

ECLA**EUROPEAN CLASSIFICATION****B24B**

MACHINES, DEVICES, OR PROCESSES FOR GRINDING OR POLISHING (grinding of gear teeth [B23F](#), of screw-threads [B23G1/36](#); by electro-erosion [B23H](#); abrasive or related blasting [B24C](#); tools for grinding, buffing or sharpening [B24D](#); polishing compositions [C09G1/00](#); abrasives [C09K3/14](#); electrolytic etching or polishing [C25F3/00](#); grinding arrangements for use on assembled railway tracks [E01B31/17](#)); **DRESSING OR CONDITIONING OF ABRADING SURFACES; FEEDING OF GRINDING, POLISHING, OR LAPPING AGENTS**

Notes

1. In this subclass, the following term is used with the meaning indicated:
 - "polishing" means the smoothing of a surface, i.e. a surface improvement but no improvement of the dimensional accuracy as would occur in a "grinding" operation.
2. Attention is drawn to Notes (1) and (2) following the title of subclass [B23F](#).
3. In groups [B24B1/00](#) to [B24B27/00](#), in connection with glass the terms "grinding " and "polishing" are treated as being equivalent.

B24B1/00

Processes of grinding or polishing; Use of auxiliary equipment in connection with such processes (processes characterised by the use of special machines or devices, see the relevant places for those machines or devices)

B24B1/00B

- . [N: using electric current ([B24B37/04D](#) and [B23H5/08](#) take precedence)] [[N1204](#)]

B24B1/00D

- . [[N: using a magnetic polishing agent](#)] [[M1106](#)]

B24B1/00F

- . [[N: abrasive treatment to obtain an aged or worn-out appearance](#)] [[N1106](#)]

B24B1/04

- . subjecting the grinding or polishing tools, the abrading or polishing medium or work to vibration, e.g. grinding with ultrasonic frequency ([polishing or abrading surfaces on work by means of tumbling apparatus \[B24B31/00\]\(#\), involving oscillating or vibrating containers \[B24B31/06\]\(#\); superfinishing surfaces on work, e.g. by means of abrading blocks reciprocating with high frequency, \[B24B35/00\]\(#\)](#))

B24B3/00

Sharpening cutting edges, e.g. of tools; Accessories therefor, e.g. for holding the tools (non-abrasive sharpening devices for scythes, sickles, or the like [A01D3/00](#); sharpening devices designed as components of machines with cutters, see the relevant places for the machines, e.g. [A01D75/08](#), [[N: \[B23F23/12D\]\(#\),\] \[B26D7/12\]\(#\)](#); sharpening of saw teeth [B23D63/12](#); sharpening of files or rasps [B23D73/00](#); grinding of die-stocks or chasers [B23G1/36](#))

B24B3/00E

- . [[N: for skate blades](#)]

B24B3/00F

- . [[N: for edges of skis, snowboards or the like](#)] [[M1106](#)]

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| B24B3/02 | . of milling cutters |
| B24B3/02B | . . [N: of milling cutters with helical cutting edges] |
| B24B3/02C | . . [N: relief grinding of milling cutters] |
| B24B3/02D | . . [N: Indexing equipment] |
| B24B3/02E | . . [N: Tooth rests; Supporting means for milling-cutter grinding machines] |
| B24B3/02G | . . [N: of milling cutters with embedded cutters] |
| B24B3/02H | . . [N: of tapered milling cutters] |
| B24B3/04 | . . of plain milling cutters |
| B24B3/04B | . . . [N: of milling cutters with helical cutting edges] |
| B24B3/06 | . . of face or end milling cutters or cutter heads, e.g. of shank type |
| B24B3/06B | . . . [N: end milling cutters with rounded ends] |
| B24B3/08 | . . of profile milling cutters, e.g. of disc type |
| B24B3/08B | . . . [N: using a template] |
| B24B3/10 | . . of routers or engraving needles |
| B24B3/12 | . . of hobs |
| B24B3/14 | . . of mortise chain cutters |
| B24B3/16 | . of broaches |
| B24B3/18 | . of taps or reamers |
| B24B3/20 | . . Tapering or chamfering taps or reamers |
| B24B3/22 | . . Relief cutting of taps or reamers |
| B24B3/24 | . of drills (by fluting the shank B24B19/04) |
| B24B3/24B | . . [N: of step drills] |
| B24B3/24C | . . [N: for simultaneously sharpening several drills; Supports therefor] |
| B24B3/24D | . . [N: Supports for drills (B24B3/24C takes precedence)] |
| B24B3/26 | . . of the point of twist drills |
| B24B3/26B | . . . [N: using devices specially adapted for domestic use] [M1106] |
| B24B3/28 | . . . by swivelling the drill around an axis angularly to the drill axis |
| B24B3/30 | and rotating the drill about its own axis |
| B24B3/32 | . . . for thinning the point |
| B24B3/33 | . . of drills for stone |
| B24B3/34 | . of turning or planing tools or tool bits, e.g. gear cutters (B24B3/36 takes precedence) |
| B24B3/34B | . . [N: of throw-away cutting bits] |
| B24B3/34C | . . [N: of gear shaper cutter] |
| B24B3/36 | . of cutting blades (B24B3/58 takes precedence) |
| B24B3/36B | . . [N: of reciprocating blades] |
| B24B3/36C | . . [N: of blades mounted on a turning drum] |
| B24B3/36D | . . [N: of rotary mower blades] |
| B24B3/36E | . . [N: of meat mincing or meat grinding machines] [M1106] |

- B24B3/36G . . [N: installed as an accessory on another machine ([B26D7/12](#) takes precedence)] [C9610]
- B24B3/38 . . for planing wood, e.g. cutter blades
- B24B3/40 . . Processes or apparatus specially adapted for sharpening curved edges
- B24B3/42 . . helically bent, e.g. for lawn mowers
- B24B3/44 . . of scythes or sickles [C9502]
- B24B3/46 . . of disc blades
- B24B3/46B . . . [N: of slicing machine disc blades] [N9502]
- B24B3/46C . . . [N: of cultivator disc blades] [N9502]
- B24B3/48 . . of razor blades or razors (by an abrasive block without mechanisms [B24D](#))
- B24B3/48B . . . [N: for travelling razor blades, in the form of a band or fitted on a transfer means]
- B24B3/50 . . . operated manually
- B24B3/52 . . of shear blades or scissors
- B24B3/54 . . of hand or table knives
- B24B3/54B . . . [N: using hand or foot driven tools]
- B24B3/54C . . . [N: the tool being driven in a non-rotary motion, e.g. oscillatory, gyratory]
- B24B3/55 . . of knife bars for harvesting machines
- B24B3/56 . . of slicing bands ([B24B3/58](#) takes precedence)
- B24B3/58 . . of tools having scalloped cutting edges
- B24B3/58B . . [N: of bands]
- B24B3/58C . . [N: of serrated edges, e.g. triangular shaped ([B24B3/58B](#) takes precedence)] [N9503]
- B24B3/60 . . of tools not covered by the preceding subgroups
- B24B3/60B . . [N: of thread cutting tools] [M1106]
- B24B3/60D . . [N: of surgical or dental instruments] [N1106]
- B24B3/60F . . [N: of files] [N1106]

