> <p>1/08 • • Instruments for indicating directly the magnitude and phase of the imbalance [1, 2006.01]</p> <p>1/10 • Determining the moment of inertia [1, 2006.01]</p> <p>1/12 • Static balancing; Determining position of centre of gravity (by determining imbalance G01M 1/14) [1, 2006.01]</p> <p>1/14 • Determining imbalance (G01M 1/30, G01M 1/38 take precedence) [1, 2006.01]</p> <p>1/16 • • by oscillating or rotating the body to be tested [1, 2006.01]</p> <p>1/18 • • • and running the body down from a speed greater than normal [1, 2006.01]</p> <p>1/20 • • • and applying external forces compensating forces due to imbalance [1, 2006.01]</p> <p>1/22 • • • and converting vibrations due to imbalance into electric variables [1, 2006.01]</p> <p>1/24 • • • Performing balancing on elastic shafts, e.g. for crankshafts [1, 2006.01]</p> <p>1/26 • • • with special adaptations for marking, e.g. by drilling [1, 2006.01]</p> <p>1/28 • • • with special adaptations for determining imbalance of the body <i>in situ</i>, e.g. of vehicle wheels [1, 2006.01]</p> <p>1/30 • Compensating imbalance (G01M 1/38 takes precedence) [1, 2006.01]</p> <p>1/32 • • by adding material to the body to be tested, e.g. by correcting-weights [1, 2006.01]</p> <p>1/34 • • by removing material from the body to be tested, e.g. from the tread of tyres [1, 2006.01]</p>	<p>1/36 • • by adjusting position of masses built-in the body to be tested [1, 2006.01]</p> <p>1/38 • Combined machines or devices for both determining and correcting imbalance [1, 2006.01]</p> <p>3/00 Investigating fluid tightness of structures [1, 2006.01]</p> <p>3/02 • by using fluid or vacuum [1, 2006.01]</p> <p>3/04 • • by detecting the presence of fluid at the leakage point [1, 2006.01]</p> <p>3/06 • • • by observing bubbles in a liquid pool [1, 2006.01]</p> <p>3/08 • • • for pipes, cables, or tubes; for pipe joints or seals; for valves [1, 2006.01]</p> <p>3/10 • • • for containers, e.g. radiators [1, 2006.01]</p> <p>3/12 • • • by observing elastic covers or coatings, e.g. soapy water [1, 2006.01]</p> <p>3/14 • • • for pipes, cables, or tubes; for pipe joints or seals; for valves [1, 2006.01]</p> <p>3/16 • • • using electric detection means (G01M 3/06, G01M 3/12, G01M 3/20, G01M 3/24, G01M 3/26 take precedence) [1, 2006.01]</p> <p>3/18 • • • for pipes, cables, or tubes; for pipe joints or seals; for valves [1, 2006.01]</p> <p>3/20 • • • using special tracer materials, e.g. dye, fluorescent material, radioactive material [1, 2006.01]</p> <p>3/22 • • • for pipes, cables, or tubes; for pipe joints or seals; for valves [1, 2006.01]</p> <p>3/24 • • • using infrasonic, sonic, or ultrasonic vibrations [1, 2006.01]</p> <p>3/26 • • by measuring rate of loss or gain of fluid, e.g. by pressure-responsive devices, by flow detectors [1, 2, 2006.01]</p> <p>3/28 • • • for pipes, cables, or tubes; for pipe joints or seals; for valves [1, 2, 2006.01]</p>
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G01M

- 3/30 • • • using progressive displacement of one fluid by another [1, 2, 2006.01]
- 3/32 • • • for containers, e.g. radiators [1, 2, 2006.01]
- 3/34 • • • by testing the possibility of maintaining the vacuum in containers, e.g. in can-testing machines [1, 2, 2006.01]
- 3/36 • • by detecting change in dimensions of the structure being tested [1, 2006.01]
- 3/38 • by using light (G01M 3/02 takes precedence) [1, 2006.01]
- 3/40 • by using electric means, e.g. by observing electric discharges [1, 2006.01]
- 5/00 Investigating the elasticity of structures, e.g. deflection of bridges or aircraft wings (G01M 9/00 takes precedence) [1, 2006.01]**
