Symbol	Typ	Titel
B	**Sektion**	**SECTION B — PERFORMING OPERATIONS; TRANSPORTING**
B24	**Klasse**	**GRINDING; POLISHING**
B24B	**Unterklasse**	**MACHINES, DEVICES, OR PROCESSES FOR GRINDING OR POLISHING (grinding of gear teeth B23F, of screw threads B23G 1/36; by electro-erosion B23H; abrasive or related blasting B24C; tools for grinding, buffing or sharpening B24D; polishing compositions C09G 1/00; abrasives C09K 3/14; electrolytic etching or polishing C25F 3/00; grinding arrangements for use on assembled railway tracks E01B 31/17); DRESSING OR CONDITIONING OF ABRADING SURFACES; FEEDING OF GRINDING, POLISHING, OR LAPPING AGENTS [2]**
B24B 1/00	**Hauptgruppe**	**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) [4]**
B24B 1/04	1-Punkt Untergruppe	. 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 B24B 31/00, involving oscillating or vibrating containers B24B 31/06; superfinishing surfaces on work, e.g. by means of abrading blocks reciprocating with high frequency, B24B 35/00) [4]
B24B 3/00	**Hauptgruppe**	**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 A01D 3/00; sharpening devices designed as components of machines with cutters, see the relevant places for the machines, e.g. A01D 75/08, B26D 7/12; sharpening of saw teeth B23D 63/12; sharpening of files or rasps B23D 73/00; grinding of die-stocks or chasers B23G 1/36)**
B24B 3/02	1-Punkt Untergruppe	. of milling cutters
B24B 3/04	2-Punkt Untergruppe	. . of plain milling cutters
B24B 3/06	2-Punkt Untergruppe	. . of face or end milling cutters or cutter heads, e.g. of shank type
B24B 3/08	2-Punkt Untergruppe	. . of profile milling cutters, e.g. of disc type
B24B 3/10	2-Punkt Untergruppe	. . of routers or engraving needles
B24B 3/12	2-Punkt Untergruppe	. . of hobs
B24B 3/14	2-Punkt Untergruppe	. . of mortise chain cutters
B24B 3/16	1-Punkt Untergruppe	. of broaches
B24B 3/18	1-Punkt Untergruppe	. of taps or reamers
B24B 3/20	2-Punkt Untergruppe	. . Tapering or chamfering taps or reamers
B24B 3/22	2-Punkt Untergruppe	. . Relief cutting of taps or reamers
B24B 3/24	1-Punkt Untergruppe	. of drills (by fluting the shank B24B 19/04)
B24B 3/26	2-Punkt Untergruppe	. . of the point of twist drills
B24B 3/28	3-Punkt Untergruppe	. . . by swivelling the drill around an axis angularly to the drill axis
B24B 3/30	4-Punkt Untergruppe	. . . . and rotating the drill about its own axis
B24B 3/32	3-Punkt Untergruppe	. . . for thinning the point
B24B 3/33	2-Punkt Untergruppe	. . of drills for stone
B24B 3/34	1-Punkt Untergruppe	. of turning or planing tools or tool bits, e.g. gear cutters (B24B 3/36 takes precedence)

Symbol	Typ	Titel
B24B 3/36	1-Punkt Untergruppe	. of cutting blades (B24B 3/58 takes precedence)
B24B 3/38	2-Punkt Untergruppe	. . for planing wood, e.g. cutter blades
B24B 3/40	2-Punkt Untergruppe	. . Processes or apparatus specially adapted for sharpening curved edges
B24B 3/42	2-Punkt Untergruppe	. . helically bent, e.g. for lawn mowers
B24B 3/44	2-Punkt Untergruppe	. . of scythes or sickles [2]
B24B 3/46	2-Punkt Untergruppe	. . of disc blades
B24B 3/48	2-Punkt Untergruppe	. . of razor blades or razors (by an abrasive block without mechanisms B24D)
B24B 3/50	3-Punkt Untergruppe	. . . operated manually
B24B 3/52	2-Punkt Untergruppe	. . of shear blades or scissors
B24B 3/54	2-Punkt Untergruppe	. . of hand or table knives
B24B 3/55	1-Punkt Untergruppe	. of knife bars for harvesting machines
B24B 3/56	1-Punkt Untergruppe	. of slicing bands (B24B 3/58 takes precedence)
B24B 3/58	1-Punkt Untergruppe	. of tools having scalloped cutting edges
B24B 3/60	1-Punkt Untergruppe	. of tools not covered by the preceding subgroups
		Grinding surfaces of particular forms
