| Symbol | Typ | Titel |
|---|---|---|
| **B** | **Sektion** | **SECTION B — PERFORMING OPERATIONS; TRANSPORTING** |
| **B23** | **Klasse** | **MACHINE TOOLS; METAL-WORKING NOT OTHERWISE PROVIDED FOR ( punching, perforating, making articles by processing sheet metal, tubes, or profiles B21D; wire-working B21F; making pins, needles, or nails B21G; making chains B21L; grinding B24)** |
| **B23Q** | **Unterklasse** | **DETAILS, COMPONENTS, OR ACCESSORIES FOR MACHINE TOOLS, e.g. ARRANGEMENTS FOR COPYING OR CONTROLLING (tools of the kind used in lathes or boring machines B23B 27/00); MACHINE TOOLS IN GENERAL, CHARACTERISED BY THE CONSTRUCTION OF PARTICULAR DETAILS OR COMPONENTS; COMBINATIONS OR ASSOCIATIONS OF METAL-WORKING MACHINES, NOT DIRECTED TO A PARTICULAR RESULT** |
| **B23Q 1/00** | **Hauptgruppe** | **Members which are comprised in the general build-up of a form of machine, particularly relatively large fixed members (B23Q 37/00 takes precedence)** |
| B23Q 1/01 | 1-Punkt Untergruppe | . Frames, beds, pillars or like members; Arrangement of ways [6] |
| B23Q 1/03 | 1-Punkt Untergruppe | . Stationary work or tool supports (B23Q 1/70 takes precedence; auxiliary tables B23Q 1/74; tailstocks B23B 23/00) [6] |
| B23Q 1/25 | 1-Punkt Untergruppe | . Movable or adjustable work or tool supports [6] |
| B23Q 1/26 | 2-Punkt Untergruppe | . . characterised by constructional features relating to the co-operation of relatively movable members; Means for preventing relative movement of such members [6] |
| B23Q 1/28 | 3-Punkt Untergruppe | . . . Means for securing sliding members in any desired position [6] |
| B23Q 1/30 | 3-Punkt Untergruppe | . . . controlled in conjunction with the feed mechanism [6] |
| B23Q 1/32 | 3-Punkt Untergruppe | . . . Relative movement obtained by co-operating spherical surfaces, e.g. ball-and-socket joints [6] |
| B23Q 1/34 | 3-Punkt Untergruppe | . . . Relative movement obtained by use of deformable elements, e.g. piezo-electric, magnetostrictive, elastic or thermally-dilatable elements (sensitive elements capable of producing movement or displacement for purposes not limited to measurement G12B 1/00) [6] |
| B23Q 1/36 | 4-Punkt Untergruppe | . . . . Springs [6] |
| B23Q 1/38 | 3-Punkt Untergruppe | . . . using fluid bearings or fluid cushion supports [6] |
| B23Q 1/40 | 3-Punkt Untergruppe | . . . using ball, roller or wheel arrangements [6] |
| B23Q 1/42 | 3-Punkt Untergruppe | . . . using T-, V-, dovetail-section or like guides (B23Q 1/40 takes precedence) [6] |
| B23Q 1/44 | 2-Punkt Untergruppe | . . using particular mechanisms (B23Q 1/26 takes precedence) [6] |
| B23Q 1/46 | 3-Punkt Untergruppe | . . . with screw pairs [6] |
| B23Q 1/48 | 3-Punkt Untergruppe | . . . with sliding pairs and rotating pairs (B23Q 1/46 takes precedence) [6] |
| B23Q 1/50 | 3-Punkt Untergruppe | . . . with rotating pairs only [6] |
| B23Q 1/52 | 4-Punkt Untergruppe | . . . . a single rotating pair [6] |
| B23Q 1/54 | 4-Punkt Untergruppe | . . . . two rotating pairs only [6] |
| B23Q 1/56 | 3-Punkt Untergruppe | . . . with sliding pairs only [6] |
| B23Q 1/58 | 4-Punkt Untergruppe | . . . . a single sliding pair [6] |
| B23Q 1/60 | 4-Punkt Untergruppe | . . . . two sliding pairs only [6] |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 1/62 | 5-Punkt Untergruppe | . . . . . with perpendicular axes, e.g. cross-slides [6] |
| B23Q 1/64 | 2-Punkt Untergruppe | . . characterised by the purpose of the movement (indexing equipment B23Q 16/02) [6] |
| B23Q 1/66 | 3-Punkt Untergruppe | . . . Work-tables interchangeably movable into operating positions [6] |
| B23Q 1/68 | 3-Punkt Untergruppe | . . . for withdrawing tool or work during reverse movement [6] |
