

**CPC****COOPERATIVE PATENT CLASSIFICATION****G01G****WEIGHING** (sorting by weighing [B07C 5/16](#))**NOTE**

Attention is drawn to the Notes following the title of class [G01](#) .

**Guidance heading:****G01G 1/00****Weighing apparatus involving the use of a counterweight or other counterbalancing mass**

- G01G 1/02 . Pendulum-weight apparatus
- G01G 1/025 . . {with variable cam radius or variable counterpoise pendulum }
- G01G 1/04 . . The pendulum having a fixed pivot axis
- G01G 1/06 . . . with a plurality of pendulums
- G01G 1/08 . . The pendulum having a moving pivot axis, e.g. a floating pendulum
- G01G 1/10 . . . with a plurality of pendulums
- G01G 1/12 . . Constructional arrangements for obtaining equal indicative divisions
- G01G 1/14 . . Temperature compensating arrangements
- G01G 1/16 . . Means for correcting for obliquity of mounting
  
- G01G 1/18 . Balances involving the use of a pivoted beam, i.e. beam balances
- G01G 1/185 . . {Two draft weighing apparatus e.g. tandem scales systems }
- G01G 1/20 . . Beam balances having the pans carried below the beam, and for use with separate counterweights
- G01G 1/22 . . . for precision weighing
- G01G 1/24 . . Platform-type scales, i.e. having the pans carried above the beam
- G01G 1/243 . . . {having pans carried above the beam }
- G01G 1/246 . . . {of the parallelogram type }
- G01G 1/26 . . with associated counterweight or set of counterweights
- G01G 1/28 . . . involving means for automatically lifting counterweights corresponding to the load
- G01G 1/29 . . . with electrical or electro-mechanical control means
- G01G 1/30 . . wherein the counterweight is in the form of a chain
- G01G 1/32 . . wherein the counterweights are in the form of rider-weights
- G01G 1/34 . . involving a fixed counterweight, with poise-weights selectively added to the load side
- G01G 1/36 . . wherein the counterweights are slideable along the beam, e.g. steelyards
- G01G 1/38 . . . with automatically-driven counterweight
- G01G 1/40 . . specially adapted for weighing by substitution
- G01G 1/42 . . Temperature compensating arrangements

- G01G 3/00**      **Weighing apparatus characterised by the use of elastically-deformable members, e.g. spring balances**
- G01G 3/02      . wherein the weighing element is in the form of a helical spring
  - G01G 3/04      . . using a plurality of springs
  - G01G 3/06      . wherein the weighing element is in the form of a spiral spring
  - G01G 3/08      . wherein the weighing element is in the form of a leaf spring
  - G01G 3/10      . wherein the torsional deformation of a weighing element is measured
  - G01G 3/12      . wherein the weighing element is in the form of a solid body stressed by pressure or tension during weighing
  - G01G 3/125      . . {wherein the weighing element is an optical member }
  - G01G 3/13      . . having piezo-electric or piezo-resistive properties
  - G01G 3/14      . . measuring variations of electrical resistance ([G01G 3/13 takes precedence](#))
  - G01G 3/1402      . . . {Special supports with preselected places to mount the resistance strain gauges; Mounting of supports }
  - G01G 3/1404      . . . . {combined with means to connect the strain gauges on electrical bridges }
  - G01G 3/1406      . . . . {combined with special measuring circuits }
  - G01G 3/1408      . . . . {the supports being of the column type, e.g. cylindric }
  - G01G 3/141      . . . . {the supports being disc or ring shaped }
  - G01G 3/1412      . . . . {the supports being parallelogram shaped }
  - G01G 3/1414      . . . {Arrangements for correcting or for compensating for unwanted effects }
  - G01G 3/1416      . . . . {for non-linearity }
  - G01G 3/1418      . . . . {for temperature variations }
  - G01G 3/142      . . . Circuits specially adapted therefor
  - G01G 3/145      . . . . involving comparison with a reference value ([G01G 3/147 takes precedence](#))
  - G01G 3/147      . . . . involving digital counting
  - G01G 3/15      . . measuring variations of magnetic properties
  - G01G 3/16      . . measuring variations of frequency of oscillations of the body
  - G01G 3/165      . . . {Constructional details }
  - G01G 3/18      . Temperature-compensating arrangements
- G01G 5/00**      **Weighing apparatus wherein the balancing is effected by fluid action**
- G01G 5/003      . {load-cell construction or mountings }
  - G01G 5/006      . {with pneumatic means }
  - G01G 5/02      . with a float or other member variably immersed in liquid
  - G01G 5/04      . with means for measuring the pressure imposed by the load on a liquid ([pressure gauges per se G01L](#) )

