

B25B

TOOLS OR BENCH DEVICES NOT OTHERWISE PROVIDED FOR, FOR FASTENING, CONNECTING, DISENGAGING OR HOLDING

Definition statement

This place covers:

- Vices
- Hand vices; Pin vices
- Clamps
- Pliers; gripping tools with jaws on pivoted limbs
- Hand-held gripping tools other than of the pliers type
- Work holders, e.g. magnetic work holders, vacuum work holders
- Spanners; Wrenches
- Screwdrivers
- Hand-driven gear-operated wrenches or screwdrivers
- Impact wrenches or screwdrivers
- Portable power-driven screw or nut setting or loosening tools
- Attachments for drilling apparatus for screw or nut setting or loosening
- Details of, or accessories for, spanners, wrenches, screwdrivers
- Implements for fastening, connecting or tensioning of wire or strip
- Hand tools, specially adapted for fitting together or separating parts or objects
- whether or not involving some deformation
- Portable power-driven joining or separation tools
- Hand tools for applying fasteners other than screws, bolts, nuts or nails

Relationships with other classification places

This subclass is to be understood as covering those hand tools for fastening, connecting, disengaging, or holding which are not provided for in another subclass such as [B25C](#) (nailing or stapling tools), [B25D](#) (percussive tools like hammers) or in an application class such as [B65B](#) (packaging) or [B21F](#) (working of wire)

Special rules of classification

In [B25B 5/00](#) are also classified clamps for mechanically clamping work-pieces on machine tool tables, even though they are not hand tools. [B25B 5/00](#) takes precedence before [B23Q 3/06](#) (Work-clamping means).

In [B25B 11/00](#) also tables, like magnetic tables and vacuum tables are classified, even though they are not hand tools.

For more detailed information about the main groups of [B25B](#) check the sheets of these main groups.

B25B 1/00

Vices (specially adapted for tying flies for angling [A01K 97/28](#); specially adapted for machine tools [B23Q 3/00](#) {; rope or cable splicing vices [D07B 7/162](#)})

Definition statement

This place covers:

- Vices with sliding jaws

- Vices with pivoted jaws
- Arrangements for positively actuating jaws
- Arrangements for turning or tilting vices
- Details of the vices, e.g. jaws of special shape, slideways

Relationships with other classification places

[B25B 1/00](#) deals with vices per se and details of vices. The function and functioning of vices in the context of machine tools as part of the machine tools is classified in [B23Q 3/066](#).

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Vices for tying flies for angling	A01K 97/28
Rope or cable splicing vices	D07B 7/162

Special rules of classification

Vices for machine tool tables are classified in [B25B 1/00](#) as far as the vice itself or details thereof are concerned. In that case [B25B 1/00](#) takes precedence over [B23Q 3/066](#).

The function and functioning of vices for machine tools in the context of the machine tool as part of the machine tool is classified in [B23Q 3/066](#).

B25B 1/2436

{around a vertical axis ([B25B 1/2447](#) takes precedence)}

References

Limiting references

This place does not cover:

Jaw being pivotable around an axis to put one of the jaw faces in a position opposite to a second jaw	B25B 1/2447
---	-----------------------------

B25B 1/2442

{around a horizontal axis ([B25B 1/2447](#) takes precedence)}

References

Limiting references

This place does not cover:

Jaw being pivotable around an axis to put one of the jaw faces in a position opposite to a second jaw	B25B 1/2447
---	-----------------------------

B25B 5/00

Clamps (for holding or positioning work for welding, soldering, or cutting by applying heat locally [B23K 37/04](#))

Definition statement

This place covers:

This group covers:

- Combination of clamps
- Supporting devices for clamps
- Clamps with sliding jaws
- Clamps with pivoted jaws
- Arrangements for positively actuating jaws
- Clamps for work of special profile
- Details of the clamps, e.g. jaws, jaw attachments

References

Limiting references

This place does not cover:

Chucks	B25B 31/00
Clamps for holding or positioning work for welding, soldering, or cutting by applying heat locally	B23K 37/04
Clamps for turbine blades	B23Q 3/063
Clamping by using adhesive means	B23Q 3/084
Clamping by using a solidifying liquid, e.g. with freezing, setting or hardening means	B23Q 3/086
Gripping heads in robots	B25J 15/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chucks	B23B 31/00
Chucks where the gripping means is a deformable sleeve	B23B 31/305
Means for securing sliding members using a hydraulically controlled membrane in machine tools	B23Q 1/287

Special rules of classification

In [B25B 5/00](#) are also classified clamps for mechanically clamping work-pieces on machine tool tables as far as the clamps themselves or details thereof are concerned, even though these clamps are not hand tools. In this case [B25B 5/00](#) takes precedence over [B23Q 3/06](#) (Work-clamping means).