B24B 5/00	**Hauptgruppe**	**Machines or devices designed for grinding surfaces of revolution on work, including those which also grind adjacent plane surfaces; Accessories therefor (B24B 11/00-B24B 21/00 take precedence ; honing machines or devices using abrading blocks performing axial and rotary movements superimposed on one another B24B 33/00) [2]**
B24B 5/01	1-Punkt Untergruppe	. for combined grinding of surfaces of revolution and of adjacent plane surfaces on work [4]
B24B 5/02	1-Punkt Untergruppe	. involving centres or chucks for holding work
B24B 5/04	2-Punkt Untergruppe	. . for grinding cylindrical surfaces externally (grinding combined cylindrical and conical surfaces B24B 5/14)
B24B 5/06	2-Punkt Untergruppe	. . for grinding cylindrical surfaces internally (B24B 5/40 takes precedence)
B24B 5/08	3-Punkt Untergruppe	. . . involving a vertical tool spindle
B24B 5/10	3-Punkt Untergruppe	. . . involving a horizontal tool spindle
B24B 5/12	2-Punkt Untergruppe	. . for grinding cylindrical surfaces both externally and internally with several grinding wheels
B24B 5/14	2-Punkt Untergruppe	. . for grinding conical surfaces, e.g. of centres
B24B 5/16	2-Punkt Untergruppe	. . for grinding peculiarly profiled surfaces, e.g. bulged
B24B 5/18	1-Punkt Untergruppe	. involving centreless means for supporting, guiding, floating or rotating work (centreless turning B23B 5/08; centreless grinding of threads B23G 1/42) [2]
B24B 5/20	2-Punkt Untergruppe	. . involving grooved abrading blocks
B24B 5/22	2-Punkt Untergruppe	. . for grinding cylindrical surfaces, e.g. on bolts
B24B 5/24	2-Punkt Untergruppe	. . for grinding conical surfaces
B24B 5/26	2-Punkt Untergruppe	. . for grinding peculiarly profiled surfaces, e.g. bulged
B24B 5/28	2-Punkt Untergruppe	. . for grinding outer surfaces concentrically to bores, involving additional centring means

Symbol	Typ	Titel
B24B 5/30	2-Punkt Untergruppe	. . Regulating-wheels; Equipment therefor
B24B 5/307	2-Punkt Untergruppe	. . Means for supporting work [3]
B24B 5/313	1-Punkt Untergruppe	. involving work-supporting means carrying several workpieces to be operated on in succession [3]
B24B 5/32	2-Punkt Untergruppe	. . the work-supporting means being indexable [3]
B24B 5/35	1-Punkt Untergruppe	. Accessories [3]
B24B 5/36	1-Punkt Untergruppe	. Single-purpose machines or devices
B24B 5/37	2-Punkt Untergruppe	. . for grinding rolls, e.g. barrel-shaped rolls [4]
B24B 5/38	2-Punkt Untergruppe	. . for externally grinding travelling elongated stock, e.g. wire
B24B 5/40	2-Punkt Untergruppe	. . for grinding tubes internally
B24B 5/42	2-Punkt Untergruppe	. . for grinding crankshafts or crankpins
B24B 5/44	2-Punkt Untergruppe	. . for grinding rims of vehicle wheels, e.g. for bicycles
B24B 5/46	2-Punkt Untergruppe	. . for grinding railway car wheels
B24B 5/48	2-Punkt Untergruppe	. . for grinding walls of very fine holes, e.g. in drawing-dies
B24B 5/50	1-Punkt Untergruppe	. 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 B29D 30/68)
B24B 7/00	**Hauptgruppe**	**Machines or devices designed for grinding plane surfaces on work, including polishing plane glass surfaces; Accessories therefor (B24B 21/00 takes precedence; honing of plane surfaces on work B24B 33/055) [4]**
B24B 7/02	1-Punkt Untergruppe	. involving a reciprocatingly-moved work-table (involving a reciprocatingly-moved grinding wheel in combination with a stationary work-table B24B 7/07) [4]
B24B 7/04	1-Punkt Untergruppe	. involving a rotary work-table
B24B 7/06	1-Punkt Untergruppe	. involving conveyer belts, a sequence of travelling work-tables or the like
B24B 7/07	1-Punkt Untergruppe	. involving a stationary work-table [4]
B24B 7/08	2-Punkt Untergruppe	. . having an abrasive wheel built in
B24B 7/10	1-Punkt Untergruppe	. Single-purpose machines or devices (grinding tools or machines specially adapted for use on assembled railway track E01B 31/17)