- G01G 5/045 . . {combined with means for totalising the pressure imposed by several load-cells }
- G01G 5/06 . . with electrical indicating means
  
- G01G 7/00** **Weighing apparatus wherein the balancing is effected by magnetic, electromagnetic, or electrostatic action, or by means not provided for in the preceding groups**
  
- G01G 7/02 . by electromagnetic action
- G01G 7/04 . . with means for regulating the current to solenoids
- G01G 7/045 . . . {having a PID control system }
- G01G 7/06 . by electrostatic action
  
- G01G 9/00** **Methods or apparatus for the determination of weight not otherwise provided for**
  
- G01G 9/005 . {using radiations, e.g. radioactive (analysing materials by the use of wave or particle radiation [G01N 23/00](#)) }
  
- G01G 11/00** **Apparatus for weighing a countinuous stream of material during flow; Conveyer belt weighers**
  
- G01G 11/003 . {Details; specially adapted accessories (details of weighing apparatus in general [G01G 21/00](#); auxiliary devices for weighing apparatus in general [G01G 23/00](#)) }
- G01G 11/006 . {Special taring or checking devices therefor (devices for determining tare weight in general [G01G 23/14](#)) }
- G01G 11/02 . having mechanical weight-sensitive devices
- G01G 11/025 . . {combined with totalising or integrating devices }
- G01G 11/04 . having electrical weight-sensitive devices
- G01G 11/043 . . {combined with totalising or integrating devices }
- G01G 11/046 . . . {involving digital counting }
- G01G 11/06 . having fluid weight-sensitive devices
- G01G 11/065 . . {combined with totalising or integrating devices }
- G01G 11/08 . having means for controlling the rate of feed or discharge (regulation of flow of fluent material [G05D](#) )
- G01G 11/083 . . {of the weight-belt or weigh-auger type ([G01G 11/10](#), [G01G 11/12](#) take precedence) }
- G01G 11/086 . . {of the loss-in-weight feeding type }
- G01G 11/10 . . by controlling the height of the material on the belt
- G01G 11/12 . . by controlling the speed of the belt
- G01G 11/14 . using totalising or integrating devices (totalising or integrating devices per se [G06](#) ) {[G01G 11/025](#), [G01G 11/043](#), [G01G 11/046](#) and [G01G 11/065](#) take precedence }
- G01G 11/16 . . being electrical or electronic means

- G01G 11/18 . . . using digital counting
- G01G 11/20 . . being mechanical means
  
- G01G 13/00** **Weighing apparatus with automatic feed or discharge for weighing-out batches of material** (for weighing a continuous stream [G01G 11/00](#); check-weighing [G01G 15/00](#); for fluids [G01G 17/04](#); apportioning by weight materials to be mixed [G01G 19/22](#); combinatorial weighing [G01G 19/387](#))
  
- G01G 13/003 . { Details; specially adapted accessories (details of weighing apparatus in general [G01G 21/00](#); auxiliary devices for weighing apparatus in general [G01G 23/00](#)) }
- G01G 13/006 . . {Container supply or discharge mechanism (means for automatic loading or discharging [G01G 13/02](#), [G01G 13/16](#), [G01G 13/24](#)) }
  
