

CPC COOPERATIVE PATENT CLASSIFICATION

B23C MILLING (broaching [B23D](#); broach-milling in making gears [B23F](#); arrangement for copying or controlling [B23Q](#))

| | | | |
|-------------|---|-------------|---|
| 1/00 | Milling machines not designed for particular work or special operations | 3/126 | . . {Portable devices or machines for chamfering edges} |
| 1/002 | . {Gantry-type milling machines} | 3/128 | . . {Trimming or finishing edges of doors and windows} |
| 1/005 | . {with a tool moving in a closed path around the workpiece} | 3/13 | . Surface milling of plates, sheets or strips |
| 1/007 | . {movable milling machines, e.g. on rails} | 3/14 | . Scrubbing or peeling ingots or similar work-pieces |
| 1/02 | . with one horizontal working-spindle | 3/16 | . Working surfaces curved in two directions |
| 1/025 | . . with working-spindle movable in a fixed position | 3/18 | . . for shaping screw-propellers, turbine blades, or impellers |
| 1/027 | . . with working-spindle movable in a vertical direction | 3/20 | . . for shaping dies |
| 1/04 | . with a plurality of horizontal working-spindles | 3/22 | . Forming overlapped joints, e.g. of the ends of piston-rings |
| 1/045 | . . {Opposed - spindle machines} | 3/24 | . Making square or polygonal ends on work-pieces, e.g. key studs on tools |
| 1/06 | . with one vertical working-spindle | 3/26 | . Making square or polygonal holes in work-pieces, e.g. key holes in tools |
| 1/08 | . with a plurality of vertical working-spindles | 3/28 | . Grooving workpieces (tread-cutting by milling B23G 1/32) |
| 1/10 | . with both horizontal and vertical working-spindles | 3/30 | . . Milling straight grooves, e.g. keyways |
| 1/12 | . with spindle adjustable to different angles, e.g. either horizontal or vertical | 3/305 | . . . {in which more than one milling tool is used simultaneously, e.g. for sheet material} |
| 1/14 | . with rotary work-carrying table (work tables for machine tools in general B23Q 1/00) | 3/32 | . . Milling helical grooves, e.g. in making twist-drills |
| 1/16 | . specially designed for control by copying devices {(not used; see B23Q 35/00)} | 3/34 | . . Milling grooves of other forms, e.g. circumferential |
| 1/18 | . . for milling while revolving the work | 3/35 | . . Milling grooves in keys |
| 1/20 | . Portable devices or machines (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed B25F 5/00); Hand-driven devices or machines | 3/355 | . . . {Holders for the template keys} |
| | | 3/36 | . Milling milling-cutters (B23C 3/28 takes precedence) |
| 3/00 | Milling particular work; Special milling operations; Machines therefor (milling gear-teeth B23F, heat assisted machining B23P 25/00) | 5/00 | Milling-cutters (for cutting gear-teeth B23F 21/12) |
| 3/002 | . {Milling elongated workpieces} | 5/003 | . {with vibration suppressing means} |
| 3/005 | . . {Rails} | 5/006 | . {Details of the milling cutter body} |
| 3/007 | . {Milling end surfaces of nuts or tubes} | 5/02 | . characterised by the shape of the cutter |
| 3/02 | . Milling surfaces of revolution (B23C 3/06 , B23C 3/08 take precedence) | 5/04 | . . Plain cutters, i.e. having essentially a cylindrical or tapered cutting surface of substantial length (B23C 5/10 takes precedence) |
| 3/023 | . . {Milling spherical surfaces} | 5/06 | . . Face-milling cutters, i.e. having only or primarily a substantially flat cutting surface |
| 3/026 | . . . {Milling balls} | 5/08 | . . Disc-type cutters |
| 3/04 | . . while revolving the work | 5/10 | . . Shank-type cutters, i.e. with an integral shaft |
| 3/05 | . . Finishing valves or valve seats {(machines for grinding seat surfaces, e.g. in valve housings, B24B 15/00)} | 5/1009 | . . . {Ball nose end mills} |
| 3/051 | . . . {Reconditioning of valve seats} | 5/1018 | {with permanently fixed cutting inserts} |
| 3/053 | {having means for guiding the tool carrying spindle} | 5/1027 | {with one or more removable cutting inserts} |
| 3/055 | {for engines} | 5/1036 | {having a single cutting insert, the cutting edges of which subtend 180 degrees} |
| 3/056 | {for taps or valves} | 5/1045 | {having a cutting insert, the cutting edge of which subtends substantially 90 degrees} |
| 3/058 | . . . {Reconditioning of valves} | 5/1054 | . . . {T slot cutters} |
| 3/06 | . Milling crankshafts | 5/1063 | {with permanently fixed cutting inserts} |
| 3/08 | . Milling cams, camshafts, or the like | 5/1072 | {with removable cutting inserts} |
| 3/10 | . Relief milling (lathes or turning devices for relieving B23B5/42) | 5/1081 | . . . {with permanently fixed cutting inserts (B23C 5/1054 and B23C 5/1081 take precedence)} |
| 3/12 | . Trimming or finishing edges, e.g. deburring welded corners | 5/109 | . . . {with removable cutting inserts} |
| 3/122 | . . {of pipes or cylinders} | | |
| 3/124 | . . . {internally} | | |