B24B 7/12	2-Punkt Untergruppe	. . for grinding travelling elongated stock, e.g. strip-shaped work [4]
B24B 7/13	3-Punkt Untergruppe	. . . grinding while stock moves from coil to coil [4]
B24B 7/14	2-Punkt Untergruppe	. . for grinding slideways (portable grinding machines designed for fastening on workpieces B24B 23/08) [4]
B24B 7/16	2-Punkt Untergruppe	. . for grinding end faces, e.g. of gauges, rollers, nuts, piston rings (for combined grinding of surfaces of revolution and of adjacent plane surfaces on work B24B 5/01; for grinding edges or bevels on work B24B 9/00) [4]
B24B 7/17	3-Punkt Untergruppe	. . . for simultaneously grinding opposite and parallel end faces, e.g. double disc grinders [4]
B24B 7/18	2-Punkt Untergruppe	. . for grinding floorings, walls, ceilings or the like (machines or devices for cleaning floorings A47L 11/00, A47L 13/00)
B24B 7/19	2-Punkt Untergruppe	. . for grinding plane decorative patterns [4]

Symbol	Typ	Titel
B24B 7/20	1-Punkt Untergruppe	. characterised by a special design with respect to properties of the material of non-metallic articles to be ground
B24B 7/22	2-Punkt Untergruppe	. . for grinding inorganic material, e.g. stone, ceramics, porcelain
B24B 7/24	3-Punkt Untergruppe	. . . for grinding or polishing glass
B24B 7/26	4-Punkt Untergruppe	. . . . for simultaneously grinding or polishing opposite faces of continuously travelling sheets or bands of glass
B24B 7/28	2-Punkt Untergruppe	. . for grinding wood
B24B 7/30	2-Punkt Untergruppe	. . for grinding plastics [4]
B24B 9/00	**Hauptgruppe**	**Machines or devices designed for grinding edges or bevels on work or for removing burrs; Accessories therefor (B24B 21/00 takes precedence; for sharpening cutting edges on tools B24B 3/00; removing burrs by loose abrasive material B24B 31/00)**
B24B 9/02	1-Punkt Untergruppe	. characterised by a special design with respect to properties of materials specific to articles to be ground
B24B 9/04	2-Punkt Untergruppe	. . of metal, e.g. skate blades
B24B 9/06	2-Punkt Untergruppe	. . of non-metallic inorganic material, e.g. stone, ceramics, porcelain
B24B 9/08	3-Punkt Untergruppe	. . . of glass
B24B 9/10	4-Punkt Untergruppe	. . . . of plate glass
B24B 9/12	4-Punkt Untergruppe	. . . . of hollow glassware, e.g. drinking glasses, preserve jars, television picture tube viewing panels
B24B 9/14	4-Punkt Untergruppe	. . . . of optical work, e.g. lenses, prisms
B24B 9/16	3-Punkt Untergruppe	. . . of diamonds, of jewels or the like; Diamond grinders' dops; Dop holders or tongs (for grinding sharp pointed diamonds or sapphires B24B 19/16) [4]
B24B 9/18	2-Punkt Untergruppe	. . of wood
B24B 9/20	2-Punkt Untergruppe	. . of plastics [4]
B24B 11/00	**Hauptgruppe**	**Machines or devices designed for grinding spherical surfaces or parts of spherical surfaces on work; Accessories therefor (specially designed for optical surfaces B24B 13/00, for seat surfaces B24B 15/00)**
B24B 11/02	1-Punkt Untergruppe	. for grinding balls
B24B 11/04	2-Punkt Untergruppe	. . involving grinding wheels
B24B 11/06	3-Punkt Untergruppe	. . . acting by the front faces, e.g. of plane, grooved, or bevelled shape
B24B 11/08	3-Punkt Untergruppe	. . . acting by the circumference
B24B 11/10	3-Punkt Untergruppe	. . . of cup type
B24B 13/00	**Hauptgruppe**	**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, B24B 9/14) [2]**
B24B 13/005	1-Punkt Untergruppe	. Blocking means, chucks or the like; Alignment devices [4]
B24B 13/01	1-Punkt Untergruppe	. Specific tools, e.g. bowl-like; Production, dressing or fastening of these tools [4]
B24B 13/015	1-Punkt Untergruppe	. of televison picture tube viewing panels, headlight reflectors or the like [4]