| B23Q 1/70 | 1-Punkt Untergruppe | . Stationary or movable members for carrying working-spindles for attachment of tools or work (headstocks or the like, working-spindle supports B23B 19/00; working-spindles B23B 19/02) [6] |
| B23Q 1/72 | 1-Punkt Untergruppe | . Auxiliary arrangements; Interconnections between auxiliary tables and movable machine elements [6] |
| B23Q 1/74 | 2-Punkt Untergruppe | . . Auxiliary tables [6] |
| B23Q 1/76 | 2-Punkt Untergruppe | . . Steadies; Rests [6] |
| **B23Q 3/00** | **Hauptgruppe** | **Devices holding, supporting, or positioning, work or tools, of a kind normally removable from the machine (work-tables or other parts, e.g. faceplates, normally not incorporating means for securing work B23Q 1/00; automatic position control B23Q 15/00; rotary tool heads for turning-machines B23B 3/24, B23B 3/26; non-driven tool holders B23B 29/00; general features of turrets B23B 29/24; tools or bench devices for fastening, connecting, disengaging or holding B25B)** |
| B23Q 3/02 | 1-Punkt Untergruppe | . for mounting on a work-table, tool-slide, or analogous part (B23Q 3/15 takes precedence) |
| B23Q 3/04 | 2-Punkt Untergruppe | . . adjustable in inclination |
| B23Q 3/06 | 2-Punkt Untergruppe | . . Work-clamping means |
| B23Q 3/08 | 3-Punkt Untergruppe | . . . other than mechanically-actuated |
| B23Q 3/10 | 2-Punkt Untergruppe | . . Auxiliary devices, e.g. bolsters, extension members |
| B23Q 3/12 | 1-Punkt Untergruppe | . for securing to a spindle in general (B23Q 3/152 takes precedence; chucks B23B 31/02) |
| B23Q 3/14 | 2-Punkt Untergruppe | . . Mandrels in general (expansion mandrels B23B 31/40) |
| B23Q 3/15 | 1-Punkt Untergruppe | . Devices for holding work using magnetic or electric force acting directly on the work |
| B23Q 3/152 | 2-Punkt Untergruppe | . . Rotary devices |
| B23Q 3/154 | 2-Punkt Untergruppe | . . Stationary devices |
| B23Q 3/155 | 1-Punkt Untergruppe | . Arrangements for automatic insertion or removal of tools |
| B23Q 3/157 | 2-Punkt Untergruppe | . . of rotary tools |
| B23Q 3/16 | 1-Punkt Untergruppe | . controlled in conjunction with the operation of the tool |
| B23Q 3/18 | 1-Punkt Untergruppe | . for positioning only |
| **B23Q 5/00** | **Hauptgruppe** | **Driving or feeding mechanisms; Control arrangements therefor (automatic control B23Q 15/00; copying B23Q 33/00, B23Q 35/00; specially adapted for boring or drilling machines B23B 39/10, B23B 47/02)** |
| B23Q 5/02 | 1-Punkt Untergruppe | . Driving main working members |
| B23Q 5/027 | 2-Punkt Untergruppe | . . reciprocating members [2] |
| B23Q 5/033 | 3-Punkt Untergruppe | . . . driven essentially by fluid pressure [2] |
| B23Q 5/04 | 2-Punkt Untergruppe | . . rotary shafts, e.g. working-spindles |
| B23Q 5/06 | 3-Punkt Untergruppe | . . . driven essentially by fluid pressure or pneumatic power |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 5/08 | 4-Punkt Untergruppe | . . . . electrically controlled |
| B23Q 5/10 | 3-Punkt Untergruppe | . . . driven essentially by electrical means |
| B23Q 5/12 | 3-Punkt Untergruppe | . . . Mechanical drives with means for varying the speed ratio |
| B23Q 5/14 | 4-Punkt Untergruppe | . . . . step-by-step |
| B23Q 5/16 | 4-Punkt Untergruppe | . . . . infinitely-variable |
| B23Q 5/18 | 4-Punkt Untergruppe | . . . . Devices for preselecting speed of working-spindle |
| B23Q 5/20 | 3-Punkt Untergruppe | . . . Adjusting or stopping working-spindles in a predetermined position |
| B23Q 5/22 | 1-Punkt Untergruppe | . Feeding members carrying tools or work |
| B23Q 5/26 | 2-Punkt Untergruppe | . . Fluid-pressure drives [3] |
| B23Q 5/28 | 2-Punkt Untergruppe | . . Electric drives [3] |