Guide heading: **Grinding surfaces of particular forms**

- B24B5/00** **Machines or devices designed for grinding surfaces of revolution on work, including those which also grind adjacent plane surfaces; Accessories therefor** ([B24B11/00](#) to [B24B21/00](#) take precedence; honing machines or devices using abrading blocks performing axial and rotary movements superimposed on one another [B24B33/00](#))
- B24B5/01 . . for combined grinding of surfaces of revolution and of adjacent plane surfaces on work
- B24B5/02 . . involving centres or chucks for holding work
- B24B5/02B . . [N: involving indexable work supporting means carrying several work pieces to be operated on in succession]
- B24B5/04 . . for grinding cylindrical surfaces externally (grinding combined cylindrical and conical surfaces [B24B5/14](#))

- B24B5/04B . . . [N: for grinding several workpieces at once using one grinding wheel]
- B24B5/04C . . . [N: with the grinding wheel axis perpendicular to the workpiece axis]
- B24B5/04D . . . [N: of workpieces turning about a vertical axis]
- B24B5/06 . . for grinding cylindrical surfaces internally ([B24B5/40](#) takes precedence)
- B24B5/06B . . . [N: for brake drums]
- B24B5/08 . . . involving a vertical tool spindle
- B24B5/10 . . . involving a horizontal tool spindle
- B24B5/12 . . for grinding cylindrical surfaces both externally and internally with several grinding wheels [M1203]
- B24B5/14 . . for grinding conical surfaces, e.g. of centres
- B24B5/16 . . for grinding peculiarly surfaces, e.g. bulged
- B24B5/16B . . . [N: controlled by a template ([B24B5/16D](#) takes precedence)]
- B24B5/16C . . . [N: controlled by gearing ([B24B5/16D](#) takes precedence)]
- B24B5/16D . . . [N: for rolls with large curvature radius, e.g. mill rolls]
- B24B5/18 . . involving centreless means for supporting, guiding, floating or rotating work ([centreless turning B23B5/08](#); [centreless grinding of threads B23G1/42](#)) [C9502]
- B24B5/18B . . [N: for internal surfaces]
- B24B5/20 . . involving grooved abrading blocks
- B24B5/22 . . for grinding cylindrical surfaces, e.g. on bolts
- B24B5/22B . . . [N: for mass articles]
- B24B5/24 . . for grinding conical surfaces
- B24B5/24B . . . [N: for mass articles]
- B24B5/26 . . for grinding peculiarly profiled surfaces, e.g. bulged
- B24B5/28 . . for grinding outer surfaces concentrically to bores, involving additional centering means
- B24B5/30 . . Regulating-wheels; Equipment therefor
- B24B5/307 . . Means for supporting work
- B24B5/313 . . involving work-supporting means carrying several workpieces to be operated on in succession
- B24B5/32 . . the work-supporting means being indexable
- B24B5/35 . . Accessories
- B24B5/35B . . [N: Feeding means]
- B24B5/36 . . Single-purpose machines or devices
- B24B5/36B . . [N: for grinding surfaces of revolution in situ]
- B24B5/36D . . [N: for grinding tyres]
- B24B5/37 . . for grinding rolls, e.g. barrel-shaped rolls
- B24B5/38 . . for externally grinding travelling elongated stock, e.g. wire
- B24B5/40 . . for grinding tubes internally
- B24B5/42 . . for grinding crankshafts or crankpins
- B24B5/42B . . . [N: Supports therefor]
- B24B5/42C . . . [N: having a grinding wheel turning around the workpiece]

- B24B5/42D . . . [N: in situ]
- B24B5/42E . . . [N: Portable devices therefor]
- B24B5/42F . . . [N: Balancing means]
- B24B5/44 . . for grinding rims of vehicle wheels, e.g. for bicycles
- B24B5/46 . . for grinding railway car wheels
- B24B5/48 . . for grinding walls of very fine holes, e.g. in drawing-dies
- B24B5/48B . . . [N: using grinding wires or ropes]

- B24B5/50 . characterised by a special design with respect to properties of the material of non-metallic articles to be ground, e.g. strings ([cutting profiles into the treads of tyres B29D30/68](#))

- B24B7/00** **Machines or devices designed for grinding plane surfaces on work, including polishing plane glass surfaces; Accessories therefor** ([B24B21/00](#) takes precedence; honing of plane surfaces on work [B24B33/055](#))

- B24B7/00B . [N: Portal grinding machines]

- B24B7/02 . involving a reciprocatingly-moved work-table ([involving a reciprocatingly-moved grinding wheel in combination with a stationary work-table B24B7/07](#))

- B24B7/04 . involving a rotary work-table

- B24B7/06 . involving conveyer belts, a sequence of travelling work-tables or the like

- B24B7/07 . involving a stationary work-table
- B24B7/07B . . [N: using a reciprocating grinding head mounted on a movable carriage]
- B24B7/08 . . having an abrasive wheel built in

- B24B7/10 . Single-purpose machines or devices ([grinding tools or machines specially designed for use on assembled railway track E01B31/17](#))
- B24B7/12 . . for grinding travelling elongated stock, e.g. strip-shaped work
- B24B7/13 . . . grinding while stock moves from coil to coil
- B24B7/14 . . for grinding slideways ([portable grinding machines designed for fastening on workpieces B24B23/08](#))
- B24B7/16 . . for grinding end-faces, e.g. of gauges, rollers, nuts, piston rings ([for combined grinding of surfaces of revolution and adjacent plane surfaces on work B24B5/01; for grinding edges of bevels on work B24B9/00](#))
- B24B7/16B . . . [N: for mass articles]
- B24B7/16C . . . [N: end faces of piston rings]
- B24B7/16D . . . [N: end faces coil springs]
- B24B7/17 . . . for simultaneously grinding opposite and parallel end faces, e.g. double disc grinders
- B24B7/18 . . for grinding floorings, walls, ceilings or the like ([machines or devices for cleaning floorings A47L11/00, A47L13/00](#))
- B24B7/18B . . . [N: for walls and ceilings] [C1207]
- B24B7/18B1 [N: pole sanders] [N1204]
- B24B7/18D . . . [N: with disc-type tools] [N1204]