- G01G 13/02 . Means for automatically loading weigh pans or other receptacles, e.g. disposable containers, under control of the weighing mechanism
- G01G 13/022 . . {Material feeding devices ([G01G 13/04](#) to [G01G 13/14](#) take precedence) }
- G01G 13/024 . . . {by gravity }
- G01G 13/026 . . . {by mechanical conveying means, e.g. belt or vibratory conveyer }
- G01G 13/028 . . . {by pneumatic carrying means }
- G01G 13/04 . . involving dribble-feed means controlled by the weighing mechanism to top up the receptacle to the target weight
- G01G 13/06 . . . wherein the main feed is effected by gravity from a hopper or chute
- G01G 13/08 . . . wherein the main feed is effected by mechanical conveying means, e.g. by belt conveyers, by vibratory conveyers
- G01G 13/10 . . . wherein the main feed is effected by pneumatic conveying means, e.g. by fluidised feed of granular material
- G01G 13/12 . . Arrangements for compensating for material suspended at cut-off, i.e. for material which is still falling from the feeder when the weigher stops the feeder
- G01G 13/14 . . Arrangements for determination of, or compensation for, the tare weight of an unloaded container, e.g. of a disposable container
  
- G01G 13/16 . Means for automatically discharging weigh receptacles under control of the weighing mechanism
- G01G 13/18 . . by valves or flaps in the container bottom
- G01G 13/20 . . by screw conveyers in the weigh receptacle
- G01G 13/22 . . by tilting or rotating the weigh receptacle
  
- G01G 13/24 . Weighing mechanism control arrangements for automatic feed or discharge
- G01G 13/241 . . {Bulk-final weighing apparatus e.g. rough weighing balance combined with separate fine weighing balance }
- G01G 13/242 . . {Twin weighing apparatus; weighing apparatus using single load carrier and a plurality of weigh pans coupled alternately with the load carrier; weighing apparatus with two or more alternatively used weighing devices }
- G01G 13/243 . . . {using a single load carrier }
- G01G 13/244 . . . . {with a single weighing receptacle divided into two or more alternatively used sections }
- G01G 13/245 . . . . . {the weighing receptacles being rockable or oscillating }
- G01G 13/246 . . . . . {the weighing apparatus being rotatable }

G01G 13/247	..	{ Checking quantity of material in the feeding arrangement, e.g. discharge material only if a predetermined quantity is present }
G01G 13/248	..	{Continuous control of flow of material ( <a href="#">control of flow G05D 7/00</a> ) }
G01G 13/26	..	involving fluid-pressure systems
G01G 13/28	..	involving variation of an electrical variable which is used to control loading or discharge of the receptacle
G01G 13/285	...	involving comparison with a reference value ( <a href="#">G01G 13/29 takes precedence</a> ; {electric measuring arrangements involving comparison with a reference value <a href="#">G01R 17/00</a> })
G01G 13/2851	....	{for controlling automatic loading of weigh pans or other receptacles ( <a href="#">G01G 13/29 takes precedence</a> ) }
G01G 13/2852	.....	{involving dribble-feed means controlled by the weighing mechanism to top up the receptacle to the target weight }
G01G 13/2853	.....	{wherein the main feed is effected by gravity from a hopper or chute }
G01G 13/2855	.....	{wherein the main feed is effected by mechanical conveying means, e.g. by belt conveyers, by vibratory conveyers }
G01G 13/2856	.....	{wherein the main feed is effected by pneumatic conveying means, e.g. by fluidised feed of granular material }
G01G 13/2857	.....	{Arrangements for compensating for material suspended at cut-off, i.e. for material which is still falling from the feeder when the weigher stops the feeder }
G01G 13/2858	.....	{Arrangements for the determination of, or compensation for, the tare weight of an unloaded container, e.g. of a disposable container }
G01G 13/29	...	involving digital counting
G01G 13/2906	....	{for controlling automatic loading of weigh-pans or other receptacles }
G01G 13/2912	.....	{involving dribble-feed means controlled by the weighing mechanism to top up the receptacle to the target weight }
G01G 13/2918	.....	{wherein the main feed is effected by gravity from a hopper or chute }
G01G 13/2925	.....	{wherein the main feed is effected by mechanical means, e.g. by belt conveyers, by vibratory conveyers }
G01G 13/2931	.....	{wherein the main feed is effected by pneumatic conveying means, e.g. by fluidised feed of granular material }
G01G 13/2937	.....	{Arrangements for compensating for material suspended at cut-off, i.e. for material which is still falling from the feeder when the weigher stops the feeder }
G01G 13/2943	.....	{Arrangements for determination of, or compensation for, the tare weight of an unloaded container, e.g. of a disposable container }
G01G 13/295	...	for controlling automatic loading of the receptacle { <a href="#">G01G 13/285</a> , <a href="#">G01G 13/29</a> take precedence }
G01G 13/2951	....	{involving dribble-feed means controlled by the weighing mechanism to top up the receptacle to the target weight }
G01G 13/2952	.....	{wherein the main feed is effected by gravity from a hopper or chute }
G01G 13/2954	.....	{wherein the main feed is effected by mechanical conveying means, e.g. by belt conveyers, by vibratory conveyers }
G01G 13/2955	.....	{wherein the main feed is effected by pneumatic conveying means, e.g. by fluidised feed of granular material }
G01G 13/2957	....	{Arrangements for compensating for material suspended at cut-off, i.e. for material which is still falling from the feeder when the weigher stops the feeder }