- 7/00 Vibration-testing of structures; Shock-testing of structures (G01M 9/00 takes precedence) [1, 2006.01]**
 - 7/02 • Vibration-testing [5, 2006.01]
 - 7/04 • • Monodirectional test stands [5, 2006.01]
 - 7/06 • • Multidirectional test stands [5, 2006.01]
 - 7/08 • Shock-testing [5, 2006.01]
- 9/00 Aerodynamic testing; Arrangements in or on wind tunnels [1, 2006.01]**
 - 9/02 • Wind tunnels [5, 2006.01]
 - 9/04 • • Details [5, 2006.01]
 - 9/06 • Measuring arrangements specially adapted for aerodynamic testing [5, 2006.01]
 - 9/08 • Aerodynamic models [5, 2006.01]
- 10/00 Hydrodynamic testing; Arrangements in or on ship-testing tanks or water tunnels [1, 2006.01]**
- 11/00 Testing of optical apparatus; Testing structures by optical methods not otherwise provided for [1, 2006.01]**
 - 11/02 • Testing optical properties [1, 2006.01]
 - 11/04 • • Optical benches therefor [1, 2006.01]
 - 11/06 • • Testing the alignment of vehicle headlight devices [1, 2006.01]
 - 11/08 • Testing mechanical properties [1, 2006.01]
- 13/00 Testing of machine parts [1, 2006.01, 2019.01]**
 - 13/003 • Machine valves (testing valves for fluid tightness G01M 3/00) [2019.01]
 - 13/005 • Sealing rings [2019.01]
 - 13/02 • Gearings; Transmission mechanisms [1, 2006.01, 2019.01]
 - 13/021 • • Gearings [2019.01]
 - 13/022 • • Power-transmitting couplings or clutches [2019.01]
- 13/023 • • Power-transmitting endless elements, e.g. belts or chains [2019.01]
- 13/025 • • Test-benches with rotational drive means and loading means; Load or drive simulation [2019.01]
- 13/026 • • • Test-benches of the mechanical closed-loop type, i.e. having a gear system constituting a closed-loop in combination with the object under test [2019.01]
- 13/027 • • Test-benches with force-applying means, e.g. loading of drive shafts along several directions [2019.01]
- 13/028 • • Acoustic or vibration analysis [2019.01]
- 13/04 • Bearings [1, 2006.01, 2019.01]
- 13/045 • • Acoustic or vibration analysis [2019.01]
- 15/00 Testing of engines [1, 4, 2006.01]**
 - 15/02 • Details or accessories of testing apparatus [2006.01]
 - 15/04 • Testing internal-combustion engines [2006.01]
 - 15/05 • • by combined monitoring of two or more different engine parameters [2006.01]
- Note(s) [2006.01]**

Group G01M 15/05 takes precedence over groups G01M 15/06-G01M 15/12.
- 15/06 • • by monitoring positions of pistons or cranks [2006.01]
- 15/08 • • by monitoring pressure in cylinders [2006.01]
- 15/09 • • by monitoring pressure in fluid ducts, e.g. in lubrication or cooling parts [2006.01]
- 15/10 • • by monitoring exhaust gases [2006.01]
- 15/11 • • by detecting misfire [2006.01]
- 15/12 • • by monitoring vibrations [2006.01]
- 15/14 • Testing gas-turbine engines or jet-propulsion engines [2006.01]
- 17/00 Testing of vehicles (testing fluid tightness G01M 3/00; testing elastic properties of bodies or chassis, e.g. torsion-testing, G01M 5/00; testing alignment of vehicle headlight devices G01M 11/06; testing of engines G01M 15/00) [1, 2006.01]**
 - 17/007 • Wheeled or endless-tracked vehicles (G01M 17/08 takes precedence) [6, 2006.01]
 - 17/013 • • Wheels [6, 2006.01]
 - 17/02 • • Tyres [1, 6, 2006.01]
 - 17/03 • • Endless-tracks [6, 2006.01]
 - 17/04 • • Suspension or damping [1, 6, 2006.01]
 - 17/06 • • Steering behaviour; Rolling behaviour [1, 6, 2006.01]
 - 17/08 • Railway vehicles [6, 2006.01]
 - 17/10 • • Suspensions, axles or wheels [6, 2006.01]
- 99/00 Subject matter not provided for in other groups of this subclass [2011.01]**