The function and functioning of clamps in the context of the machine tool as part of the machine tool is classified in [B23Q](#).

B25B 5/061

{with fluid drive ([B25B 5/087](#), [B25B 5/122](#) take precedence)}

References**Limiting references**

This place does not cover:

Fluid-driven clamps using cams	B25B 5/087
Fluid-driven clamps using toggle levers	B25B 5/122

B25B 7/00

Pliers; Other hand-held gripping tools with jaws on pivoted limbs; Details applicable generally to pivoted-limb hand tools (implements for fastening, connecting, or tensioning wire or strip [B25B 25/00](#); adapted for other fitting or separating purposes [B25B 27/00](#); for marking animals [A01K 11/00](#); dentists' forceps [A61C 3/00](#); bending wire eyes [B21F 1/06](#); hand-held metal-shearing or metal-cutting devices [B23D 29/00](#); hand cutting tools [B26B](#); for punching or perforating [B26F 1/36](#); devices for securing ends of binding material in bundling machines [B65B 13/24](#); specially designed for watch-making or comparable work [G04D 1/00](#))

Definition statement

This place covers:

- Pliers construction in general
- Jaws
- Joints
- Pliers involving special transmission means between the handles and the jaws
- Locking means for pliers
- Adjusting means for the operating arms
- Pliers for sealing
- Pliers provided with auxiliary tool elements, e.g. cutting edges, nail extractors

References**Application-oriented references**

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Implements for fastening, connecting, or tensioning wire or strip	B25B 25/00
Pliers for assembling or disassembling purposes	B25B 27/00
Pliers for marking animals	A01K 11/00
Surgical forceps	A61B 17/28
Dentist forceps	A61C 3/00
Pliers for bending wire eyes	B21F 1/06
Hand-held metal-shearing or metal-cutting devices	B23D 29/00
Hand-held cutting tools	B26B

Pliers for punching or perforating	B26F 1/36
Pliers for securing ends of binding material	B65B 13/24
Pliers specially designed for watch-making or comparable work	G04D 1/00
Pliers for removing insulation or armouring from electrical cables	H02G 1/12

B25B 7/14

Locking means {([B25B 7/123](#) takes precedence)}

References

Limiting references

This place does not cover:

Self-locking toggle lever pliers	B25B 7/123
----------------------------------	----------------------------

B25B 9/00

Hand-held gripping tools other than those covered by group [B25B 7/00](#) (wrenches [B25B 13/00](#); specially adapted for watchmakers' or like use [G04D](#))

Definition statement

This place covers:

- Gripping tools with sliding or pivotal connections
- Gripping tools without sliding or pivotal connections, e.g. tweezers

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Surgical forceps	A61B 17/28
Dentist forceps	A61C 3/00
Gripping heads in robots	B25J 15/00
Load carriers	B65G 7/12
Hand-held implements for removing litter	E01H 1/12
Hand-held implements picking up excrements	E01H 1/1206
Gripping tools specially adapted for watchmakers	G04D 1/00
Gripping tools for fluorescent lamps	H01J 9/006
Gripping tools for light bulbs	H01K 3/32

B25B 11/00

Work holders not covered by any preceding group in the subclass, e.g. magnetic work holders, vacuum work holders (for holding or positioning work for welding, soldering, or cutting by applying heat locally [B23K 37/04](#); specially adapted to machine tools [B23Q 3/00](#))

Definition statement

This place covers:

- Work holders
- Magnetic work holders
- Vacuum work holders

Relationships with other classification places

Magnetic means for holding work-pieces on tables of tool machines are partially classified as well in [B23Q 3/154](#), [B23Q 3/1546](#), [B23Q 3/1546](#) as in [B25B 11/005](#)

