

Symbol	Typ	Titel
B	Sektion	PERFORMING OPERATIONS; TRANSPORTING
B23	Klasse	MACHINE TOOLS; METAL-WORKING NOT OTHERWISE PROVIDED FOR
B23F	Unterklasse	MAKING GEARS OR TOOTHED RACKS (by stamping B21D; by rolling B21H; by forging or pressing B21K; by casting B22; arrangements for copying or controlling B23Q; machines or devices for grinding or polishing, in general B24B)
B23F 1/00	Hauptgruppe	Making gear teeth by tools of which the profile matches the profile of the required surface (special adaptations for making curved teeth B23F 9/00) [1, 2006.01]
B23F 1/02	1-Punkt Untergruppe	. by grinding [1, 2006.01]
B23F 1/04	1-Punkt Untergruppe	. by planing or slotting [1, 2006.01]
B23F 1/06	1-Punkt Untergruppe	. by milling [1, 2006.01]
B23F 1/08	1-Punkt Untergruppe	. by broaching; by broach-milling [1, 2006.01]
B23F 3/00	Hauptgruppe	Making gear teeth involving copying operations controlled by templates having a profile which matches that of the required tooth face or part thereof or a copy thereof to a different scale (copying systems or devices <u>per se</u> B23Q 35/00) [1, 2006.01]
B23F 5/00	Hauptgruppe	Making straight gear teeth involving moving a tool relatively to a workpiece with a rolling-off or an enveloping motion with respect to the gear teeth to be made [1, 2006.01]
B23F 5/02	1-Punkt Untergruppe	. by grinding [1, 2006.01]
B23F 5/04	2-Punkt Untergruppe	. . the tool being a grinding worm [1, 2006.01]
B23F 5/06	2-Punkt Untergruppe	. . the tool being a grinding disc with a plane front surface [1, 2006.01]
B23F 5/08	2-Punkt Untergruppe	. . the tool being a grinding disc having the same profile as the tooth or teeth of a rack [1, 2006.01]
B23F 5/10	2-Punkt Untergruppe	. . the tool being a grinding disc having the same profile as the tooth or teeth of a crown or bevel wheel [1, 2006.01]
B23F 5/12	1-Punkt Untergruppe	. by planing or slotting [1, 2006.01]
B23F 5/14	2-Punkt Untergruppe	. . the tool having the same profile as a tooth or teeth of a rack [1, 2006.01]
B23F 5/16	2-Punkt Untergruppe	. . the tool having a shape similar to that of a spur wheel or part thereof [1, 2006.01]
B23F 5/18	2-Punkt Untergruppe	. . the tool having the same profile as a tooth of a crown wheel [1, 2006.01]
B23F 5/20	1-Punkt Untergruppe	. by milling [1, 2006.01]
B23F 5/22	2-Punkt Untergruppe	. . the tool being a hob for making spur gears [1, 2006.01]
B23F 5/24	2-Punkt Untergruppe	. . the tool being a hob for making bevel gears [1, 2006.01]
B23F 5/26	2-Punkt Untergruppe	. . the tool having the same profile as a tooth or teeth of a rack, for making spur gears [1, 2006.01]
B23F 5/27	2-Punkt Untergruppe	. . the tool having the same profile as a tooth or teeth of a crown or bevel wheel [2, 2006.01]
B23F 5/28	1-Punkt Untergruppe	. by broaching; by broach-milling [1, 2006.01]
B23F 7/00	Hauptgruppe	Making herring-bone gear teeth [1, 2006.01]
B23F 9/00	Hauptgruppe	Making gears having teeth curved in their longitudinal direction [1, 2006.01]
B23F 9/02	1-Punkt Untergruppe	. by grinding [1, 2006.01]
B23F 9/04	1-Punkt Untergruppe	. by planing or slotting with reciprocating cutting tools [1, 2006.01]