- B24B7/18F . . . [N: with cylinder- or belt-type tools] [N1204]
- B24B7/19 . . for grinding plane decorative patterns
- B24B7/20 . characterised by a special design with respect to properties of the material of non-metallic articles to be ground
- B24B7/22 . . for grinding inorganic material, e.g. stone, ceramics, porcelain
- B24B7/22B . . . [N: for grinding vertical surfaces ([B24B7/26B](#) takes precedence)] [C9610]
- B24B7/22C . . . [N: Portal grinding machines; Machines having a tool movable in a plane]
- B24B7/22D . . . [N: in which the tool is supported by the workpiece]
- B24B7/22E . . . [N: for grinding thin, brittle parts, e.g. semiconductors, wafers (grinding edges of thin, brittle parts [B24B9/06B](#))] [N9608]
- B24B7/24 . . . for grinding or polishing glass
- B24B7/24B [N: Methods]
- B24B7/24C [N: for plate glass]
- B24B7/24C1 [N: continuous]
- B24B7/24C2 [N: discontinuous]
- B24B7/24D [N: using reciprocating grinding tools]
- B24B7/24D1 [N: high-frequency reciprocating tools, e.g. magnetically driven]
- B24B7/26 for simultaneously grinding or polishing opposite faces of continuously travelling sheets or bands
- B24B7/26B [N: of vertical surfaces]
- B24B7/28 . . for grinding wood
- B24B7/30 . . for grinding plastics
- B24B9/00** **Machines or devices designed for grinding edges or bevels on work or for removing burrs; Accessories therefor** ([B24B21/00](#) takes precedence ; for sharpening cutting edges on tools [B24B3/00](#); removing burrs by loose abrasive material [B24B31/00](#)) [C9502]
- B24B9/00B . [N: for travelling workpieces]
- B24B9/00C . [N: for mass articles]
- B24B9/00D . [N: for end faces of tubes (cleaning pipe ends or pipe fittings, e.g. before soldering [B08B9/02F](#))]
- B24B9/02 . characterised by a special design with respect to properties of materials specific to articles to be ground
- B24B9/04 . . of metal, e.g. skate blades [N: ([B24B3/00E](#) takes precedence)]
- B24B9/06 . . of non-metallic inorganic material, e.g. stone, ceramics, porcelain
- B24B9/06B . . . [N: of thin, brittle parts, e.g. semiconductors, wafers] [C9502]
- B24B9/08 . . . of glass
- B24B9/08B [N: for watch glasses]
- B24B9/10 of plate glass
- B24B9/10B [N: for travelling sheets]
- B24B9/10C [N: using a template]

- B24B9/10D [N: for glass plates while they are turning]
- B24B9/12 of hollow glassware, e.g. drinking glasses, preserve jars, television picture tube viewing panels
- B24B9/14 of optical work, e.g. lenses, prisms [N: (control of the position of the tool for bevelling optical work [B24B47/22B](#))]
- B24B9/14B [N: for contact lenses]
- B24B9/14C [N: the spectacles being used as a template]
- B24B9/14D [N: Accessories, e.g. lens mounting devices]
- B24B9/14E [N: electrically, e.g. numerically, controlled]
- B24B9/16 of diamonds; of jewels or the like; Diamond grinders` dops; Dop holders or tongs (for grinding sharp pointed diamonds or sapphires [B24B19/16](#))
- B24B9/16B [N: Dops, dop holders]
- B24B9/16C [N: by bruting, i.e. rubbing two precious stones against each other]
- B24B9/16D [N: of gem stones or convex surfaces, cabochons]
- B24B9/16E [N: of diamond tools]
- B24B9/16G [N: for grinding cavities in gem stones]
- B24B9/16H [N: using heat]
- B24B9/16I [N: with means for turning and positioning the gem stones]
- B24B9/16K [N: grinding peripheral, e.g. conical or cylindrical, surfaces] [M1203]
- B24B9/16K1 [N: using templates]
- B24B9/18 of wood
- B24B9/20 of plastics

B24B11/00 **Machines or devices designed for grinding spherical surfaces or parts of spherical surfaces on work; Accessories therefor** (specially designed for optical surfaces [B24B13/00](#), for seat surfaces [B24B15/00](#))

- B24B11/02 for grinding balls
- B24B11/04 involving grinding wheels
- B24B11/06 acting by the front faces, e.g. of plane, grooved or bevelled shape
- B24B11/08 acting by the circumference
- B24B11/10 of cup type

B24B13/00 **Machines or devices designed for grinding or polishing optical surfaces on lenses or surfaces of similar shape on other work; Accessories therefor** (edging optical work, e.g. lenses, prisms [B24B9/14](#)) [C9502]

- B24B13/00B [N: for intraocular lenses] [N1204]
- B24B13/00D [N: for multifocal lenses]
- B24B13/00F [N: for plane optical surfaces]
- B24B13/00G [N: for contact lenses]
- B24B13/00H [N: Machines having several working posts; Feeding and manipulating devices]