- 5/12 . . Cutters specially designed for producing particular profiles ([B23C 5/10](#) takes precedence)
- 5/14 . . . essentially comprising curves { ([B23C 5/1009](#) takes precedence) }
- 5/16 . characterised by physical features other than shape
- 5/165 . . {with chipbreaking or chipdividing equipment (for turning machines [B23B 25/02](#); turning tools [B23B 27/00](#); drilling machines [B23B 47/34](#)) }
- 5/18 . . with permanently-fixed cutter-bits or teeth
- 5/20 . . with removable cutter bits or teeth {or cutting inserts }
- 5/202 . . . {Special by shaped plate-like cutting inserts, i.e. length greater than or equal to width, width greater than or equal to thickness (with removable plate-like turning cutting inserts of special form [B23B 27/141](#)) }
- 5/205 {having chip-breakers }
- 5/207 {having a special shape }
- 5/22 . . . Securing arrangements for bits or teeth {or cutting inserts }
- 5/2204 {with cutting inserts clamped against the walls of the recess in the shank by a clamping member acting upon the wall of a hole in the insert }
- 5/2208 {for plate-like cutting inserts ([B23C 5/2226](#), [B23C 5/223](#), [B23C 5/2234](#) take precedence) }
- 5/2213 {Special by shaped cutting inserts }
- 5/2217 {having chip-breakers }
- 5/2221 {having a special shape }
- 5/2226 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/223 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/2234 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/2239 {with cutting inserts clamped by a clamping member acting almost perpendicular on the cutting face }
- 5/2243 {for plate-like cutting inserts ([B23C 5/2252](#), [B23C 5/2256](#), [B23C 5/226](#) take precedence) }
- 5/2247 {having a special shape }
- 5/2252 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/2256 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/226 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/2265 {by means of a wedge }
- 5/2269 {for plate-like cutting inserts ([B23C 5/2278](#), [B23C 5/2286](#), [B23C 5/2291](#) take precedence) }
- 5/2273 {having a special shape }
- 5/2278 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/2282 {having a special shape }
- 5/2286 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/2291 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/2295 {the cutting elements being clamped simultaneously }
- 5/24 adjustable
- 5/2403 {with cutting inserts clamped against the walls of the recess in the shank by a clamping member acting upon the wall of a hole in the insert }
- 5/2406 {for plate-like cutting inserts ([B23C 5/241](#), [B23C 5/2413](#), [B23C 5/2417](#) take precedence) }
- 5/241 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/2413 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/2417 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/242 {with cutting inserts clamped by a clamping member acting almost perpendicularly on the cutting face }
- 5/2424 {for plate-like cutting inserts ([B23C 5/2427](#), [B23C 5/2431](#), [B23C 5/2434](#) take precedence) }
- 5/2427 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/2431 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/2434 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/2437 {clamping by means of a wedge }
- 5/2441 {for plate-like cutting inserts ([B23C 5/2444](#), [B23C 5/2448](#), [B23C 5/2451](#) take precedence) }
- 5/2444 {for plate-like cutting inserts fitted on an intermediate carrier }
- 5/2448 {for plate-like cutting inserts fitted on a shank, fixed in the cutter body }
- 5/2451 {for plate-like cutting inserts fitted on a ring or ring segment }
- 5/2455 {The adjusting means being serrated teeth on the cutter and the cutting insert }
- 5/2458 {the cutting elements being clamped or adjusted simultaneously }
- 5/2462 {the adjusting means being oblique surfaces }
- 5/2465 {the adjusting means being notches }
- 5/2468 {the adjusting means being serrations }
- 5/2472 {the adjusting means being screws }
- 5/2475 {the adjusting means being distance elements, e.g. shims or washers }
- 5/2479 {the adjusting means being eccentrics }
- 5/2482 {the adjusting means being hydraulic cylinders }
- 5/2486 {where the adjustment is made by balancing the toolholders }
- 5/2489 {where the adjustment is made by changing the inclination of the inserts }
- 5/2493 {where the adjustment is made by deforming the seating surfaces }
- 5/2496 {where the adjusting means are gears and racks }
- 5/26 . Securing milling cutters to the driving spindle
- 5/265 . . {by fluid pressure means }
- 5/28 . Features relating to lubricating or cooling
- 7/00 Milling devices able to be attached to a machine tool, whether or not replacing an operative portion of the machine tool**