B24B 13/02	1-Punkt Untergruppe	. by means of tools with abrading surfaces corresponding in shape with the lenses to be made
B24B 13/04	1-Punkt Untergruppe	. grinding of lenses involving grinding wheels controlled by gearing (B24B 13/06 takes precedence) [4]

Symbol	Typ	Titel
B24B 13/06	1-Punkt Untergruppe	. grinding of lenses, the tool or work being controlled by information carrying means, e.g. patterns, punched tapes, magnetic tapes [4]
B24B 15/00	**Hauptgruppe**	**Machines or devices designed for grinding seat surfaces; Accessories therefor (for spherical surfaces in general B24B 11/00)**
B24B 15/02	1-Punkt Untergruppe	. in valve housings
B24B 15/03	2-Punkt Untergruppe	. . using portable or mobile machines [4]
B24B 15/04	1-Punkt Untergruppe	. on valve members
B24B 15/06	1-Punkt Untergruppe	. on openings of bottles; on bottle stoppers or the like [4]
B24B 15/08	1-Punkt Untergruppe	. for grinding co-operating seat surfaces by moving one over the other
B24B 17/00	**Hauptgruppe**	**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 B24B 9/14; for grinding or polishing optical lens surfaces B24B 13/06; for grinding non-circular cross-sections B24B 19/08; for grinding trochoidal surfaces B24B 19/09; for grinding cams B24B 19/12; for grinding turbine blades or the like B24B 19/14; such control means per seB23Q 33/00, B23Q 35/00, G05); Accessories therefor [4]**
B24B 17/02	1-Punkt Untergruppe	. involving mechanical transmission means only
B24B 17/04	1-Punkt Untergruppe	. involving optical auxiliary means, e.g. optical projection form grinding machines
B24B 17/06	2-Punkt Untergruppe	. . combined with electrical transmission means, e.g. controlled by photoelectric cells
B24B 17/08	1-Punkt Untergruppe	. involving fluid transmission means only
B24B 17/10	1-Punkt Untergruppe	. involving electrical transmission means only, e.g. controlled by magnetic tape
B24B 19/00	**Hauptgruppe**	**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 B24B 3/20, B24B 3/22; grinding screw threads B23G 1/36)**
B24B 19/02	1-Punkt Untergruppe	. for grinding grooves, e.g. on shafts, in casings, in tubes, homokinetic joint elements [4]
B24B 19/03	2-Punkt Untergruppe	. . for grinding grooves in glass workpieces, e.g. decorative grooves [4]
B24B 19/04	2-Punkt Untergruppe	. . for fluting drill shanks
B24B 19/06	2-Punkt Untergruppe	. . for grinding races, e.g. roller races
B24B 19/08	1-Punkt Untergruppe	. for grinding non-circular cross-sections, e.g. shafts of elliptical or polygonal cross-section
B24B 19/09	2-Punkt Untergruppe	. . for grinding trochoidal surfaces, e.g. in rotor housings of Wankel engines [4]
B24B 19/10	2-Punkt Untergruppe	. . for grinding pistons
B24B 19/11	2-Punkt Untergruppe	. . for grinding the circumferential surface of rings, e.g. piston rings (grinding end faces B24B 7/16, B24B 7/17) [4]
B24B 19/12	2-Punkt Untergruppe	. . for grinding cams or camshafts
B24B 19/14	1-Punkt Untergruppe	. for grinding turbine blades, propeller blades or the like (using grinding belts B24B 21/16) [4]
B24B 19/16	1-Punkt Untergruppe	. for grinding sharp-pointed workpieces, e.g. needles, pens, fish hooks, tweezers, record player styli (grinding bevels on diamonds or sapphires B24B 9/16; polishing of needles B24B 29/08) [4]
B24B 19/18	2-Punkt Untergruppe	. . for grinding carding equipment, e.g. card-clothings (devices for sharpening card-clothings built in, or attachable to, carding machines D01G)

Symbol	Typ	Titel
B24B 19/20	1-Punkt Untergruppe	. for grinding dies (for grinding walls of very fine holes B24B 5/48)
B24B 19/22	1-Punkt Untergruppe	. characterised by a special design with respect to properties of the material of non-metallic articles to be ground
B24B 19/24	2-Punkt Untergruppe	. . of wood, e.g. furniture