- G01G 13/2958 . . . . {Arrangements for the determination of, or compensation for, the tare weight of an unloaded container, e.g. a disposable container }
- G01G 13/30 . . involving limit switches or position-sensing switches
- G01G 13/32 . . . involving photoelectric devices
- G01G 13/34 . . involving mechanical linkage motivated by weighing mechanism

**G01G 15/00** **Arrangements for check-weighing of materials dispensed into removable containers** (packaging aspects [B65B](#) ; {electric measuring arrangements involving comparison with a reference value [G01R 17/00](#) })

- G01G 15/001 . {Volumetric pre-dispensing to an estimated weight; Gravimetric make-up device for target device }
- G01G 2015/002 . . {using electrical, electromechanical or electronic means }
- G01G 2015/003 . . . {involving digital counting }
- G01G 2015/005 . . . {involving comparison with reference value }
- G01G 15/006 . {using electrical, electromechanical, or electronic means not covered by [G01G 15/001](#), [G01G 15/02](#), [G01G 15/04](#) }
- G01G 2015/007 . . {involving digital counting }
- G01G 2015/008 . . {involving comparison with a reference value }
- G01G 15/02 . with provision for adding or removing a make-up quantity of material to obtain the desired net weight (dribble-feed means for automatic batch-weighers [G01G 13/04](#))
- G01G 2015/022 . . {using electrical, electromechanical or electronic means }
- G01G 2015/025 . . . {involving digital counting }
- G01G 2015/027 . . . {involving comparison with a reference value }
- G01G 15/04 . with provision for adding or removing a make-up quantity of material to obtain the desired gross weight (dribble-feed means for automatic batch-weighers [G01G 13/04](#))
- G01G 2015/042 . . {using electrical, electromechanical or electronic means }
- G01G 2015/045 . . . {involving digital counting }
- G01G 2015/047 . . . {involving comparison with a reference value }

**G01G 17/00** **Apparatus for or methods of weighing material of special form or property** (determining weight by measuring volume [G01F](#) )

- G01G 17/02 . for weighing material of filamentary or sheet form
- G01G 17/04 . for weighing fluids, e.g. gases, pastes
- G01G 17/06 . . having means for controlling the supply or discharge
- G01G 17/08 . for weighing livestock

**G01G 19/00** **Weighing apparatus or methods adapted for special purposes not provided for in the preceding groups** { (electric measuring arrangements involving comparison with a reference value [G01R 17/00](#) ) }