- B24B13/00H1 . . [N: the lenses being worked by different tools, e.g. for rough-grinding, fine-grinding, polishing]
- B24B13/00J . [N: the workpieces being deformed during the grinding operation]
- B24B13/005 . Blocking means, chucks or the like; Alignment devices
- B24B13/005B . . [N: Lens block moulding devices]
- B24B13/005C . . [N: Positioning of lenses; Marking of lenses]
- B24B13/005D . . [N: Deblocking of lenses] [N1204]
- B24B13/01 . Specific tools, e.g. bowl-like; Production, dressing or fastening of these tools
- B24B13/01B . . [N: conformable in shape to the optical surface, e.g. by fluid pressure acting on an elastic membrane] [N1204]
- B24B13/015 . of television picture tube viewing panels, headlight reflectors or the like
- B24B13/02 . by means of tools with abrading surfaces corresponding in shape with the lenses to be made [C9502]
- B24B13/02B . . [N: for grinding several lenses simultaneously]
- B24B13/02C . . [N: the contact between tool and workpiece being a line]
- B24B13/04 . grinding of lenses involving grinding wheels controlled by gearing ([B24B13/06](#) takes precedence)
- B24B13/04C . . [N: using cup-type grinding wheels]
- B24B13/04D . . [N: using a pointed tool or scraper-like tool ([B24B13/015](#) and [B24B13/06B](#) take precedence)]
- B24B13/06 . grinding of lenses, the tool or work being controlled by information-carrying means, e.g. patterns, punched tapes, magnetic tapes
- B24B13/06B . . [N: using a template]
- B24B15/00** **Machines or devices designed for grinding seat surfaces; Accessories therefor (for spherical surfaces in general [B24B11/00](#))**
- B24B15/02 . in valve housings
- B24B15/03 . . using portable or mobile machines
- B24B15/04 . on valve members
- B24B15/06 . on openings of bottles; on bottle stoppers or the like
- B24B15/08 . for grinding co-operating seat surfaces by moving one over the other
- B24B17/00** **Special adaptations of machines or devices for grinding controlled by patterns, drawings, magnetic tapes or the like (machines or devices so-controlled for grinding the edges of lenses [B24B9/14](#); for grinding or polishing optical lens surfaces [B24B13/06](#); for grinding non-circular cross-sections [B24B19/08](#); for grinding trochoidal surfaces [B24B19/09](#); for grinding cams [B24B19/12](#); for grinding turbine blades or the like [B24B19/14](#); such control means per se [B23Q33/00](#), [B23Q35/00](#), [G05](#)); Accessories therefor**

- B24B17/02 . involving mechanical transmission means only
- B24B17/02B . . [N: using a pantograph]
- B24B17/02C . . [N: using two or more templates]
- B24B17/02D . . [N: for grinding rotating workpieces (three dimensional)]
- B24B17/02D1 . . . [N: for the periphery of plane workpieces, e.g. cams, lenses]
- B24B17/02G . . [N: using an abrasive belt]

- B24B17/04 . involving optical auxiliary means, e.g. optical projection form grinding machines
- B24B17/06 . . combined with electrical transmission means, e.g. controlled by photoelectric cells

- B24B17/08 . involving fluid transmission means only

- B24B17/10 . involving electrical transmission means only, e.g. controlled by magnetic tape

- B24B19/00** **Single-purpose machines or devices for particular grinding operations not covered by any other main group (tapering, chamfering, or relief cutting of taps or reamers [B24B3/20](#), [B24B3/22](#), grinding screw threads [B23G](#))**

- B24B19/00B . [N: for table cutlery]
- B24B19/00B1 . . [N: for knife blades (sharpening table knife blades [B24B3/54](#))]

- B24B19/00D . [N: for the underframes of locomotives]

- B24B19/00F . [N: for grinding rails, T, I, H or other similar profiles]

- B24B19/00G . [N: for grinding skins or similar sheets]

- B24B19/00H . [N: for grinding hollow glassware, bottles]

- B24B19/00K . [N: for grinding buttons, nail heads, screw heads, bottle capsules or the like]

- B24B19/00M . [N: for grinding ceramics, pottery, table ware]

- B24B19/00N . [N: for grinding profiled workpieces using a profiled grinding tool]

- B24B19/02 . for grinding grooves, e.g. on shafts, in casings, in tubes, homokinetic joint elements
- B24B19/02B . . [N: for helicoidal grooves ([B24B19/04](#) takes precedence)] [M1203]
- B24B19/02B1 . . . [N: on electrical resistances]
- B24B19/02C . . [N: for checks for pilger rolls]
- B24B19/02D . . [N: for microgrooves or oil spots]
- B24B19/03 . . for grinding grooves in glass workpieces, e.g. decorative grooves
- B24B19/04 . . for fluting drill shanks
- B24B19/06 . . for grinding races, e.g. roller races

- B24B19/08 . for grinding non-circular cross-sections, e.g. shafts of elliptical or polygonal cross-section

- B24B19/09 . . for grinding trochoidal surfaces, e.g. in rotor housings of Wankel engines

- B24B19/09B . . . [N: using templates]
- B24B19/10 . . for grinding pistons
- B24B19/11 . . for grinding the circumferential surface of rings, e.g. piston rings (grinding end faces [B24B7/16](#), [B24B7/17](#))
- B24B19/12 . . for grinding cams or camshafts
- B24B19/12B . . . [N: electrically controlled, e.g. numerically controlled]
- B24B19/14 . for grinding turbine blades, propeller blades or the like (using grinding belts [B24B21/16](#))
- B24B19/16 . for grinding sharp-pointed workpieces, e.g. needles, pens, fish hooks, tweezers or record player styli (grinding bevels on diamonds or sapphires [B24B9/16](#); polishing of needles [B24B29/08](#)) [M1208]
- B24B19/16B . . [N: Phonograph needles and the like]
- B24B19/18 . . for grinding carding equipment, e.g. card-clothings (devices for sharpening card-clothings built in or attachable to carding machines [D01G](#))
- B24B19/20 . for grinding dies (for grinding walls of very fine holes [B24B5/48](#))
- B24B19/22 . characterised by a special design with respect to properties of the material of non-metallic articles to be ground
- B24B19/22B . . [N: of paper or similar sheet material, e.g. perforating, cutting by means of a grinding wheel]
- B24B19/22C . . [N: of the ends of optical fibres]
- B24B19/24 . . of wood, e.g. furniture
- B24B19/26 . for grinding workpieces with arcuate surfaces, e.g. parts of car bodies, bumpers or magnetic recording heads (grinding of spherical surfaces in general [B24B11/00](#), of optical surfaces on lenses or surfaces of similar shape on other work [B24B13/00](#)) [M1208]
- B24B19/26B . . [N: for bumpers]
- B24B19/28 . . for grinding shoes or linings of drum brakes (of brake drum hubs [B24B5/06](#), of brake discs [B24B7/17](#))
- B24B21/00** **Machines or devices using grinding or polishing belts (for sharpening cutting edges of tools [B24B3/00](#); portable belt-grinding machines [B24B23/06](#)); Accessories therefor**
- B24B21/00C . [N: for grinding edges or bevels]
- B24B21/00D . [N: using abrasive rolled strips]
- B24B21/00F . [N: for special purposes, e.g. for television tubes, car bumpers]
- B24B21/00G . [N: Machines comprising two or more tools or having several working posts ([B24B21/00F](#) takes precedence)]
- B24B21/02 . for grinding rotationally symmetrical surfaces
- B24B21/02B . . [N: for travelling elongated stock, e.g. wire]
- B24B21/04 . for grinding plane surfaces