| B23Q 5/32 | 2-Punkt Untergruppe | . . Feeding working-spindles (feeding working-spindle supports B23Q 5/34) [3] |
| B23Q 5/34 | 2-Punkt Untergruppe | . . Feeding other members supporting tools or work, e.g. saddles, tool-slides, through mechanical transmission [3] |
| B23Q 5/36 | 3-Punkt Untergruppe | . . . in which a servomotor forms an essential element [3] |
| B23Q 5/38 | 3-Punkt Untergruppe | . . . feeding continuously [3] |
| B23Q 5/40 | 4-Punkt Untergruppe | . . . . by feed shaft, e.g. lead screw [3] |
| B23Q 5/42 | 5-Punkt Untergruppe | . . . . . Mechanism associated with headstock [3] |
| B23Q 5/44 | 5-Punkt Untergruppe | . . . . . Mechanism associated with the moving member [3] |
| B23Q 5/46 | 4-Punkt Untergruppe | . . . . with variable speed ratio [3] |
| B23Q 5/48 | 5-Punkt Untergruppe | . . . . . by use of toothed gears [3] |
| B23Q 5/50 | 3-Punkt Untergruppe | . . . feeding step by step [3] |
| B23Q 5/52 | 2-Punkt Untergruppe | . . Limiting feed movement |
| B23Q 5/54 | 1-Punkt Untergruppe | . Arrangements or details not restricted to group B23Q 5/02 or group B23Q 5/22 respectively |
| B23Q 5/56 | 2-Punkt Untergruppe | . . Preventing backlash |
| B23Q 5/58 | 2-Punkt Untergruppe | . . Safety devices |
| **B23Q 7/00** | **Hauptgruppe** | **Arrangements for handling work specially combined with or arranged in, or specially adapted for use in connection with, machine tools, e.g. for conveying, loading, positioning, discharging, sorting (incorporated in working-spindles B23B 13/00, B23B 19/02; for automatic or semi-automatic turning machines B23B 15/00) [2]** |
| B23Q 7/02 | 1-Punkt Untergruppe | . by means of drums or rotating tables or discs |
| B23Q 7/03 | 1-Punkt Untergruppe | . by means of endless chain conveyers (B23Q 7/16 takes precedence) [2] |
| B23Q 7/04 | 1-Punkt Untergruppe | . by means of grippers |
| B23Q 7/05 | 1-Punkt Untergruppe | . by means of roller-ways (B23Q 7/16 takes precedence) [2] |
| B23Q 7/06 | 1-Punkt Untergruppe | . by means of pushers |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 7/08 | 1-Punkt Untergruppe | . by means of slides or chutes |
| B23Q 7/10 | 1-Punkt Untergruppe | . by means of magazines |
| B23Q 7/12 | 1-Punkt Untergruppe | . Sorting arrangements |
| B23Q 7/14 | 1-Punkt Untergruppe | . co-ordinated in production lines |
| B23Q 7/16 | 1-Punkt Untergruppe | . Loading work on to conveyers; Arranging work on conveyers, e.g. varying spacing between individual workpieces [2] |
| B23Q 7/18 | 2-Punkt Untergruppe | . . Orienting work on conveyers [2] |
| **B23Q 9/00** | **Hauptgruppe** | **Arrangements for supporting or guiding portable metal-working machines or apparatus (for tapping pipes B23B 41/08; specially designed for drilling B23B 45/14)** |
| B23Q 9/02 | 1-Punkt Untergruppe | . for securing machines or apparatus to workpieces, or other parts, of particular shape, e.g. to beams of particular cross-section |
| | | **Accessories** |
| **B23Q 11/00** | **Hauptgruppe** | **Accessories fitted to machine tools for keeping tools or parts of the machine in good working condition or for cooling work; Safety devices specially combined with or arranged in, or specially adapted for use in connection with, machine tools (in respect of boring or drilling machines B23B 47/24, B23B 47/32 take precedence; safety devices in general F16P)** |
| B23Q 11/02 | 1-Punkt Untergruppe | . Devices for removing scrap from the cutting teeth of circular cutters |
| B23Q 11/04 | 1-Punkt Untergruppe | . Arrangements preventing overload of tools, e.g. restricting load |
| B23Q 11/06 | 1-Punkt Untergruppe | . Safety devices for circular cutters |