- G01G 19/002 . {for postal parcels and letters }

- G01G 19/005 . . {with electric or electronic computing means }
- G01G 19/007 . {fractioning a determined weight of material in several equal parts }
- G01G 19/02 . for weighing wheeled or rolling bodies, e.g. vehicles
- G01G 19/021 . . {having electrical weight-sensitive devices ([G01G 19/04](#) to [G01G 19/07](#) take precedence) }
- G01G 19/022 . . {for weighing wheeled or rolling bodies in motion ([G01G 19/045](#) takes precedence) }
- G01G 19/024 . . . {using electrical weight-sensitive devices }
- G01G 19/025 . . {wheel-load scales }
- G01G 19/027 . . . {using electrical weight-sensitive devices }
- G01G 19/028 . . {combined with shock-absorbing devices (shock-absorbing arrangements for bearings [G01G 21/02](#); means for damping oscillations [G01G 23/06](#); shock-absorbers per se [F16F](#) ) }
- G01G 19/03 . . for weighing during motion ([G01G 19/04](#), [G01G 19/07](#) take precedence) { check weighing of materials dispensed into removable containers [G01G 15/00](#); weighing a continuous stream of material during flow [G01G 11/00](#); [G01G 19/02](#), e.g. [G01G 19/022](#), [G01G 19/045](#) take precedence }
- G01G 19/035 . . . {using electrical weight-sensitive devices }
- G01G 19/04 . . for weighing railway vehicles
- G01G 19/042 . . . {having electrical weight-sensitive devices }
- G01G 19/045 . . . {for weighing railway vehicles in motion }
- G01G 19/047 . . . . {using electrical weight-sensitive devices }
- G01G 19/06 . . . on overhead rails
- G01G 19/07 . . for weighing aircraft
- G01G 19/08 . for incorporation in vehicles
- G01G 19/083 . . {lift truck scale }
- G01G 19/086 . . {wherein the vehicle mass is dynamically estimated }
- G01G 19/10 . . having fluid weight-sensitive devices
- G01G 19/12 . . having electrical weight-sensitive devices
- G01G 19/14 . for weighing suspended loads ([G01G 3/00](#) takes precedence; incorporation of weighing devices in cranes [B66C 1/40](#), [B66C 13/16](#))
- G01G 19/16 . . having fluid weight-sensitive devices
- G01G 19/18 . . having electrical weight-sensitive devices
- G01G 19/20 . . for weighing unbalanced loads
- G01G 19/22 . for apportioning materials by weighing prior to mixing them ([ratio regulation G05D 11/00](#))
- G01G 19/24 . . using a single weighing apparatus
- G01G 19/26 . . . associated with two or more counterweighted beams
- G01G 19/28 . . . having fluid weight-sensitive devices
- G01G 19/30 . . . having electrical weight-sensitive devices
- G01G 19/303 . . . . {involving digital counting }
- G01G 19/306 . . . . {involving comparison with a reference value }



- G01G 19/32 . . using two or more weighing apparatus
- G01G 19/34 . . with electrical control means
- G01G 19/343 . . . {involving digital counting }
- G01G 19/346 . . . {involving comparison with a reference value }
- G01G 19/36 . . with mechanical control means
- G01G 19/38 . . programme controlled, e.g. by perforated tape ([programme control in general G05B 19/00](#))
- G01G 19/382 . . . {involving digital counting }
- G01G 19/384 . . . {involving comparison with a reference value }
- G01G 19/387 . for combinatorial weighing, i.e. selecting a combination of articles whose total weight or number is closest to a desired value
- G01G 19/393 . . using two or more weighing units
- G01G 19/40 . with provisions for indicating, recording, or computing price or other quantities dependent on the weight ([indicating means for weighing apparatus G01G 23/18](#); [recording means for weighing apparatus G01G 23/18](#); computers in general [G06](#) )
- G01G 19/41 . . using mechanical computing means
- G01G 19/413 . . using electromechanical or electronic computing means
- G01G 19/414 . . . using electronic computing means only
- G01G 19/4142 . . . . { for controlling activation of safety devices, e.g. airbag systems ([electrical circuits for triggering safety arrangements in case of vehicle accidents B60R 21/015](#)) }
- G01G 19/4144 . . . . {for controlling weight of goods in commercial establishments, e.g. supermarket, P.O.S. systems }
- G01G 19/4146 . . . . {for controlling caloric intake, e.g. diet control }
- G01G 19/4148 . . . . {for controlling postal rate in articles to be mailed ([Franking apparatus with means for computing G07B 17/02](#)) }
- G01G 19/415 . . . . combined with recording means
- G01G 19/417 . . with provision for checking computing part of balance
- G01G 19/42 . . for counting by weighing ([G01G 19/387](#) takes precedence)
- G01G 19/44 . for weighing persons
- G01G 19/445 . . {in a horizontal position }
- G01G 19/46 . . Spring balances specially adapted for this purpose
- G01G 19/48 . . Pendulum balances specially adapted for this purpose
- G01G 19/50 . . having additional measuring devices, e.g. for height
- G01G 19/52 . Weighing apparatus combined with other objects, e.g. furniture ([with walking sticks A45B 3/08](#))
- G01G 19/54 . . combined with writing implements or paper-knives
- G01G 19/56 . . combined with handles of tools or household implements
- G01G 19/58 . . combined with handles of suit-cases or trunks
- G01G 19/60 . . combined with fishing equipment, e.g. with fishing rods
- G01G 19/62 . over or under weighing apparatus
- G01G 19/64 . Percentage-indicating weighing apparatus, i.e. for expressing the weight as a