| | | | |
|----------------|--|----------------|--|
| 7/02 | . to lathes | 2200/283 | . . Negative cutting angles |
| 7/04 | . to planing or slotting machines | 2200/286 | . . Positive cutting angles |
| 9/00 | Details or accessories so far as specially adapted to milling machines or cutter (drives, control devices, or accessories, in general B23Q) | 2200/32 | . Chip breaking or chip evacuation |
| 9/005 | . {milling heads} | 2200/323 | . . by chip-breaking projections (with projection on top surface B23C 2200/081) |
| 2200/00 | Details of milling cutting inserts | 2200/326 | . . by chip breaking grooves (with grooves on top surface for chip-breaking B23C 2200/087) |
| 2200/04 | . Overall shape | 2200/36 | . Other features of the milling insert not covered by B23C 2200/04 - B23C 2200/32 |
| 2200/0405 | . . Hexagonal | 2200/361 | . . Fixation holes |
| 2200/0411 | . . . irregular | 2200/362 | . . . Having two fixation holes |
| 2200/0416 | . . Irregular | 2200/363 | . . Lines to permit indexing of round insert (bottom surface with features relating to indexing B23C 2200/168) |
| 2200/0422 | . . Octagonal | 2200/365 | . . Lands, i.e. the outer peripheral section of rake faces |
| 2200/0427 | . . . rounded | 2200/366 | . . . Variable |
| 2200/0433 | . . Parallelogram | 2200/367 | . . Mounted tangentially, i.e. where the rake face is not the face with largest area |
| 2200/0438 | . . . rounded | 2200/368 | . . Roughened surfaces |
| 2200/0444 | . . Pentagonal | 2210/00 | Details of milling cutters |
| 2200/045 | . . Round | 2210/02 | . Connections between the shanks and detachable cutting heads |
| 2200/0455 | . . Square | 2210/03 | . Cutting heads comprised of different material than the shank irrespective of whether the head is detachable from the shank |
| 2200/0461 | . . . rounded | 2210/04 | . Angles |
| 2200/0466 | . . Star form | 2210/0407 | . . Cutting angles |
| 2200/0472 | . . Trapezium | 2210/0414 | . . . different |
| 2200/0477 | . . Triangular | 2210/0421 | . . . negative |
| 2200/0483 | . . . rounded | 2210/0428 | axial rake angle |
| 2200/0488 | . . Heptagonal | 2210/0435 | radial rake angle |
| 2200/0494 | . . Rectangular | 2210/0442 | . . . positive |
| 2200/08 | . Rake or top surfaces | 2210/045 | axial rake angle |
| 2200/081 | . . with projections (chip breaking projections in general B23C 2200/323) | 2210/0457 | radial rake angle |
| 2200/082 | . . with an elevated clamping surface | 2210/0464 | . . . neutral |
| 2200/083 | . . curved | 2210/0471 | axial rake angle |
| 2200/085 | . . discontinuous | 2210/0478 | radial rake angle |
| 2200/086 | . . with one or more grooves | 2210/0485 | . . Helix angles |
| 2200/087 | . . . for chip-breaking (with chip-breaking grooves in general B23C 2200/326) | 2210/0492 | . . . different |
| 2200/088 | . . spherical | 2210/08 | . Side or top views of the cutting edge |
| 2200/12 | . Side or flank surfaces | 2210/082 | . . Details of the corner region between axial and radial cutting edges |
| 2200/121 | . . with projections | 2210/084 | . . Curved cutting edges |
| 2200/123 | . . curved | 2210/086 | . . Discontinuous or interrupted cutting edges |
| 2200/125 | . . discontinuous | 2210/088 | . . Cutting edges with a wave form |
| 2200/126 | . . . stepped | 2210/12 | . Cross section of the cutting edge |
| 2200/128 | . . with one or more grooves | 2210/123 | . . Bevelled cutting edges |
| 2200/16 | . Supporting or bottom surfaces | 2210/126 | . . Rounded cutting edges |
| 2200/161 | . . with projections | 2210/16 | . Fixation of inserts or cutting bits in the tool (details of connections B23C 2240/00) |
| 2200/162 | . . curved | 2210/161 | . . Elastically deformable clamping members |
| 2200/164 | . . discontinuous | 2210/163 | . . Indexing |
| 2200/165 | . . with one or more grooves | 2210/165 | . . Fixation bolts |
| 2200/167 | . . star form | 2210/166 | . . Shims |
| 2200/168 | . . with features related to indexing (with lines to permit indexing of round inserts B23C 2200/363) | 2210/168 | . . Seats for cutting inserts, supports for replaceable cutting bits |
| 2200/20 | . Top or side views of the cutting edge | 2210/20 | . Number of cutting edges |
| 2200/201 | . . Details of the nose radius and immediately surrounding areas | 2210/201 | . . one |
| 2200/203 | . . Curved cutting edges | 2210/202 | . . three |
| 2200/205 | . . Discontinuous cutting edges | 2210/203 | . . four |
| 2200/206 | . . Cutting edges having a wave-form | 2210/204 | . . five |
| 2200/208 | . . Wiper, i.e. an auxiliary cutting edge to improve surface finish | | |
| 2200/24 | . Cross section of the cutting edge | | |
| 2200/243 | . . bevelled or chamfered | | |
| 2200/246 | . . rounded | | |
| 2200/28 | . Angles | | |