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Holding or positioning work for welding, soldering, or cutting by applying heat locally	B23K 37/04
Holding work-pieces on machine tool tables by magnetic means	B23Q 3/154
Robot vacuum gripping head	B25J 15/0616
Holding work-pieces by suction in cutting machines	B26D 7/018
Vacuum material handling devices associated with conveyors	B65G 47/91
Suction grippers for separating articles from a pile	B65H 3/0808
Load-engaging elements for lifting by magnetic means	B66C 1/04
Load-engaging elements for lifting by electro-magnetic means	B66C 1/06
Implements for mounting doors	E04F 21/0007
Portable devices for holding doors	E05C 17/54
Electromagnets for lifting handling or transport	H01F 7/206
Holding semiconductors by vacuum	H01L 21/6838

Informative references

Attention is drawn to the following places, which may be of interest for search:

Signs, plates, panels or boards being secured to a surface by magnetic means	B25C 1/003
--	----------------------------

Special rules of classification

In [B25B 11/00](#) also tables, like magnetic tables and vacuum tables are classified, even though they are not hand tools.

B25B 13/00

Spanners; Wrenches (hand-driven gear-operated [B25B 17/00](#); impact wrenches [B25B 19/00](#); portable power-driven [B25B 21/00](#) {; spanners or wrenches specially adapted for osteosynthesis [A61B 17/8875](#)}; machines for fitting together or separating metal parts [B23P 19/00](#) {; for mounting or dismounting wheels [B60B 29/003](#)})

Definition statement

This place covers:

- Cross wrenches
- Wrenches with rigid jaws
- Wrenches with adjustable jaws
- Wrenches of the chuck type
- Wrenches of the ratchet type, for providing a free return stroke of the handle
- Wrenches for special purposes
- Wrenches for operating on work of special profile, e.g. pipes
- Chain or strap wrenches
- Spanner sets
- Jaw attachments

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Wrenches or spanners specially adapted for osteosynthesis	A61B 17/8875
Spanners and wrenches for mounting and dismounting wheels	B60B 29/003
Devices for removing threaded caps of containers	B67B 7/18
Tools for removing threaded caps from containers by use of a flexible loop gripping the cap	B67B 7/184
Wrenches in earth drilling	E21B 19/161

B25B 13/02

with rigid jaws ([B25B 13/46](#), [B25B 13/48](#) take precedence)

References

Limiting references

This place does not cover:

Ratchet wrenches	B25B 13/46
Wrenches or sockets for special purposes	B25B 13/48

B25B 13/10

with adjustable jaws ([B25B 13/46](#), [B25B 13/48](#) {[B25B 13/5041](#)} take precedence)

References**Limiting references**

This place does not cover:

Ratchet wrenches	B25B 13/46
Spanners or wrenches for special purposes	B25B 13/48
Wrenches for pipes with adjustable jaws	B25B 13/5041

B25B 13/5008

{for operating on pipes or cylindrical objects ([B25B 13/52](#) takes precedence)}

References**Limiting references**

This place does not cover:

Chain or strap wrenches	B25B 13/52
-------------------------	----------------------------

B25B 13/54

Internal grip wrenches {([B25B 13/5083](#) takes precedence)}

References**Limiting references**

This place does not cover:

Spanners and wrenches for internally gripping pipes	B25B 13/5083
---	------------------------------

B25B 15/00

Screwdrivers (hand-driven gear-operated [B25B 17/00](#); impact screwdrivers [B25B 19/00](#); portable power-driven [B25B 21/00](#) {; screwdrivers specially adapted for osteosynthesis [A61B 17/8875](#)})

Definition statement

This place covers:

- Screwdrivers characterised by material or shape of the tool bit
- Screwdrivers operated by rotating the handle
- Screwdrivers operated by axial movement of the handle

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Screwdrivers specially adapted for osteosynthesis	A61B 17/8875
Screwdrivers specially adapted for watchmakers	G04D 1/0028

B25B 17/00

Hand-driven gear-operated wrenches or screwdrivers (ratchet-operated [B25B 13/46](#) {[B25B 13/467](#)}, [B25B 15/04](#); {for mounting or dismounting wheels [B60B 29/005](#)})

Definition statement

This place covers:

- Hand-driven gear-operated wrenches or screwdrivers
- Hand-driven gear-operated wrenches or screwdrivers providing for torque amplification