| B23Q 11/08 | 1-Punkt Untergruppe | . Protective coverings for parts of machine tools; Splash guards |
| *B23Q 11/10* | *1-Punkt Untergruppe* | *. Arrangements for cooling or lubricating tools or work ( incorporated in tools, see the relevant subclass for the tool ) [1, 2006.01]* |
| *B23Q 11/12* | *1-Punkt Untergruppe* | *. Arrangements for cooling or lubricating parts of the machine ( B23Q 11/14 takes precedence ) [1, 2006.01]* |
| *B23Q 11/14* | *1-Punkt Untergruppe* | *. Methods or arrangements for maintaining a constant temperature in parts of machine tools [1, 2006.01]* |
| **B23Q 13/00** | **Hauptgruppe** | **Equipment for use with tools or cutters when not in operation, e.g. protectors for storage** |
| | | **Measuring; Indicating; Controlling [3]** |
| **B23Q 15/00** | **Hauptgruppe** | **Automatic control or regulation of feed movement, cutting velocity or position of tool or work [3]** |
| B23Q 15/007 | 1-Punkt Untergruppe | . while the tool acts upon the workpiece [3] |
| B23Q 15/013 | 2-Punkt Untergruppe | . . Control or regulation of feed movement (B23Q 15/12 takes precedence) [3] |
| B23Q 15/02 | 3-Punkt Untergruppe | . . . according to the instantaneous size and the required size of the workpiece acted upon (B23Q 15/06 takes precedence) [3] |
| B23Q 15/04 | 3-Punkt Untergruppe | . . . according to the final size of the previously machined workpiece (B23Q 15/06 takes precedence) [3] |
| B23Q 15/06 | 3-Punkt Untergruppe | . . . according to measuring results produced by two or more gauging methods using different measuring principles, e.g. by both optical and mechanical gauging [3] |
| B23Q 15/08 | 2-Punkt Untergruppe | . . Control or regulation of cutting velocity (B23Q 15/12 takes precedence) [3] |
| B23Q 15/10 | 3-Punkt Untergruppe | . . . to maintain constant cutting velocity between tool and workpiece [3] |
| B23Q 15/12 | 2-Punkt Untergruppe | . . Adaptive control, i.e. adjusting itself to have a performance which is optimum according to a preassigned criterion [3] |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 15/14 | 2-Punkt Untergruppe | . . Control or regulation of the orientation of the tool with respect to the work [3] |
| B23Q 15/16 | 2-Punkt Untergruppe | . . Compensation for wear of the tool [3] |
| B23Q 15/18 | 2-Punkt Untergruppe | . . Compensation of tool-deflection due to temperature or force [3] |
| B23Q 15/20 | 1-Punkt Untergruppe | . before or after the tool acts upon the workpiece [3] |
| B23Q 15/22 | 2-Punkt Untergruppe | . . Control or regulation of position of tool or workpiece [3] |
| B23Q 15/24 | 3-Punkt Untergruppe | . . . of linear position [3] |
| B23Q 15/26 | 3-Punkt Untergruppe | . . . of angular position [3] |
| B23Q 15/28 | 2-Punkt Untergruppe | . . with compensation for tool wear [3] |
| **B23Q 16/00** | **Hauptgruppe** | **Equipment for precise positioning of tool or work into particular locations not otherwise provided for (automatic control or regulation of position of tool or work B23Q 15/22; arrangements for indicating or measuring existing or desired position of tool or work B23Q 17/22) [4]** |
| B23Q 16/02 | 1-Punkt Untergruppe | . Indexing equipment (specially adapted for gear-cutting machines B23F 23/08) [4] |
| B23Q 16/04 | 2-Punkt Untergruppe | . . having intermediate members, e.g. pawls, for locking the relatively movable parts in the indexed position [4] |
| B23Q 16/06 | 3-Punkt Untergruppe | . . . Rotary indexing [4] |
| B23Q 16/08 | 2-Punkt Untergruppe | . . having means for clamping the relatively movable parts together in the indexed position [4] |
| B23Q 16/10 | 3-Punkt Untergruppe | . . . Rotary indexing [4] |
| B23Q 16/12 | 2-Punkt Untergruppe | . . using optics [4] |