B24B 19/26	1-Punkt Untergruppe	. for grinding workpieces with arcuate surfaces, e.g. parts of car bodies, bumpers, magnetic recording heads (grinding of spherical surfaces in general B24B 11/00, of optical surfaces on lenses or surfaces of similar shape on other work B24B 13/00) [4]
B24B 19/28	2-Punkt Untergruppe	. . for grinding shoes or linings of drum brakes (of brake drum hubs B24B 5/06; of brake discs B24B 7/17) [4]
B24B 21/00	**Hauptgruppe**	**Machines or devices using grinding or polishing belts (for sharpening cutting edges of tools B24B 3/00; portable belt-grinding machines B24B 23/06); Accessories therefor [4]**
B24B 21/02	1-Punkt Untergruppe	. for grinding rotationally symmetrical surfaces
B24B 21/04	1-Punkt Untergruppe	. for grinding plane surfaces
B24B 21/06	2-Punkt Untergruppe	. . involving members with limited contact area pressing the belt against the work, e.g. shoes sweeping across the whole area to be ground (B24B 21/12 takes precedence)
B24B 21/08	3-Punkt Untergruppe	. . . Pressure shoes; Backing belts
B24B 21/10	2-Punkt Untergruppe	. . involving a rigid member, e.g. pressure bar, table, pressing or supporting the belt over substantially its whole span
B24B 21/12	2-Punkt Untergruppe	. . involving a contact wheel or roller pressing the belt against the work
B24B 21/14	3-Punkt Untergruppe	. . . Contact wheels; Contact rollers; Belt supporting rolls [4]
B24B 21/16	1-Punkt Untergruppe	. for grinding other surfaces of particular shape (single purpose machines for grinding cams or camshafts B24B 19/12) [4]
B24B 21/18	1-Punkt Untergruppe	. Accessories
B24B 21/20	2-Punkt Untergruppe	. . for controlling or adjusting the tracking or the tension of the grinding belt [4]
B24B 21/22	2-Punkt Untergruppe	. . for producing a reciprocation of the grinding belt normal to its direction of movement [4]
B24B 23/00	**Hauptgruppe**	**Portable grinding machines, e.g. hand-guided; Accessories therefor (B24B 7/18 takes precedence; for grinding seat surfaces B24B 15/00; having a flexible shaft B24B 27/027; grinders for cutting-off B24B 27/08; dust extraction equipment B24B 55/10; details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed B25F 5/00) [4]**
B24B 23/02	1-Punkt Untergruppe	. with rotating grinding tools; Accessories therefor
B24B 23/03	2-Punkt Untergruppe	. . the tool being driven in a combined movement [4]
B24B 23/04	1-Punkt Untergruppe	. with oscillating grinding tools; Accessories therefor [4]
B24B 23/06	1-Punkt Untergruppe	. with abrasive belts, e.g. with endless travelling belts; Accessories therefor [4]
B24B 23/08	1-Punkt Untergruppe	. Portable grinding machines designed for fastening on workpieces or other parts of particular section, e.g. for grinding commutators
B24B 25/00	**Hauptgruppe**	**Grinding machines of universal type**
B24B 27/00	**Hauptgruppe**	**Other grinding machines or devices**
B24B 27/02	1-Punkt Untergruppe	. Bench grinders [4]
B24B 27/027	1-Punkt Untergruppe	. having a flexible shaft [4]

Symbol	Typ	Titel
B24B 27/033	1-Punkt Untergruppe	. for grinding a surface for cleaning purposes, e.g. for descaling or for grinding off flaws in the surface [4]
B24B 27/04	2-Punkt Untergruppe	. . Grinding machines or devices in which the grinding tool is supported on a swinging arm
B24B 27/06	1-Punkt Untergruppe	. Grinders for cutting-off
B24B 27/08	2-Punkt Untergruppe	. . being portable [4]
		Polishing surfaces (machines or devices for grinding or polishing glass B24B 7/24, B24B 9/00, B24B 13/00; for grinding or polishing using belts B24B 21/00); Finishing surfaces (B24B 3/00 takes precedence)
B24B 29/00	**Hauptgruppe**	**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 B24D 13/00) [4]**
B24B 29/02	1-Punkt Untergruppe	. designed for particular workpieces [4]
B24B 29/04	2-Punkt Untergruppe	. . for rotationally symmetrical workpieces, e.g. ball-, cylinder- or cone-shaped workpieces [4]