- B24B21/06
 - . . involving members with limited contact area pressing the belt against the work, e.g. shoes sweeping across the whole area to be ground ([B24B21/12 takes precedence](#))
- B24B21/08
 - . . . Pressure shoes; [N: Pressure members, e.g.] backing belts
- B24B21/10
 - . . involving a rigid member, e.g. pressure bar, table, pressing or supporting the belt over substantially its whole span
- B24B21/12
 - . . involving a contact wheel or roller pressing the belt against the work
- B24B21/14
 - . . . Contact wheels; Contact rollers; Belt supporting rolls
- B24B21/16
 - . for grinding other surfaces of particular shape ([single purpose machines for grinding cams or camshafts B24B19/12](#))
- B24B21/16B
 - . . [N: for vanes or blades of turbines, propellers, impellers, compressors and the like] [\[N1204\]](#)
- B24B21/18
 - . Accessories
- B24B21/20
 - . . for controlling or adjusting the tracking or the tension of the grinding belt
- B24B21/22
 - . . for producing a reciprocation of the grinding belt normal to its direction of movement
- B24B23/00**

Portable grinding machines, e.g. hand-guided; Accessories therefor ([B24B7/18 takes precedence](#); for grinding seat surfaces [B24B15/00](#); having a flexible shaft [B24B27/027](#); grinders for cutting-off [B24B27/08](#); dust extraction equipment [B24B55/10](#); details or components, e.g. casings, bodies of portable power-driven tools not particularly related to the operation performed [B25F5/00](#))
- B24B23/00C
 - . [\[N: Auxiliary devices used in connection with portable grinding machines, e.g. holders\]](#)
- B24B23/02
 - . with rotating grinding tools; Accessories therefor
- B24B23/02B
 - . . [\[N: Spindle-locking devices, e.g. for mounting or removing the tool\]](#)
- B24B23/02C
 - . . [\[N: driven by hands or feet\]](#)
- B24B23/02D
 - . . [\[N: Fluid driven\]](#)
- B24B23/02E
 - . . [\[N: Angle tools\]](#)
- B24B23/03
 - . . the tool being driven in a combined movement
- B24B23/04
 - . with oscillating grinding tools; Accessories therefor
- B24B23/04B
 - . . [\[N: reciprocatingly driven by a pneumatic or hydraulic piston\]](#)
- B24B23/04D
 - . . [\[N: Clamping or tensioning means for abrasive sheets\]](#) [\[N1204\]](#)
- B24B23/06
 - . with abrasive belts, e.g. with endless travelling belts; Accessories therefor
- B24B23/08
 - . Portable grinding machines designed for fastening on work-pieces or other parts of particular section, e.g. for grinding commutators
- B24B25/00**

Grinding machines of universal type
- B24B27/00**

Other grinding machines or devices
- B24B27/00B
 - . [\[N: Movable machines\]](#)

- B24B27/00C . [N: Hanging grinding machines]
- B24B27/00D . [N: grinding machines with a plurality of working posts]
- B24B27/00F . [N: using a tool turning around the work-piece]
- B24B27/00G . [N: with the grinding tool mounted at the end of a set of bars]
- B24B27/00H . [N: Column grinding machines]
- B24B27/00I . [N: Radial grinding machines]
- B24B27/00K . [N: having several tools on a revolving tools box]
- B24B27/00L . [N: with means for feeding the work-pieces to the grinding tool, e.g. turntables, transfer means (see also [B24B27/00D](#), [B24B7/16](#))]
- B24B27/00M . [N: grinding machines comprising two or more grinding tools]
- B24B27/00N . [N: the grinding wheel support being angularly adjustable]
- B24B27/00P . [N: Grinding attachments for lathes or the like] [N1204]
- B24B27/02 . Bench grinders
- B24B27/027 . having a flexible shaft
- B24B27/033 . for grinding a surface for cleaning purposes, e.g. for descaling or for grinding off flaws in the surface
- B24B27/04 . . Grinding machines or devices in which the grinding tool is supported on a swinging arm
- B24B27/06 . Grinders for cutting-off
- B24B27/06B . . [N: using a saw movable on slideways]
- B24B27/06C . . [N: using a tool turning around the workpiece]
- B24B27/06D . . [N: whereby the workpieces are radially fed by means of a turning drum]
- B24B27/06E . . [N: using a cutting wire]
- B24B27/06F . . [N: for grinding holes]
- B24B27/06G . . [N: the saw being mounted on a pivoting arm]
- B24B27/06H . . [N: for cutting workpieces while they are turning about their longitudinal axis]
- B24B27/06J . . [N: the saw blade being arranged underneath a work-table]
- B24B27/06M . . [N: methods therefor]
- B24B27/06P . . [N: Accessories therefor]
- B24B27/06P1 . . . [N: for controlling the feeding or return movement of the saw]
- B24B27/08 . . being portable
- B24B27/08B . . . [N: Stands therefor]

Guide heading: **Polishing surfaces** (machines or devices for grinding or polishing glass [B24B7/24](#), [B24B9/00](#), [B24B13/00](#); for grinding or polishing using belts [B24B21/00](#)); **Finishing**

surfaces ([B24B3/00 takes precedence](#))

B24B29/00 **Machines or devices for polishing surfaces on work by means of tools made of soft or flexible material with or without the application of solid or liquid polishing agents** ([polishing tools in general B24D13/00](#))

- B24B29/00B . [N: using brushes] [[N1204](#)]
- B24B29/02 . designed for particular workpieces
- B24B29/04 . . for rotationally symmetrical workpieces, e.g. ball-, cylinder- or cone-shaped workpieces
- B24B29/06 . . for elongated workpieces having uniform cross-section in one main direction
- B24B29/08 . . . the cross-section being circular, e.g. tubes, wires, needles
- B24B29/10 . . for table cutlery

B24B31/00 **Machines or devices designed for polishing or abrading surfaces on work by means of tumbling apparatus or other apparatus in which the work and/or the abrasive material is loose; Accessories therefor** ([abrasive blasting machines B24C3/26](#))