Gear-operated ratchet wrenches	B25B 13/467
Ratchet screwdrivers	B25B 15/04

B25B 17/02

providing for torque amplification

References

Limiting references

This place does not cover:

Wrenches with torque amplification for mounting or dismounting wheels	B60B 29/005
---	-----------------------------

B25B 19/00

Impact wrenches or screwdrivers (portable power-driven [B25B 21/02](#))

Definition statement

This place covers:

Impact wrenches and screwdrivers that are not power-driven

B25B 21/00

Portable power-driven screw or nut setting or loosening tools; (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed [B25F 5/00](#); {for mounting or dismounting wheels [B60B 29/006](#)}); Attachments for drilling apparatus serving the same purpose (machines [B23P 19/06](#))

Definition statement

This place covers:

- Portable power-driven screw or nut setting or loosening tools
- Power-driven screw or nut setting or loosening tools for combined nut setting and crimping
- Power-driven screw or nut setting or loosening tools for special purposes
- power-driven screw or nut setting or loosening tools of the ratchet type
- Attachments for drilling apparatus for screw or nut setting or loosening
- Power-driven screw or nut setting or loosening tools with automatic change-over from high speed-low torque mode to low speed-high torque mode
- Power-driven screw or nut setting or loosening tools with means for imparting impact to screwdriver blade or nut socket

Relationships with other classification places

Details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed are classified in [B25F 5/00](#)

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Multi-spindle power-driven screw or nut setting or loosening	B23P 19/069
Power-operated devices for mounting or dismounting wheels	B60B 29/006
Power-operated devices for removing threaded caps of containers	B67B 7/18
Powered wrenches in earth drilling	E21B 19/161

Informative references

Attention is drawn to the following places, which may be of interest for search:

Screw or nut setting or loosening machines	B23P 19/06
Details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed	B25F 5/00

B25B 23/00

Details of, or accessories for, spanners, wrenches, screwdrivers (bolt tensioners [B25B 29/02](#))

Definition statement

This place covers:

- Connections or joints between tool parts
- Screw guiding means
- Socket or nut ejector means
- Means for adjusting screwing depth
- Abutment for screws or nuts
- Reaction arms
- Counter holding devices
- Tools for placing nut or screw lock wires
- Arrangements for handling screws or nuts
- Arrangement of torque limiters or torque indicators in wrenches or screwdrivers
- Handles
- Devices for illuminating the head of the screw or the nut

Relationships with other classification places

Details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed are classified in [B25F 5/00](#). Even though there is a group [B25B 23/16](#) for handles, details of handles for hand-driven screwdrivers and wrenches are classified in [B25G 1/00](#) and details of handles for power-driven screwdrivers and wrenches are classified in [B25F 5/02](#). Angular adjustment means between tool head and handle of a hand-driven fastening tool are classified in [B25B 23/0028](#) as well as in [B25G 1/063](#)

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Details of handles of power-driven screwdrivers and wrenches	B25F 5/02
Details of handles of hand-driven screwdrivers and wrenches	B25G 1/00
Device for determining value of torque or twisting moment for tightening a nut or screw per se, when not in connection with the fastening process itself	G01L 5/24

Informative references

Attention is drawn to the following places, which may be of interest for search:

Feeding or holding elements like screws or nuts in machines	B23P 19/00
Screw or nut setting or loosening machines	B23P 19/06
Torque limiting in screw or nut setting or loosening machines	B23P 19/065
Arrangements in machine tools for improving direct observation of the working space, e.g. using mirrors or lamps	B23Q 17/2404
Nail feeding devices for belts of nails	B25C 1/003

Details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed	B25F 5/00
Torque reaction bars for portable rotary tools other than fastening tools	B25F 5/025
Nails formed in integral series using disposable strips or discs per se	F16B17/08
Bolts, screws, or nuts formed in integral series using disposable strips or discs per se	F16B 27/00
Breaking-bolts per se	F16B 31/00
Lightening devices for hand tools in general	F21V 33/0084

B25B 23/06

using built-in magazine ([B25B 23/045](#) takes precedence)

References

Limiting references

This place does not cover:

Feeding screws or nuts using disposable strips or discs carrying the screws or nuts	B25B 23/045
---	-----------------------------

B25B 23/101

{for hand-driven screw-drivers ([B25B 23/105](#) takes precedence)}

References

Limiting references

This place does not cover:

Gripping device for the fastening element, where the gripping device is an integral part of the driving element	B25B 23/105
---	-----------------------------

B25B 23/1425

{by electrical means}

Definition statement

This place covers:

Tightening of fasteners, wherein the torque is measured electrically, e.g. using ultrasound or strain gauge.