- 2210/205 . . six
- 2210/206 . . seven
- 2210/207 . . eight
- 2210/208 . . ten
- 2210/209 . . twelve
- 2210/24 . Overall form of the milling cutter ([angles B23C 2210/04; top or side views of cutting edges B23C 2210/08; cross sections of cutting edges B23C 2210/12](#))
- 2210/241 . . Cross sections of the whole milling cutter
- 2210/242 . . Form tools, i.e. cutting edges profiles to generate a particular form
- 2210/243 . . Cutting parts at both ends
- 2210/244 . . Milling cutters comprised of disc-shaped modules or multiple disc-like cutters
- 2210/245 . . Milling cutters comprising a disc having a wave form
- 2210/246 . . Milling cutters comprising a hole or hollow in the end face or between the cutting edges
- 2210/247 . . Stepped milling cutters
- 2210/248 . . . with enlarged cutting heads
- 2210/28 . Arrangement of teeth
- 2210/282 . . Unequal angles between the cutting edges, i.e. cutting edges unequally spaced in the circumferential direction
- 2210/285 . . Cutting edges arranged at different diameters
- 2210/287 . . Cutting edges arranged at different axial positions or having different lengths in the axial direction
- 2210/32 . Details of teeth
- 2210/321 . . Lands, i.e. the area on the rake face in the immediate vicinity of the cutting edge
- 2210/323 . . Separate teeth, i.e. discrete profiled teeth similar to those of a hob
- 2210/325 . . Different teeth, i.e. one tooth having a different configuration to a tooth on the opposite side of the flute
- 2210/326 . . File like cutting teeth, e.g. the teeth of cutting burrs
- 2210/328 . . Treated cutting edges
- 2210/40 . Flutes, i.e. chip conveying grooves
- 2210/402 . . of variable depth
- 2210/405 . . . having decreasing depth in the direction of the shank from the tip of the tool
- 2210/407 . . . having increasing depth in the direction of the shank from the tip of the tool
- 2210/44 . Margins, i.e. the part of the peripheral surface immediately adjacent the cutting edge
- 2210/445 . . variable
- 2210/48 . Chip breakers
- 2210/483 . . Chip breaking projections
- 2210/486 . . Chip breaking grooves or depressions
- 2210/50 . Cutting inserts
- 2210/503 . . mounted internally on the cutter
- 2210/506 . . mounted so as to be able to rotate freely
- 2210/52 . Bushings
- 2210/54 . Configuration of the cutting part
- 2210/56 . Supporting or guiding sections located on the periphery of the tool
- 2210/58 . Brushes
- 2210/60 . Axis of the cutter inclined with respect to the axis of rotation
- 2210/62 . Selectable cutting diameters
- 2210/64 . End milling cutters having a groove in the end cutting face, the groove not being present so as to provide a cutting edge
- 2210/66 . Markings, i.e. symbols or indicating marks
- 2210/68 . Reground to nominal diameter by removal of material from both the front of the insert and the back of insert carrier
- 2210/70 . Pilots
- 2210/72 . Rotatable in both directions
- 2210/74 . Slits
- 2215/00 Details of workpieces**
- 2215/04 . Aircraft components
- 2215/045 . . Propellers
- 2215/08 . Automotive parts ([B23C 2215/16, B23C 2215/20 and B23C 2215/24 take precedence](#))
- 2215/085 . . Wheels
- 2215/12 . Propellers for boats
- 2215/16 . Camshafts
- 2215/20 . Crankshafts
- 2215/24 . Components of internal combustion engines
- 2215/242 . . Combustion chambers
- 2215/245 . . Connecting rods
- 2215/247 . . Components of diesel engines
- 2215/28 . Nipples
- 2215/32 . Railway tracks
- 2215/36 . Railway wheels
- 2215/40 . Spectacles
- 2215/44 . Turbine blades
- 2215/48 . Kaplan turbines
- 2215/52 . Axial turbine wheels
- 2215/56 . Radial turbine wheels
- 2215/60 . Valve guides in combination with the neighbouring valve seat
- 2215/64 . Well pipe windows, i.e. windows in tubings or casings for wells
- 2220/00 Details of milling processes**
- 2220/04 . Milling with the axis of the cutter inclined to the surface being machined
- 2220/08 . Milling with the axis of the tool perpendicular to the workpiece axis
- 2220/12 . Cutting off, i.e. producing multiple discrete components from a single piece of material
- 2220/16 . Chamferring
- 2220/20 . Deburring
- 2220/24 . Production of elliptical holes
- 2220/28 . Finishing ([roughing and finishing B23C 2220/605](#))
- 2220/32 . Five-axis
- 2220/36 . Production of grooves
- 2220/363 . . Spiral grooves
- 2220/366 . . Turbine blade grooves
- 2220/40 . Using guiding means
- 2220/44 . High speed milling
- 2220/48 . Methods of milling not otherwise provided for
- 2220/52 . Orbital drilling, i.e. use of a milling cutter moved in a spiral path to produce a hole
- 2220/56 . Plunge milling
- 2220/60 . Roughing
- 2220/605 . . Roughing and finishing
- 2220/64 . Using an endmill, i.e. a shaft milling cutter, to generate profile of a crankshaft or camshaft
- 2220/68 . Whirling