percentage of a predetermined or initial weight

## G01G 21/00

### Details of weighing apparatus

- G01G 21/02 . Arrangements of bearings (bearings per se [F16C](#) )
- G01G 21/022 .. {of tapes or ribbons }
- G01G 21/025 .. {using a combination of knife-edge and ball or roller bearings }
- G01G 21/027 .. {Hydraulic or pneumatic bearings }
- G01G 21/04 .. of knife-edge bearings
- G01G 21/06 .. of ball or roller bearings
- G01G 21/07 .. of flexure-plate bearings
- G01G 21/08 .. Bearing mountings or adjusting means therefor
- G01G 21/085 ... {of knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/10 .. Floating suspensions; Arrangements of shock absorbers (shock absorbers per se [F16F](#) )
- G01G 21/12 .. Devices for preventing derangement
- G01G 21/125 ... {of knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/14 . Beams
- G01G 21/16 .. of composite construction; Connections between different beams
- G01G 21/161 ... {Connections between different beams }
- G01G 21/162 .... {using knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/163 .... {using ball or roller bearings (ball or roller bearings [G01G 21/06](#)) }
- G01G 21/165 .... {using tapes or ribbons (tapes or ribbons [G01G 21/022](#)) }
- G01G 21/166 .... {using flexure plate fulcrums (flexure plate fulcrums [G01G 21/07](#)) }
- G01G 21/167 .... {combined with different kinds of bearings }
- G01G 21/168 ..... {combined with knife-edge and ball or roller bearings }
- G01G 21/18 . Link connections between the beam and the weigh pan
- G01G 21/182 .. {using knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/184 .. {using ball or roller bearings (ball or roller bearings [G01G 21/06](#)) }
- G01G 21/186 .. {using tapes or ribbons (tapes or ribbons [G01G 21/022](#)) }
- G01G 21/188 .. {using flexure plate fulcrums (flexure plate fulcrums [G01G 21/07](#)) }
- G01G 21/20 .. for precision weighing apparatus
- G01G 21/22 . Weigh pans or other weighing receptacles; Weighing platforms
- G01G 21/23 . Support or suspension of weighing platforms ([G01G 21/24](#) takes precedence)
- G01G 21/235 .. {using knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/24 . Guides or linkages for ensuring parallel motion of the weigh-pans
- G01G 21/241 .. {combined with knife-edge bearings (knife-edge bearings [G01G 21/04](#)) }
- G01G 21/242 .. {combined with ball or roller bearings (ball or roller bearings [G01G 21/06](#)) }
- G01G 21/243 .. {combined with tapes or ribbons (tapes or ribbons [G01G 21/022](#)) }

- G01G 21/244 . . {combined with flexure-plate fulcrums ([flexure-plate fulcrums G01G 21/07](#)) }
- G01G 21/245 . . {combined with different kinds of bearings }
- G01G 21/246 . . . {combined with knife-edge and ball or roller bearings }
- G01G 21/247 . . . {combined with knife-edge bearings and tapes or ribbons }
- G01G 21/248 . . . {combined with knife-edge and flexure-plate fulcrums }
  