| **B23Q 17/00** | **Hauptgruppe** | **Arrangements for indicating or measuring on machine tools (for automatic control or regulation of feed movement, cutting velocity or position of tool or work B23Q 15/00) [3, 4]** |
| B23Q 17/09 | 1-Punkt Untergruppe | . for indicating or measuring cutting pressure or cutting-tool condition, e.g. cutting ability, load on tool ( arrangements preventing overload of tools B23Q 11/04; devices for indicating failure of drills during boring B23B 49/00) [4] |
| B23Q 17/10 | 1-Punkt Untergruppe | . for indicating or measuring cutting speed or number of revolutions |
| B23Q 17/12 | 1-Punkt Untergruppe | . for indicating or measuring vibration |
| B23Q 17/20 | 1-Punkt Untergruppe | . for indicating or measuring workpiece characteristics, e.g. contour, dimension, hardness [4] |
| B23Q 17/22 | 1-Punkt Untergruppe | . for indicating or measuring existing or desired position of tool or work [4] |
| B23Q 17/24 | 1-Punkt Untergruppe | . using optics [4] |
| **B23Q 23/00** | **Hauptgruppe** | **Arrangements for compensating for irregularities or wear, e.g. of ways, of setting mechanisms ( automatic control B23Q 15/00) [3]** |
| **B23Q 27/00** | **Hauptgruppe** | **Geometrical mechanisms for the production of work of particular shapes, not fully provided for in another subclass** |
| | | **Copying** |
| **B23Q 33/00** | **Hauptgruppe** | **Methods for copying** |
| **B23Q 35/00** | **Hauptgruppe** | **Control systems or devices for copying directly from a pattern or a master model; Devices for use in copying manually** |
| B23Q 35/02 | 1-Punkt Untergruppe | . Copying discrete points from the pattern, e.g. for determining the position of holes to be drilled |
| B23Q 35/04 | 1-Punkt Untergruppe | . using a feeler or the like travelling along the outline of the pattern, model or drawing; Feelers, patterns, or models therefor |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 35/06 | 2-Punkt Untergruppe | . . specially adapted for controlling successive operations, e.g. separate cuts, on a workpiece |
| B23Q 35/08 | 2-Punkt Untergruppe | . . Means for transforming movement of the feeler or the like into feed movement of tool or work |
| B23Q 35/10 | 3-Punkt Untergruppe | . . . mechanically only |
| B23Q 35/12 | 3-Punkt Untergruppe | . . . involving electrical means (programme recording for copying purposes in a separate apparatus G05, G11) |
| B23Q 35/121 | 4-Punkt Untergruppe | . . . . using mechanical sensing |
| B23Q 35/122 | 5-Punkt Untergruppe | . . . . . the feeler opening or closing electrical contacts |
| B23Q 35/123 | 5-Punkt Untergruppe | . . . . . the feeler varying the impedance in a circuit |
| B23Q 35/124 | 6-Punkt Untergruppe | . . . . . varying resistance |
| B23Q 35/125 | 6-Punkt Untergruppe | . . . . . varying capacitance |
| B23Q 35/126 | 6-Punkt Untergruppe | . . . . . varying inductance |
| B23Q 35/127 | 4-Punkt Untergruppe | . . . . using non-mechanical sensing |
| B23Q 35/128 | 5-Punkt Untergruppe | . . . . . Sensing by using optical means |
| B23Q 35/129 | 5-Punkt Untergruppe | . . . . . Sensing by means of electric discharges |
| B23Q 35/13 | 5-Punkt Untergruppe | . . . . . Sensing by using magnetic means |
| B23Q 35/14 | 4-Punkt Untergruppe | . . . . controlling one or more electromotors |
| B23Q 35/16 | 4-Punkt Untergruppe | . . . . controlling fluid motors |
| B23Q 35/18 | 3-Punkt Untergruppe | . . . involving fluid means (B23Q 35/16 takes precedence) |
| B23Q 35/20 | 3-Punkt Untergruppe | . . . with special means for varying the ratio of reproduction |
| B23Q 35/22 | 3-Punkt Untergruppe | . . . specially adapted for compensating for wear of the tool |
| B23Q 35/24 | 2-Punkt Untergruppe | . . Feelers; Feeler units |