2222/00 Materials of tools or workpieces composed of metals, alloys or metal matrices

- 2222/04 . Aluminium
- 2222/06 . Babbitt metal
- 2222/12 . Brass
- 2222/14 . Cast iron
- 2222/16 . Cermet
- 2222/28 . Details of hard metal, i.e. cemented carbide
- 2222/32 . Details of high speed steel ([steel B23C 2222/84](#))
- 2222/52 . Magnesium
- 2222/61 . Metal matrices with metallic or non-metallic particles or fibres
- 2222/64 . Nickel
- 2222/76 . Silver
- 2222/78 . Sodium
- 2222/84 . Steel ([details of high speed steel B23C 2222/32](#))
- 2222/88 . Titanium
- 2222/98 . Zinc

2224/00 Materials of tools or workpieces composed of a compound including a metal

- 2224/04 . Aluminium oxide
- 2224/13 . Chromium nitride
- 2224/14 . Chromium aluminium nitride (CrAlN)
- 2224/20 . Tantalum carbide
- 2224/22 . Titanium aluminium carbide nitride (TiAlCN)
- 2224/24 . Titanium aluminium nitride (TiAlN)
- 2224/28 . Titanium carbide
- 2224/32 . Titanium carbide nitride (TiCN)
- 2224/36 . Titanium nitride
- 2224/56 . Vanadium aluminium nitride (VAlN)

2226/00 Materials of tools or workpieces not comprising a metal

- 2226/12 . Boron nitride
- 2226/125 . . cubic [CBN]
- 2226/18 . Ceramic
- 2226/27 . Composites, e.g. fibre reinforced composites
- 2226/31 . Diamond
- 2226/315 . . polycrystalline [PCD]
- 2226/33 . Elastomers, e.g. rubber
- 2226/37 . Fibreglass
- 2226/41 . Gypsum
- 2226/42 . Gem, i.e. precious stone
- 2226/45 . Glass ([milling glass B28D 1/18](#))
- 2226/54 . Paper
- 2226/61 . Plastics not otherwise provided for, e.g. nylon
- 2226/62 . Polystyrene foam
- 2226/72 . Silicon carbide
- 2226/73 . Silicon nitride
- 2226/75 . Stone, rock or concrete ([milling stone or like materials B28D 1/18](#))