B24B 29/06	2-Punkt Untergruppe	. . for elongated workpieces having uniform cross-section in one main direction [4]
B24B 29/08	3-Punkt Untergruppe	. . . the cross-section being circular, e.g. tubes, wires, needles [4]
B24B 29/10	2-Punkt Untergruppe	. . for table cutlery [4]
B24B 31/00	**Hauptgruppe**	**Machines or devices designed for polishing or abrading surfaces on work by means of tumbling apparatus or other apparatus in which the work or the abrasive material is loose; Accessories therefor (abrasive blasting machines B24C 3/26)**
B24B 31/02	1-Punkt Untergruppe	. involving rotary barrels
B24B 31/023	2-Punkt Untergruppe	. . with tiltable axis [4]
B24B 31/027	2-Punkt Untergruppe	. . with additional oscillating movement [4]
B24B 31/03	2-Punkt Untergruppe	. . the workpieces being continuously-travelling [4]
B24B 31/033	2-Punkt Untergruppe	. . having several rotating or tumbling drums with parallel axes [4]
B24B 31/037	2-Punkt Untergruppe	. . having several rotating or tumbling drums with non-parallel axes [4]
B24B 31/05	1-Punkt Untergruppe	. involving a container formed as a conveyer belt [4]
B24B 31/06	1-Punkt Untergruppe	. involving oscillating or vibrating containers
B24B 31/067	2-Punkt Untergruppe	. . involving a bowl formed as a straight trough [4]
B24B 31/073	2-Punkt Untergruppe	. . involving a bowl being ring- or spiral-shaped [4]
B24B 31/10	1-Punkt Untergruppe	. involving other means for tumbling of work [4]
B24B 31/104	2-Punkt Untergruppe	. . involving a rotating bowl, in which a ring zone of abrasive powder is formed by centrifugal force [4]
B24B 31/108	2-Punkt Untergruppe	. . 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 [4]
B24B 31/112	2-Punkt Untergruppe	. . using magnetically consolidated grinding powder, moved relatively to the workpiece under the influence of pressure [4]
B24B 31/116	2-Punkt Untergruppe	. . using plastically deformable grinding compound, moved relatively to the workpiece under the influence of pressure [4]
B24B 31/12	1-Punkt Untergruppe	. Accessories; Protective equipment or safety devices; Installations for exhaustion of dust or for sound absorption specially designed for machines covered by group B24B 31/00 (in general B24B 55/00) [4]

Symbol	Typ	Titel
B24B 31/14	2-Punkt Untergruppe	. . Abrading-bodies specially designed for tumbling apparatus, e.g. abrading-balls
B24B 31/16	2-Punkt Untergruppe	. . Means for separating the workpiece from the abrasive medium at the end of operation [4]
B24B 33/00	**Hauptgruppe**	**Honing machines or devices; Accessories therefor**
B24B 33/02	1-Punkt Untergruppe	. designed for working internal surfaces of revolution, e.g. of cylindrical or conical shapes
B24B 33/04	1-Punkt Untergruppe	. designed for working external surfaces of revolution
B24B 33/05	1-Punkt Untergruppe	. designed for working grooves, e.g. in gun barrels
B24B 33/055	1-Punkt Untergruppe	. designed for working plane surfaces [4]
B24B 33/06	1-Punkt Untergruppe	. with controlling or gauging equipment (gauging in general G01B; controlling in general G05)
B24B 33/08	1-Punkt Untergruppe	. Honing tools
B24B 33/10	1-Punkt Untergruppe	. Accessories
B24B 35/00	**Hauptgruppe**	**Machines or devices designed for superfinishing surfaces on work, i.e. by means of abrading blocks reciprocating with high frequency**
B24B 37/00	**Hauptgruppe**	**Lapping machines or devices, i.e. requiring pulverulent abrading substances inserted between a lap of relatively soft but rigid material and the surface to be lapped; Accessories therefor**
B24B 37/02	1-Punkt Untergruppe	. designed for working surfaces of revolution
B24B 37/04	1-Punkt Untergruppe	. designed for working plane surfaces