- B24B31/00C . [[N: whereby the workpieces are mounted on a holder and are immersed in the abrasive material](#)]
- B24B31/00D . [[N: for grinding the interior surfaces of hollow workpieces](#)]
- B24B31/02 . involving rotary barrels
- B24B31/02C . . [[N: for descaling wires travelling through the rotating drum](#)]
- B24B31/02D . . [[N: the barrels being submitted to a composite rotary movement](#)]
- B24B31/02D1 . . . [[N: the barrels are moving around two parallel axes, e.g. gyratory, planetary movement \(\[B24B31/033 takes precedence\]\(#\)\)](#)]
- B24B31/02G . . [[N: the workpieces being fitted on a support](#)]
- B24B31/023 . . with tiltable axis
- B24B31/027 . . with additional oscillating movement
- B24B31/03 . . the workpieces being continuously-travelling
- B24B31/033 . . having several rotating or tumbling drums with parallel axes
- B24B31/037 . . having several rotating or tumbling drums with non-parallel axes [[N: \(\[B24B31/02D\]\(#\), \[B24B31/02D1 take precedence\]\(#\)\)](#)]
- B24B31/05 . involving a container formed as a conveyer belt
- B24B31/06 . involving oscillating or vibrating containers
- B24B31/06C . . [[N: the workpieces travelling through the containers \(\[B24B31/067\]\(#\), \[B24B31/073 take precedence\]\(#\)\)](#)]
- B24B31/06D . . [[N: the workpieces being fitted on a support](#)]
- B24B31/067 . . involving a bowl formed as a straight through
- B24B31/073 . . involving a bowl being ring- or spiral-shaped

- B24B31/10 . involving other means for tumbling of work
- B24B31/10B . . [N: using an alternating magnetic field]
- B24B31/104 . . involving a rotating bowl, in which a ring zone of abrasive powder is formed by centrifugal force
- B24B31/108 . . involving a sectioned bowl, one part of which, e.g. its wall, is stationary and the other part of which is moved, e.g. rotated
- B24B31/112 . . using magnetically consolidated grinding powder, moved relatively to the workpiece under the influence of pressure
- B24B31/116 . . using plastically deformable grinding compound, moved relatively to the workpiece under the influence of pressure
- B24B31/12 . Accessories; Protective equipment or safety devices; Installations for exhaustion of dust or for sound absorption specially adapted for machines covered by group [B24B31/00](#)(in general [B24B55/00](#)) [M1208]
- B24B31/14 . . Abrading-bodies specially designed for tumbling apparatus, e.g. abrading-balls
- B24B31/16 . . Means for separating the workpiece from the abrasive medium at the end of operation

B24B33/00 Honing machines or devices; Accessories therefor

- B24B33/02 . designed for working internal surfaces of revolution, e.g. of cylindrical or conical shapes
- B24B33/02B . . [N: Horizontal honing machines]
- B24B33/02C . . [N: Internal surface of conical shape]
- B24B33/02D . . [N: using an unexpandable tool]
- B24B33/04 . designed for working external surfaces of revolution
- B24B33/05 . designed for working grooves, e.g. in gun barrels
- B24B33/055 . designed for working plane surfaces
- B24B33/06 . with controlling or gauging equipment (gauging in general [G01B](#); controlling in general [G05](#))
- B24B33/08 . Honing tools [N: (for manufacturing gear teeth [B23F21/03](#))] [C9602]
- B24B33/08B . . [N: for external surfaces]
- B24B33/08C . . [N: having only one honing stone]
- B24B33/08D . . [N: with different sets of honing stones]
- B24B33/08F . . [N: having honing stones at the end of bars]
- B24B33/08G . . [N: in which the honing element consists of a deformable body]
- B24B33/08H . . [N: Abrading blocks for honing tools]
- B24B33/08I . . [N: provided with measuring equipment]
- B24B33/08K . . [N: for holes having a shape other than cylindrical]
- B24B33/08L . . [N: with a rack-and-pinion mechanism for expanding the honing segments]
- B24B33/10 . Accessories

- B24B33/10B
 - · [N: Honing spindles; Devices for expanding the honing elements ([B24B33/04](#) takes precedence)]
- B24B35/00**

Machines or devices designed for superfinishing surfaces on work, i.e. by means of abrading blocks reciprocating with high frequency
- B24B35/00B
 - [N: for making three-dimensional objects (by electroerosion [B23H5/04](#))]
- B24B37/00**

[N: IPC2012.01] **Lapping machines or devices; Accessories** ([B24B3/00](#) takes precedence) [C1106]
- B24B37/005
 - [N: IPC2012.01] Control means for lapping machines or devices [N1106]
- B24B37/005B
 - · [N: detecting loss or breakage of a workpiece during lapping] [N1106]
- B24B37/005D
 - · [N: taking regard of the pH-value of lapping agents] [N1106]
- B24B37/013
 - · [N: IPC2012.01] Devices or means for detecting lapping completion [N1106]
- B24B37/015
 - · [N: IPC2012.01] Temperature control [N1106]
- B24B37/02
 - designed for working surfaces of revolution
- B24B37/02B
 - · [N: characterised by the movement of the work between two lapping plates] [M1106]
- B24B37/025
 - · [N: IPC2012.01] designed for working spherical surfaces [N1106]
- B24B37/04
 - designed for working plane surfaces
- B24B37/04B
 - · [N: operating processes therefor] [M1203]
- B24B37/04B1
 - · · [N: characterised by the composition of the lapping agent] [N1204]
- B24B37/04D
 - · [N: using electric current] [N1204]
- B24B37/04F
 - · [N: of sliders and magnetic heads of hard disc drives or the like] [N1204]
- B24B37/07
 - · [N: IPC2012.01] characterised by the movement of the work or lapping tool [N1106]
- B24B37/08
 - · · [N: IPC2012.01] for double side lapping [N1106]
- B24B37/10
 - · · [N: IPC2012.01] for single side lapping [N1106]
- B24B37/10B
 - · · · [N: the workpieces or work carriers being able to rotate freely due to a frictional contact with the lapping tool] [N1106]
- B24B37/10D
 - · · · [N: the workpieces or work carriers being actively moved by a drive, e.g. in a combined rotary and translatory movement] [N1106]
- B24B37/10D1
 - · · · · [N: in a rotary movement only, about an axis being stationary during lapping] [N1106]
- B24B37/11
 - [N: IPC2012.01] Lapping tools [N1106]
- B24B37/12
 - · [N: IPC2012.01] Lapping plates for working plane surfaces [N1106]
- B24B37/14
 - · · [N: IPC2012.01] characterised by the composition or properties of the plate materials [N1106]
- B24B37/16
 - · · [N: IPC2012.01] characterised by the shape of the lapping plate surface, e.g. grooved [N1106]
- B24B37/20
 - · [N: IPC2012.01] Lapping pads for working plane surfaces [N1106]
- B24B37/20F
 - · · [N: provided with a window for inspecting the surface of the work being lapped] [N1106]