Symbol	Typ	Titel
B23F 9/06	2-Punkt Untergruppe	. . having a shape similar to a spur wheel of part thereof [1, 2006.01]
B23F 9/07	2-Punkt Untergruppe	. . having a shape similar to a crown wheel or a part thereof [2, 2006.01]
B23F 9/08	1-Punkt Untergruppe	. by milling, e.g. with helicoidal hob [1, 2006.01]
B23F 9/10	2-Punkt Untergruppe	. . with a face-mill [1, 2006.01]
B23F 9/12	3-Punkt Untergruppe	. . . for non-continuous generating processes [2, 2006.01]
B23F 9/14	3-Punkt Untergruppe	. . . for continuous generating processes [2, 2006.01]
B23F 11/00	Hauptgruppe	Making worm wheels, e.g. by hobbing [1, 2006.01]
B23F 13/00	Hauptgruppe	Making worms by methods essentially requiring the use of machines of the gear-cutting type (making screw-thread B23G) [1, 2006.01]
B23F 13/02	1-Punkt Untergruppe	. Making worms of cylindrical shape [1, 2006.01]
B23F 13/04	2-Punkt Untergruppe	. . by grinding [1, 2006.01]
B23F 13/06	1-Punkt Untergruppe	. Making worms of globoidal shape [1, 2006.01]
B23F 13/08	2-Punkt Untergruppe	. . by grinding [1, 2006.01]
B23F 15/00	Hauptgruppe	Methods or machines for making gear wheels of special kinds, not covered by groups B23F 7/00-B23F 13/00 [1, 2006.01]
B23F 15/02	1-Punkt Untergruppe	. Making gear teeth on wheels of varying radius of operation, e.g. on elliptical wheels [1, 2006.01]
B23F 15/04	1-Punkt Untergruppe	. Making fine-pitch gear teeth on clock wheels or the like by special machining [1, 2006.01]
B23F 15/06	1-Punkt Untergruppe	. Making gear teeth on the front surface of wheels, e.g. for clutches or couplings with toothed faces [1, 2006.01]
B23F 15/08	1-Punkt Untergruppe	. Making intermeshing rotors, e.g. of pumps [1, 2006.01]
B23F 17/00	Hauptgruppe	Special methods or machines for making gear teeth, not covered by groups B23F 1/00-B23F 15/00 [1, 2006.01]
B23F 19/00	Hauptgruppe	Finishing gear teeth by other tools than those used for manufacturing gear teeth [1, 2006.01]
B23F 19/02	1-Punkt Untergruppe	. Lapping gear teeth [1, 2006.01]
B23F 19/04	2-Punkt Untergruppe	. . Lapping spur gears by making use of a correspondingly shaped counterpart [1, 2006.01]
B23F 19/05	1-Punkt Untergruppe	. Honing gear teeth [2, 2006.01]
B23F 19/06	1-Punkt Untergruppe	. Shaving the faces of gear teeth [1, 2006.01]
B23F 19/10	1-Punkt Untergruppe	. Chamfering the end edges of gear teeth [1, 2006.01]
B23F 19/12	2-Punkt Untergruppe	. . by grinding [1, 2006.01]
B23F 21/00	Hauptgruppe	Tools specially adapted for use in machines for manufacturing gear teeth [1, 2006.01]
B23F 21/02	1-Punkt Untergruppe	. Grinding discs; Grinding worms (truing grinding tools B24B; grinding tools in general B24D) [1, 2006.01]
B23F 21/03	1-Punkt Untergruppe	. Honing tools [2, 2006.01]
B23F 21/04	1-Punkt Untergruppe	. Planing or slotting tools [1, 2006.01]
B23F 21/06	2-Punkt Untergruppe	. . having a profile which matches a gear tooth profile [1, 2006.01]
B23F 21/08	2-Punkt Untergruppe	. . having the same profile as a tooth or teeth of a rack [1, 2006.01]
B23F 21/10	2-Punkt Untergruppe	. . Gear-shaper cutters having a shape similar to a spur wheel or part thereof [1, 2006.01]

Symbol	Typ	Titel
B23F 21/12	1-Punkt Untergruppe	. Milling tools [1, 2006.01]
B23F 21/14	2-Punkt Untergruppe	. . Profile cutters of disc type [1, 2006.01]
B23F 21/16	2-Punkt Untergruppe	. . Hobs [1, 2006.01]
B23F 21/18	3-Punkt Untergruppe	. . . Taper hobs, e.g. for bevel gears [1, 2006.01]
B23F 21/20	2-Punkt Untergruppe	. . Fly cutters [1, 2006.01]
B23F 21/22	2-Punkt Untergruppe	. . Face-mills for longitudinally-curved gear teeth [1, 2006.01]
B23F 21/23	3-Punkt Untergruppe	. . . with cutter teeth arranged on a spiral curve for continuous generating processes [2, 2006.01]
B23F 21/24	1-Punkt Untergruppe	. Broach-milling tools [1, 2006.01]
B23F 21/26	1-Punkt Untergruppe	. Broaching tools [1, 2006.01]
B23F 21/28	1-Punkt Untergruppe	. Shaving cutters [1, 2006.01]
B23F 23/00	Hauptgruppe	Accessories or equipment combined with or arranged in, or specially designed to form part of, gear-cutting machines (accessories or equipment not restricted to gear-cutting machines B23Q; tool-guiding mechanisms, <u>see</u> the relevant groups for making gear teeth) [1, 2006.01]
B23F 23/02	1-Punkt Untergruppe	. Loading or chucking arrangements for workpieces [1, 2006.01]
B23F 23/04	2-Punkt Untergruppe	. . Loading arrangements [1, 2006.01]
B23F 23/06	2-Punkt Untergruppe	. . Chucking arrangements [1, 2006.01]
B23F 23/08	1-Punkt Untergruppe	. Index mechanisms [1, 2006.01]
B23F 23/10	1-Punkt Untergruppe	. Arrangements for compensating irregularities in drives or indexing mechanisms [1, 2006.01]
B23F 23/12	1-Punkt Untergruppe	. Other devices, e.g. tool holders; Checking devices for controlling workpieces in machines for manufacturing gear teeth [1, 2006.01]