B24B 39/00	**Hauptgruppe**	**Burnishing machines or devices, i.e. requiring pressure members for compacting the surface zone (modifying the physical properties or structure of metal by burnishing C21D 7/08, C22F 1/00); Accessories therefor**
B24B 39/02	1-Punkt Untergruppe	. designed for working internal surfaces of revolution
B24B 39/04	1-Punkt Untergruppe	. designed for working external surfaces of revolution
B24B 39/06	1-Punkt Untergruppe	. designed for working plane surfaces [4]
		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)
B24B 41/00	**Hauptgruppe**	**Component parts such as frames, beds, carriages, headstocks**
B24B 41/02	1-Punkt Untergruppe	. Frames; Beds; Carriages
B24B 41/04	1-Punkt Untergruppe	. Headstocks; Working-spindles; Features relating thereto
B24B 41/047	2-Punkt Untergruppe	. . Grinding heads for working on plane surfaces [4]
B24B 41/053	3-Punkt Untergruppe	. . . for grinding or polishing glass [4]
B24B 41/06	1-Punkt Untergruppe	. Work supports, e.g. adjustable steadies
B24B 45/00	**Hauptgruppe**	**Means for securing grinding wheels on rotary arbors (suppression of vibrations in systems F16F 15/00; testing static or dynamic balancing of machines G01M 1/00)**
B24B 47/00	**Hauptgruppe**	**Drives or gearings; Equipment therefor**
B24B 47/02	1-Punkt Untergruppe	. for performing a reciprocating movement of carriages or work-tables
B24B 47/04	2-Punkt Untergruppe	. . by mechanical gearing only
B24B 47/06	2-Punkt Untergruppe	. . by liquid or gas pressure only
B24B 47/08	2-Punkt Untergruppe	. . by mechanical gearing combined with fluid systems

Symbol	Typ	Titel
B24B 47/10	1-Punkt Untergruppe	. for rotating or reciprocating working-spindles carrying grinding wheels or workpieces
B24B 47/12	2-Punkt Untergruppe	. . by mechanical gearing or electric power (B24B 47/16 takes precedence)
B24B 47/14	2-Punkt Untergruppe	. . by liquid or gas pressure (B24B 47/16 takes precedence)
B24B 47/16	2-Punkt Untergruppe	. . performing a reciprocating movement, e.g. during which the sense of rotation of the working-spindle is reversed
B24B 47/18	2-Punkt Untergruppe	. . for rotating the spindle at a speed adaptable to wear of the grinding wheel
B24B 47/20	1-Punkt Untergruppe	. relating to feed movement
B24B 47/22	1-Punkt Untergruppe	. Equipment for exact control of the position of the grinding tool or work at the start of the grinding operation
B24B 47/25	1-Punkt Untergruppe	. for compensating grinding wheel abrasion resulting from dressing [4]
B24B 47/26	1-Punkt Untergruppe	. Accessories, e.g. stops
B24B 47/28	1-Punkt Untergruppe	. Equipment for preventing backlash
		Measuring; Indicating; Controlling
B24B 49/00	**Hauptgruppe**	**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 (B24B 33/06 takes precedence; if applicable to other machine tools, B23Q 15/00-B23Q 17/00 take precedence; gauging instruments in general G01B)**
B24B 49/02	1-Punkt Untergruppe	. according to the instantaneous size and required size of the workpiece acted upon, the measuring or gauging being continuous or intermittent (B24B 49/12 takes precedence) [4]
B24B 49/03	2-Punkt Untergruppe	. . according to the final size of the previously ground workpiece [4]
B24B 49/04	2-Punkt Untergruppe	. . involving measurement of the workpiece at the place of grinding during grinding operation [4]
B24B 49/05	3-Punkt Untergruppe	. . . including the measurement of a first workpiece already machined and of another workpiece being machined and to be matched with the first one [4]
B24B 49/06	2-Punkt Untergruppe	. . requiring comparison of the workpiece with standard gauging plugs, rings or the like
B24B 49/08	1-Punkt Untergruppe	. involving liquid or pneumatic means
B24B 49/10	1-Punkt Untergruppe	. involving electrical means (B24B 49/02, B24B 49/08 take precedence)