| | |
|-----------------------|---|
| B24B37/22 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> [N: IPC2012.01] characterised by a multi-layered structure [N1106] |
| B24B37/24 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> [N: IPC2012.01] characterised by the composition or properties of the pad materials [N1106] |
| B24B37/24F | <ul style="list-style-type: none"> <ul style="list-style-type: none"> [N: Pads with fixed abrasives] [N1106] |
| B24B37/26 | <ul style="list-style-type: none"> <ul style="list-style-type: none"> [N: IPC2012.01] characterised by the shape of the lapping pad surface, e.g. grooved [N1106] |
| B24B37/27 | <ul style="list-style-type: none"> [N: IPC2012.01] Work carriers [N1106] |
| B24B37/28 | <ul style="list-style-type: none"> [N: IPC2012.01] for double side lapping of plane surfaces [N1106] |
| B24B37/30 | <ul style="list-style-type: none"> [N: IPC2012.01] for single side lapping of plane surfaces [N1106] |
| B24B37/32 | <ul style="list-style-type: none"> [N: IPC2012.01] Retaining rings [N1106] |
| B24B37/34 | <ul style="list-style-type: none"> [N: IPC2012.01] Accessories [N1106] |
| B24B37/34F | <ul style="list-style-type: none"> [N: Feeding, loading or unloading work specially adapted to lapping] [N1106] |
| B24B39/00 | Burnishing machines or devices, i.e. requiring pressure members for compacting the surface zone (modifying the physical properties or structure of metal by burnishing C21D7/08, C22F1/00); Accessories therefor |
| B24B39/00B | <ul style="list-style-type: none"> [N: the working tool being composed of a plurality of working rolls or balls (see also B24B39/02B, B24B39/04B)] |
| B24B39/00C | <ul style="list-style-type: none"> [N: Peening and tools therefor] |
| B24B39/02 | <ul style="list-style-type: none"> designed for working internal surfaces of revolution |
| B24B39/02B | <ul style="list-style-type: none"> [N: the working tool being composed of a plurality of working rolls or balls (see also B24B39/00B, B24B39/04B)] |
| B24B39/02C | <ul style="list-style-type: none"> [N: Impact burnishing] |
| B24B39/04 | <ul style="list-style-type: none"> designed for working external surfaces of revolution |
| B24B39/04B | <ul style="list-style-type: none"> [N: the working tool being composed of a plurality of working rolls or balls (see also B24B39/00B, B24B39/04B)] |
| B24B39/06 | <ul style="list-style-type: none"> designed for working plane surfaces |
| B24B39/06B | <ul style="list-style-type: none"> [N: Graining of metal plates, e.g. printing or lithographic plates] [N1204] |
| Guide heading: | <u>Component parts of grinding machines or devices so far as specially adapted to grinding (if applicable to other machine tools, B23Q takes precedence; if peculiar to a particular type of machine or device, see the relevant group therefor)</u> |
| B24B41/00 | Component parts such as frames, beds, carriages, headstocks |
| B24B41/00B | <ul style="list-style-type: none"> [N: Grinding heads] |
| B24B41/00C | <ul style="list-style-type: none"> [N: Feeding or manipulating devices specially adapted to grinding machines (feeding, loading or unloading work specially adapted to lapping machines B24B37/34F)] [M1106] |
| B24B41/00D | <ul style="list-style-type: none"> [N: Weight compensation; Temperature compensation; Vibration damping] |

- B24B41/02 . Frames; Beds; Carriages
- B24B41/04 . Headstocks; Working-spindles; Features relating thereto
- B24B41/04B . . [N: Balancing mechanisms]
- B24B41/04C . . [N: Grinding spindles with magnetic or electromagnetic bearings; Features related thereto (electric motors with magnetic bearings [H02K7/09](#))]
- B24B41/047 . . Grinding heads for working on plane surfaces
- B24B41/047B . . . [N: equipped with oscillating abrasive blocks, e.g. mounted on a rotating head]
- B24B41/053 . . . for grinding or polishing glass [N: ([B24B41/047B](#) takes precedence)]
- B24B41/06 . Work supports, e.g. adjustable steadies ([B24B37/27](#) takes precedence) [C1106]
- B24B41/06B . . [N: axially supporting turning workpieces, e.g. magnetically, pneumatically]
- B24B41/06B1 . . . [N: between centres; Dogs]
- B24B41/06B1B [N: Lubrication of centres] [N1204]
- B24B41/06C . . [N: Steady rests]
- B24B41/06D . . [N: adapted for supporting work in the form of tools, e.g. drills] [M1203]
- B24B41/06F . . [N: radially supporting workpieces]
- B24B41/06G . . [N: Table-like supports for panels, sheets or the like]
- B24B45/00 Means for securing grinding wheels on rotary arbors** (suppression of vibrations in systems [F16F15/00](#); testing static or dynamic balancing of machines [G01M1/00](#))
- B24B45/00B . [N: Accessories therefor]
- B24B45/00C . [N: Quick mount and release means for disc-like wheels, e.g. on power tools]
- B24B47/00 Drives or gearings; Equipment therefor**
- B24B47/02 . for performing a reciprocating movement of carriages or work- tables
- B24B47/04 . . by mechanical gearing only
- B24B47/06 . . by liquid or gas pressure only
- B24B47/08 . . by mechanical gearing combined with fluid systems
- B24B47/10 . for rotating or reciprocating working-spindles carrying grinding wheels or workpieces [\[C9502\]](#)
- B24B47/12 . . by mechanical gearing or electric power ([B24B47/16](#) takes precedence)
- B24B47/14 . . by liquid or gas pressure ([B24B47/16](#) takes precedence)
- B24B47/16 . . performing a reciprocating movement, e.g. during which the sense of rotation of the working-spindle is reversed
- B24B47/18 . . for rotating the spindle at a speed adaptable to wear of the grinding wheel
- B24B47/20 . relating to feed movement
- B24B47/20B . . [N: driven by hand]
- B24B47/20C . . [N: for centreless grinding machines; for machines comprising work supports, e.g. steady rests]

- B24B47/22 . Equipment for exact control of the position of the grinding tool or work at the start of the grinding operation
- B24B47/22B . . [N: for bevelling optical work, e.g. lenses]
- B24B47/25 . for compensating grinding wheel abrasion resulting from dressing
- B24B47/26 . Accessories, e.g. stops
- B24B47/28 . Equipment for preventing backlash