| B23Q 35/26 | 3-Punkt Untergruppe | . . . designed for physical contact with a pattern or a model |
| B23Q 35/28 | 4-Punkt Untergruppe | . . . . for control of a mechanical copying system |
| B23Q 35/30 | 4-Punkt Untergruppe | . . . . for control of an electrical or electro-hydraulic copying system |
| B23Q 35/32 | 5-Punkt Untergruppe | . . . . . in which the feeler makes and breaks an electrical contact or contacts, e.g. with brush-type tracers |
| B23Q 35/34 | 5-Punkt Untergruppe | . . . . . in which the feeler varies an electrical characteristic in a circuit, e.g. capacity, frequency |
| B23Q 35/36 | 4-Punkt Untergruppe | . . . . for control of a hydraulic or pneumatic copying system |
| B23Q 35/38 | 3-Punkt Untergruppe | . . . designed for sensing the pattern, model, or drawing without physical contact (sensing by means of a fluid jet B23Q 35/36) |
| B23Q 35/40 | 4-Punkt Untergruppe | . . . . involving optical or photoelectrical systems |
| B23Q 35/42 | 2-Punkt Untergruppe | . . Patterns; Master models |
| B23Q 35/44 | 3-Punkt Untergruppe | . . . provided with means for adjusting the contact face, e.g. comprising flexible bands held by set-screws |
| B23Q 35/46 | 3-Punkt Untergruppe | . . . Supporting devices therefor |

| Symbol | Typ | Titel |
|---|---|---|
| B23Q 35/48 | 1-Punkt Untergruppe | . using a feeler or the like travelling to-and-fro between opposite parts of the outline of the pattern, model, or drawing |
| | | **Metal-working machines comprising units or sub-assemblies; Associations of metal-working machines or units** |
| **B23Q 37/00** | **Hauptgruppe** | **Metal-working machines, or constructional combinations thereof, built-up from units designed so that at least some of the units can form parts of different machines or combinations; Units therefor in so far as the feature of interchangeability is important (features relating to particular metal-working operations, see the relevant subclasses, e.g. B23P 23/00)** |
| **B23Q 39/00** | **Hauptgruppe** | **Metal-working machines incorporating a plurality of sub-assemblies, each capable of performing a metal-working operation (B23Q 33/00, B23P 23/00 take precedence; if the operations are similar and the kind of operation is essential, see the relevant subclass for the operation)** |
| B23Q 39/02 | 1-Punkt Untergruppe | . the sub-assemblies being capable of being brought to act at a single operating station |
| B23Q 39/04 | 1-Punkt Untergruppe | . the sub-assemblies being arranged to operate simultaneously at different stations, e.g. with an annular work-table moved in steps (associations of machines connected only by work-transferring means B23Q 41/00) |
| **B23Q 41/00** | **Hauptgruppe** | **Combinations or associations of metal-working machines not directed to a particular result according to classes B21, B23, or B24 (B23Q 37/00, B23Q 39/00 take precedence; features relating to operations performed, if the different metal-working operations are of the same kind, see the subclass for the kind of operation, e.g. punching B21D, welding B23K, grinding B24B; features relating to technically specified combinations of different metal-working operations B23P 23/00)** |
| B23Q 41/02 | 1-Punkt Untergruppe | . Features relating to transfer of work between machines (arrangements for handling work for machine tools co-ordinated in production lines B23Q 7/14) |
| B23Q 41/04 | 1-Punkt Untergruppe | . Features relating to relative arrangements of machines |
| B23Q 41/06 | 1-Punkt Untergruppe | . Features relating to organisation of working of machines |
| B23Q 41/08 | 1-Punkt Untergruppe | . Features relating to maintenance of efficient operation |