B24B 49/12	1-Punkt Untergruppe	. involving optical means
B24B 49/14	1-Punkt Untergruppe	. taking regard of the temperature during grinding
B24B 49/16	1-Punkt Untergruppe	. taking regard of the load
B24B 49/18	1-Punkt Untergruppe	. taking regard of the presence of dressing tools
B24B 51/00	**Hauptgruppe**	**Arrangements for automatic control of a series of individual steps in grinding a workpiece**
B24B 53/00	**Hauptgruppe**	**Devices or means for dressing or conditioning abrasive surfaces (compensation for grinding wheel abrasion resulting from dressing B24B 47/25) [4]**
B24B 53/007	1-Punkt Untergruppe	. Cleaning of grinding wheels [4]
B24B 53/013	1-Punkt Untergruppe	. Application of loose grinding agent as auxiliary tool during truing operation [4]
B24B 53/02	1-Punkt Untergruppe	. of plane surfaces on abrasive tools
B24B 53/04	1-Punkt Untergruppe	. of cylindrical or conical surfaces on abrasive tools or wheels [4]
B24B 53/047	2-Punkt Untergruppe	. . equipped with one or more diamonds [4]

Symbol	Typ	Titel
B24B 53/053	2-Punkt Untergruppe	. . using a rotary dressing tool [4]
B24B 53/06	1-Punkt Untergruppe	. of profiled abrasive wheels
B24B 53/065	2-Punkt Untergruppe	. . having other than straight profiles, e.g. crowned (B24B 53/07 takes precedence) [4]
B24B 53/07	2-Punkt Untergruppe	. . by means of forming tools having a shape complementary to that to be produced, e.g. blocks, profile rolls [4]
B24B 53/075	2-Punkt Untergruppe	. . for workpieces having a grooved profile, e.g. gears, splined shafts, threads, worms (B24B 53/07 takes precedence) [4]
B24B 53/08	2-Punkt Untergruppe	. . controlled by information means, e.g. patterns, templets, punched tapes or the like
B24B 53/085	3-Punkt Untergruppe	. . . for workpieces having a grooved profile, e.g. gears, splined shafts, threads, worms (B24B 53/09 takes precedence) [4]
B24B 53/09	3-Punkt Untergruppe	. . . having transfer elements formed as pantograph mechanism [4]
B24B 53/095	1-Punkt Untergruppe	. Cooling or lubricating during dressing operation (cooling the grinding surfaces B24B 55/02) [4]
B24B 53/10	1-Punkt Untergruppe	. of travelling flexible backings coated with abrasives; Cleaning of abrasive belts [4]
B24B 53/12	1-Punkt Untergruppe	. Dressing tools; Holders therefor [4]
B24B 53/14	2-Punkt Untergruppe	. . Dressing tools equipped with rotary rollers or cutters; Holders therefor [4]
B24B 55/00	**Hauptgruppe**	**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 B23Q 11/00; in general F16P)**
B24B 55/02	1-Punkt Untergruppe	. Equipment for cooling the grinding surfaces, including devices for feeding coolant (cooling or lubricating during dressing operation B24B 53/095; incorporated in grinding wheels B24D) [4]
B24B 55/03	2-Punkt Untergruppe	. . designed as a complete equipment for feeding or clarifying coolant [4]
B24B 55/04	1-Punkt Untergruppe	. Protective covers for the grinding wheel
B24B 55/05	2-Punkt Untergruppe	. . specially designed for portable grinding machines [4]
B24B 55/06	1-Punkt Untergruppe	. Dust extraction equipment on grinding or polishing machines (B24B 31/12 takes precedence)
B24B 55/08	2-Punkt Untergruppe	. . specially designed for belt grinding machines [4]
B24B 55/10	2-Punkt Untergruppe	. . specially designed for portable grinding machines, e.g. hand-guided [4]
B24B 55/12	1-Punkt Untergruppe	. 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 [4]
B24B 57/00	**Hauptgruppe**	**Devices for feeding, applying, grading or recovering grinding, polishing or lapping agents (for abrasive blasting B24C 1/00, B24C 7/00) [4]**
B24B 57/02	1-Punkt Untergruppe	. for feeding of fluid, sprayed, pulverised, or liquefied grinding, polishing or lapping agents [4]
B24B 57/04	1-Punkt Untergruppe	. for feeding of solid grinding, polishing or lapping agents [4]