Guide heading: **Measuring; Indicating; Controlling**

- B24B49/00** **Measuring or gauging equipment for controlling the feed movement of the grinding tool or work; Arrangements of indicating or measuring equipment, e.g. for indicating the start of the grinding operation** ([B24B33/06](#), [B24B37/005](#) take precedence; if applicable to other machine tools, [B23Q15/00](#) - [B23Q17/00](#) take precedence) [C1106]
- B24B49/00B . [N: involving acoustic means] [N1204]
 - B24B49/00D . [N: taking regard of the speed] [N1204]
 - B24B49/02 . according to the instantaneous size and required size of the workpiece acted upon, the measuring or gauging being continuous or intermittent ([B24B49/12](#) takes precedence)
 - B24B49/03 . . according to the final size of the previously ground workpiece
 - B24B49/04 . . involving measurement of the workpiece at the place of grinding during grinding operation
 - B24B49/04B . . . [N: Specially adapted gauging instruments]
 - B24B49/05 . . . including the measurement of a first workpiece already machined and of another workpiece being machined and to be matched with the first one
 - B24B49/06 . . requiring comparison of the workpiece with standard gauging plugs, rings or the like
 - B24B49/08 . involving liquid or pneumatic means
 - B24B49/10 . involving electrical means ([B24B49/02](#), [B24B49/08](#) take precedence)
 - B24B49/10B . . [N: using eddy currents] [N1204]
 - B24B49/12 . involving optical means
 - B24B49/14 . taking regard of the temperature during grinding
 - B24B49/16 . taking regard of the load
 - B24B49/16D . . [N: for grinding tyres]
 - B24B49/18 . taking regard of the presence of dressing tools
 - B24B49/18B . . [N: Wear compensation without the presence of dressing tools]
 - B24B49/18C . . [N: taking regard of the wear of the dressing tools]

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|------------------|--|
| B24B51/00 | Arrangements for automatic control of a series of individual steps in grinding a workpiece (if applicable to other machine tools, G05B takes precedence) |
| B24B53/00 | Devices or means for dressing or conditioning abrasive surfaces (compensation for grinding wheel abrasion resulting from dressing B24B47/25) |
| B24B53/00B | . [N: involving the use of electric current] |
| B24B53/00C | . [N: using at least two conditioning tools] |
| B24B53/00D | . [N: Positioning devices for conditioning tools] |
| B24B53/007 | . Cleaning of grinding wheels |
| B24B53/013 | . Application of loose grinding agent as auxiliary tool during truing operation |
| B24B53/017 | . [N: IPC2012.01] Devices or means for dressing, cleaning or otherwise conditioning lapping tools [N1106] |
| B24B53/02 | . [N: IPC2012.01] of plane surfaces on abrasive tools (B24B53/017 takes precedence) [C1106] |
| B24B53/04 | . [N: IPC2012.01] of cylindrical or conical surfaces on abrasive tools or wheels (B24B53/017 takes precedence) [C1106] |
| B24B53/047 | . . equipped with one or more diamonds |
| B24B53/053 | . . using a rotary dressing tool |
| B24B53/06 | . of profiled abrasive wheels |
| B24B53/06C | . . [N: using rotary dressing tools (B24B53/07 takes precedence)] |
| B24B53/065 | . . having other than straight profiles, e.g. crowned (B24B53/07 takes precedence) |
| B24B53/07 | . . by means of forming tools having a shape complementary to that to be produced, e.g. blocks, profile rolls |
| B24B53/075 | . . for workpieces having a grooved profile, e.g. gears, splined shafts, threads, worms (B24B53/07 takes precedence) |
| B24B53/08 | . . controlled by information means, e.g. patterns, templets, punched tapes or the like |
| B24B53/08B | . . . [N: by means of a template] |
| B24B53/08B1 | [N: for tools having a screw-thread profile] |
| B24B53/08C | . . . [N: for tools having a screw-thread profile (B24B53/08B takes precedence)] |
| B24B53/085 | . . . for workpieces having a grooved profile, e.g. gears, splined shafts, threads, worms [N: (B24B53/08B1 , B24B53/08C , B24B53/09 take precedence)] |
| B24B53/09 | . . . having transfer elements formed as pantograph mechanism |
| B24B53/095 | . Cooling or lubricating during dressing operation (cooling the grinding surfaces B24B55/02) |
| B24B53/10 | . of travelling flexible backings coated with abrasives; Cleaning of abrasive belts |
| B24B53/12 | . Dressing tools; Holders therefor |

- B24B53/14
 - . . Dressing tools equipped with rotary rollers or cutters; Holders therefor
- B24B55/00**
Safety devices for grinding or polishing machines; Accessories fitted to grinding or polishing machines for keeping tools or parts of the machine in good working condition (of general applicability for machine tools [B23Q11/00](#); in general [F16P](#))
- B24B55/02
 - . Equipment for cooling the grinding surfaces, e.g. devices for feeding coolant ([cooling or lubricating during dressing operation \[B24B53/095\]\(#\)](#) ; incorporated in grinding wheels [B24D](#)) [[M1208](#)]
- B24B55/03
 - . . designed as a complete equipment for feeding or clarifying coolant
- B24B55/04
 - . Protective covers for the grinding wheel
- B24B55/04C
 - . . [[N: with cooling means incorporated](#)]
- B24B55/05
 - . . specially designed for portable grinding machines
- B24B55/05B
 - . . . [[N: with rotating tools](#)] [[N1204](#)]
- B24B55/05D
 - . . . [[N: with oscillating tools](#)] [[N1204](#)]
- B24B55/05F
 - . . . [[N: with belt-like tools](#)] [[N1204](#)]
- B24B55/06
 - . Dust extraction equipment on grinding or polishing machines ([B24B31/12 takes precedence](#))
- B24B55/08
 - . . specially designed for belt grinding machines
- B24B55/10
 - . . specially designed for portable grinding machines, e.g. hand-guided
- B24B55/10B
 - . . . [[N: with rotating tools](#)] [[M1203](#)]
- B24B55/10C
 - . . . [[N: with oscillating tools](#)] [[M1203](#)]
- B24B55/10D
 - . . . [[N: with belt-like tools](#)] [[M1203](#)]
- B24B55/12
 - . Devices for exhausting mist of oil or coolant; Devices for collecting or recovering materials resulting from grinding or polishing, e.g. of precious metals, precious stones, diamonds or the like
- B24B57/00**
Devices for feeding, applying, grading or recovering grinding, polishing or lapping agents (for abrasive blasting [B24C1/00](#), [B24C7/00](#))
- B24B57/02
 - . for feeding of fluid, sprayed, pulverised, or liquefied grinding, polishing or lapping agents
- B24B57/04
 - . for feeding of solid grinding, polishing or lapping agents