B25B 25/00

Implements for fastening, connecting or tensioning of wire or strip

Definition statement

This place covers:

- Implements for tensioning of wire or strip
- Implements for applying wire clasps to hose couplings

References

Limiting references

This place does not cover:

Tools for placing nut or screw lock wires	B25B 23/0092
Turnbuckles and the like	F16G 11/12

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Bundling articles	B65B 13/00
-------------------	----------------------------

B25B 27/00

Hand tools, specially adapted for fitting together or separating parts or objects whether or not involving some deformation, not otherwise provided for (machines for simply fitting together or separating metal parts or objects [B23P 19/00](#))

Definition statement

This place covers:

- Hand tools adapted for fitting together or separating parts or objects
- Tools for fixing internally screw-threaded tubular fasteners
- Tools for bonding or debonding brake linings
- Tools for removing or installing seals
- Hand tools specially adapted for fitting together or separating parts of motor-vehicles
- Hand tools specially adapted for fitting together or separating parts of bicycles
- Tools for wheel weights
- Explosive-powered hand tools
- Tools moving along strips, e.g. decorating or sealing strips, to insert them in, or remove them from, grooves or profiles
- Tools for connecting objects by press fit or detaching same
- Tools for assembling objects other than by press fit or detaching same

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Tools or implements for repairing chains using metal-working operations	B21L 21/00
Wrenches for mounting or dismounting wheels	B60B 29/003
Mounting or dismounting tyre valves	B60C 25/18
Spring positioning or withdrawing for watchmakers or watch-repairers	G04D 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Machines for assembling or disassembling	B23P 19/00
Machines moving along strips, e.g. decorating or sealing strips, to insert them in, or remove them from, grooves or profiles	B23P 19/047
Machines for installing or removing seals, e.g. O-rings	B23P 19/084
Hammers having the impacting head in the form of a sleeve slidable on a shaft	B25D 1/16
Coil spring compressors	B60G 2206/921
Assembling sealing arrangements with vehicle parts	B60J 10/45
Assembly, disassembly, repair or servicing of endless-track systems	B62D 55/32
Hand-held apparatus for delivering pressure-sensitive adhesive tape	B65H 35/0026
Implements for finishing work on buildings, e.g. devices for fitting sealing strips or other finishing strips	E04F 21/00
Equipment for mounting belts, ropes or chains	F16H 7/24
Accessories for bringing two tubular members closer to each other	F16L 1/09
Auxiliary devices for flanged joints	F16L 23/003
Hand tools for crimping electric connectors	H01R 43/042

B25B 27/0028

{Tools for removing or installing seals ([B25B 27/0092](#) takes precedence)}

References**Limiting references**

This place does not cover:

Tools moving along strips, e.g. decorating or sealing strips, to insert them in, or remove them from, grooves or profiles	B25B 27/0092
---	------------------------------

B25B 29/00

Accessories (specially for spanners, wrenches, screwdrivers [B25B 23/00](#); tool boxes, tool positioning stands [B25H](#))

Definition statement

This place covers:

- Accessories
- Bolt tensioners

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Bolt tensioners in machines	B23P 19/067
-----------------------------	-----------------------------

Screwed prestressed connection by means of liquid, grease, rubber, where the tensile strength is produced in the connection itself and not by a tool	F16B 31/043
--	-----------------------------

B25B 31/00

Hand tools for applying fasteners (nailing or stapling tools [B25C](#))

Definition statement

This place covers:

- Hand tools for applying fasteners other than screws, bolts, nuts or nails
- Hand tools for applying dowels
- Hand tools for temporarily connecting sheets before or during assembly operations

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Attachments or adapters for portable power-driven percussive tools for placing dowels	B25D 17/005
---	-----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Attachments or adapters for portable power-driven percussive tools for placing dowels	B25D 17/005
Devices for applying fasteners, e.g. clips, to bundles of sheets	B42F 1/003

B25B 33/00

Hand tools not covered by any other group in this subclass

Definition statement

This place covers:

Hand tools not covered by any other group

Chuck keys