- G01G 21/26 . Counterweights; Poise-weights; Sets of weights; Holders for the reception of weights
  
- G01G 21/28 . Frames, Housings
- G01G 21/283 . . { Details related to a user interface }
- G01G 21/286 . . { with windshields }
  
- G01G 21/30 . Means for preventing contamination by dust
  
- G01G 23/00** **Auxiliary devices for weighing apparatus**
  
- G01G 23/002 . {Means for correcting for obliquity of mounting ([for pendulum-weight apparatus G01G 1/16](#)) }
  
- G01G 23/005 . {Means for preventing overload }
  
- G01G 23/007 . {Integrated arrangements for generating electrical power, e.g. solar cells }
  
- G01G 23/01 . Testing or calibrating of weighing apparatus
- G01G 23/012 . . { with load cells comprising in-build calibration weights }
- G01G 23/015 . . { by adjusting to the local gravitational acceleration }
- G01G 23/017 . . { Securing calibration against fraud }
  
- G01G 23/02 . Relieving mechanisms; Arrestment mechanisms
- G01G 23/04 . . for precision weighing apparatus
  
- G01G 23/06 . Means for damping oscillations, e.g. of weigh beams
- G01G 23/08 . . by fluid means
- G01G 23/10 . . by electric or magnetic means
- G01G 23/12 . . specially adapted for preventing oscillations due to movement of the load
  
- G01G 23/14 . Devices for determining tare weight or for cancelling out the tare by zeroising, e.g. mechanically operated ([in connection with automatic loading G01G 13/14](#))
- G01G 23/16 . . electrically or magnetically operated
- G01G 23/163 . . . {involving digital counting }
- G01G 23/166 . . . {involving comparison with a reference value }
  
- G01G 23/18 . Indicating devices, e.g. for remote indication; Recording devices; Scales, e.g. graduated
- G01G 23/20 . . Indicating weight by mechanical means
- G01G 23/203 . . . {with wheel-type counters }
- G01G 23/206 . . . {special graduated scales therefor ([G01G 23/24 takes precedence](#)) }

- G01G 23/22 . . . combined with price indicators
- G01G 23/24 . . . involving logarithmic scales
- G01G 23/26 . . . Drive for the indicating member, e.g. mechanical amplifiers
- G01G 23/28 . . . involving auxiliary or memory marks
- G01G 23/30 . . . with means for illuminating the scale
- G01G 23/32 . . Indicating the weight by optical projection means
- G01G 23/34 . . . combined with price indicators
- G01G 23/35 . . indicating the weight by photographic recording
- G01G 23/36 . . indicating the weight by electrical means, e.g. using photoelectric cells
- G01G 23/361 . . . {using photoelectric cells }
- G01G 23/362 . . . {using electric contacts }
- G01G 23/363 . . . {using magnetic or capacitive contacts }
- G01G 23/365 . . . involving comparison with a reference value ([G01G 23/37](#) takes precedence)
- G01G 23/37 . . . involving digital counting
- G01G 23/3707 . . . . {using a microprocessor }
- G01G 23/3714 . . . . . {with feedback means }
- G01G 23/3721 . . . . . {with particular representation of the result, e.g. graphic }
- G01G 23/3728 . . . . { with wireless means }
- G01G 23/3735 . . . . . { using a digital network }
- G01G 23/3742 . . . . . { using a mobile telephone network }
- G01G 23/375 . . . . during the movement of a coded element
- G01G 23/38 . . Recording and/or coding devices specially adapted for weighing apparatus  
(computers per se [G06](#) ; disc converters in general [G08C](#) )
- G01G 23/40 . . . mechanically operated
- G01G 23/42 . . . electrically operated
- G01G 23/44 . . . . Coding devices therefor
- G01G 23/46 . . . Devices preventing recording until the weighing mechanism has come to rest
- G01G 23/48 . Temperature-compensating arrangements ([G01G 1/14](#), [G01G 1/42](#), [G01G 3/18](#) take precedence)