2228/00 Properties of materials of tools or workpieces, materials of tools or workpieces applied in a specific manner

- 2228/04 . applied by chemical vapour deposition [CVD]
- 2228/08 . applied by physical vapour deposition [PVD]
- 2228/10 . Coating
- 2228/12 . Cast, i.e. in the form of a casting
- 2228/14 . Flexible
- 2228/24 . Hard, i.e. after being hardened
- 2228/25 . Honeycomb

- 2228/26 . Hot
- 2228/49 . Sintered
- 2228/50 . Soft metal

2230/00 Details of chip evacuation ([chip evacuation in cutting inserts B23C 2200/32](#))

- 2230/04 . Transport of chips
- 2230/045 . . to the middle of the cutter or in the middle of a hollow cutter
- 2230/08 . Using suction

2235/00 Details of milling keys

- 2235/04 . Keys with blind holes
- 2235/08 . Brushes
- 2235/12 . Using a database to store details of the key, the information in the database being used for the generation of the profile of the key
- 2235/16 . Dial indicators
- 2235/21 . Calibration by electronic detection of position of probes and cutting wheels
- 2235/24 . Electronic sensors
- 2235/28 . Key blanks
- 2235/32 . Measurement systems
- 2235/36 . Ring keys
- 2235/41 . Scanning systems
- 2235/44 . Templates for the simulation of keys
- 2235/48 . Tracers, probes or styli

2240/00 Details of connections of tools or workpieces ([fixation of the cutting insert or bit in the tool B23C 2210/16](#))

- 2240/04 . Bayonet connections
- 2240/08 . Brazed connections
- 2240/12 . Connections using captive nuts
- 2240/16 . Welded connections
- 2240/21 . Glued connections
- 2240/24 . Connections using screws
- 2240/245 . . hollow screws, e.g. for the transmission of coolant
- 2240/32 . Connections using screw threads

2245/00 Details of adjusting inserts or bits in the milling cutter

- 2245/04 . Adjustable wedge surfaces
- 2245/08 . Setting gauges
- 2245/12 . Spiral discs

2250/00 Compensating adverse effects during milling

- 2250/04 . Balancing the cutter ([vibration damping B23C 2250/16](#))
- 2250/08 . compensating centrifugal force
- 2250/12 . Cooling and lubrication
- 2250/16 . Damping vibrations ([balancing B23C 2250/04](#))
- 2250/21 . compensating wear of parts not designed to be exchanged as wear parts

2255/00 Regulation of depth of cut

- 2255/04 . Depth indicators
- 2255/08 . Limitation of depth of cut
- 2255/12 . Depth stops

2260/00 Details of constructional elements

- 2260/04 . Adjustable elements
- 2260/08 . Bearings
- 2260/12 . Cams
- 2260/28 . Differential screw threads

- 2260/40 . Harmonic gearboxes, i.e. reduction gearing including a wave generator, a flex spline or a circular spline
- 2260/48 . Indication scales
- 2260/52 . Keys, e.g. spanners or Allen keys, especially for assembling or disassembling tooling
- 2260/56 . Lasers ([improving machinability with laser whilst milling B23P 25/003](#))
- 2260/68 . Rings
- 2260/72 . Seals
- 2260/76 . Sensors
- 2260/80 . Serrations
- 2260/84 . Springs
- 2260/88 . Steadies

2265/00 Details of general geometric configurations

- 2265/08 . Conical
- 2265/12 . Eccentric
- 2265/16 . Elliptical
- 2265/32 . Polygonal
- 2265/36 . Spherical
- 2265/40 . Spiral

2270/00 Details of milling machines, milling processes or milling tools not otherwise provided for

- 2270/02 . Use of a particular power source
- 2270/022 . . Electricity
- 2270/025 . . Hydraulics
- 2270/027 . . Pneumatics
- 2270/04 . Use of centrifugal force ([compensation of effect of centrifugal force B23C 2250/08](#))
- 2270/06 . Use of elastic or plastic deformation ([B23C 2210/161 takes precedence](#))
- 2270/08 . Clamping mechanisms or provision for clamping ([B23C 2210/16 takes precedence](#))
- 2270/10 . Use of ultrasound
- 2270/12 . Centering of two elements relative to one another
- 2270/14 . Constructions comprising exactly two similar components
- 2270/16 . Constructions comprising three or more similar components
- 2270/18 . Milling internal areas of components
- 2270/20 . Milling external areas of components