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)**
B23K	**Unterklasse**	**SOLDERING OR UNSOLDERING; WELDING; CLADDING OR PLATING BY SOLDERING OR WELDING; CUTTING BY APPLYING HEAT LOCALLY, e.g. FLAME CUTTING; WORKING BY LASER BEAM (making metal-coated products by extruding metal B21C 23/22; building up linings or coverings by casting B22D 19/08; casting by dipping B22D 23/04; manufacture of composite layers by sintering metal powder B22F 7/00; arrangements on machine tools for copying or controlling B23Q; covering metals or covering materials with metals, not otherwise provided for C23C; burners F23D)** **Soldering, e.g. brazing, or unsoldering (essentially requiring the use of welding machines or welding equipment, see the relevant groups for the welding machines or welding equipment)**
B23K 1/00	**Hauptgruppe**	**Soldering, e.g. brazing, or unsoldering (B23K 3/00 takes precedence; characterised only by the use of special materials or media B23K 35/00; dip or wave soldering in the manufacture of printed circuits H05K 3/34) [5]**
B23K 1/002	1-Punkt Untergruppe	. Soldering by means of induction heating [5]
B23K 1/005	1-Punkt Untergruppe	. Soldering by means of radiant energy [5]
B23K 1/008	1-Punkt Untergruppe	. Soldering within a furnace (B23K 1/012 takes precedence) [5]
B23K 1/012	1-Punkt Untergruppe	. Soldering with the use of hot gas [5]
B23K 1/015	2-Punkt Untergruppe	. . Vapour-condensation soldering [5]
B23K 1/018	1-Punkt Untergruppe	. Unsoldering; Removal of melted solder or other residues [5]
B23K 1/06	1-Punkt Untergruppe	. making use of vibrations, e.g. supersonic vibrations
B23K 1/08	1-Punkt Untergruppe	. Soldering by means of dipping in molten solder
B23K 1/14	1-Punkt Untergruppe	. specially adapted for soldering seams (making tubes involving operations other than soldering B21C) [5]
B23K 1/16	2-Punkt Untergruppe	. . longitudinal seams, e.g. of shells [5]
B23K 1/18	2-Punkt Untergruppe	. . circumferential seams, e.g. of shells [5]
B23K 1/19	1-Punkt Untergruppe	. taking account of the properties of the materials to be soldered [3]
B23K 1/20	1-Punkt Untergruppe	. Preliminary treatment of work or areas to be soldered, e.g. in respect of a galvanic coating (preparation of surfaces in particular ways, see the relevant classes for the treatments or the materials treated, e.g. C04B, C23C)
B23K 3/00	**Hauptgruppe**	**Tools, devices, or special appurtenances for soldering, e.g. brazing, or unsoldering, not specially adapted for particular methods (materials used for soldering B23K 35/00) [5]**
B23K 3/02	1-Punkt Untergruppe	. Soldering irons; Bits
B23K 3/03	2-Punkt Untergruppe	. . electrically heated [5]
B23K 3/04	1-Punkt Untergruppe	. Heating appliances (soldering lamps or blow-pipes F23D; electric heating in general H05B)
B23K 3/047	2-Punkt Untergruppe	. . electric [5]
B23K 3/053	3-Punkt Untergruppe	. . . using resistance wires [5]

Symbol	Typ	Titel
B23K 3/06	1-Punkt Untergruppe	. Solder feeding devices; Solder melting pans
B23K 3/08	1-Punkt Untergruppe	. Auxiliary devices therefor (cleaning pipes or tubes or systems of pipes or tubes, e.g. before soldering, B08B 9/02) [5]
		Flame welding or cutting
B23K 5/00	**Hauptgruppe**	**Gas flame welding**
B23K 5/02	1-Punkt Untergruppe	. Seam welding (making tubes involving operations other than welding B21C)
B23K 5/04	2-Punkt Untergruppe	. . using additional profiled strips or like of welding metal along seam edges
B23K 5/06	2-Punkt Untergruppe	. . Welding longitudinal seams
B23K 5/08	2-Punkt Untergruppe	. . Welding circumferential seams
B23K 5/10	1-Punkt Untergruppe	. Welding workpieces essentially comprising layers of different metals, e.g. plated workpieces
B23K 5/12	1-Punkt Untergruppe	. taking account of the properties of the material to be welded
B23K 5/14	2-Punkt Untergruppe	. . of non-ferrous metals (B23K 5/16 takes precedence)
B23K 5/16	2-Punkt Untergruppe	. . of different metals
B23K 5/18	1-Punkt Untergruppe	. for purposes other than joining parts, e.g. built-up welding
B23K 5/20	1-Punkt Untergruppe	. making use of vibrations, e.g. supersonic vibrations
B23K 5/213	1-Punkt Untergruppe	. Preliminary treatment [3]
B23K 5/22	1-Punkt Untergruppe	. Auxiliary equipment, e.g. backings, guides
B23K 5/24	2-Punkt Untergruppe	. . Arrangements for supporting torches (not restricted to flame welding B23K 37/02)
B23K 7/00	**Hauptgruppe**	**Cutting, scarfing, or desurfacing by applying flames**
B23K 7/06	1-Punkt Untergruppe	. Machines, apparatus, or equipment specially designed for scarfing or desurfacing
B23K 7/08	1-Punkt Untergruppe	. by applying additional compounds or means favouring the cutting, scarfing, or desurfacing procedure
B23K 7/10	1-Punkt Untergruppe	. Auxiliary devices, e.g. for guiding or supporting the torch (guiding means applicable to other metal-working machines B23Q)
		Electric welding or cutting
B23K 9/00	**Hauptgruppe**	**Arc welding or cutting (electro-slag welding B23K 25/00; welding transformers H01F; welding generators H02K)**
B23K 9/007	1-Punkt Untergruppe	. Spot arc welding [5]
B23K 9/013	1-Punkt Untergruppe	. Arc cutting, gouging, scarfing or desurfacing [5]
B23K 9/02	1-Punkt Untergruppe	. Seam welding; Backing means; Inserts
B23K 9/022	2-Punkt Untergruppe	. . Welding by making use of electrode vibrations [5]
B23K 9/025	2-Punkt Untergruppe	. . for rectilinear seams [5]
B23K 9/028	2-Punkt Untergruppe	. . for curved planar seams [5]
B23K 9/032	2-Punkt Untergruppe	. . for three-dimensional seams [5]
B23K 9/035	2-Punkt Untergruppe	. . with backing means disposed under the seam [5]
B23K 9/038	2-Punkt Untergruppe	. . using moulding means (not restricted to arc welding B23K 37/06) [5]

Symbol	Typ	Titel
B23K 9/04	1-Punkt Untergruppe	. Welding for other purposes than joining, e.g. built-up welding
B23K 9/06	1-Punkt Untergruppe	. Arrangements or circuits for starting the arc, e.g. by generating ignition voltage, or for stabilising the arc [5]
B23K 9/067	2-Punkt Untergruppe	. . Starting the arc [5]
B23K 9/073	2-Punkt Untergruppe	. . Stabilising the arc [5]
B23K 9/08	1-Punkt Untergruppe	. Arrangements or circuits for magnetic control of the arc
B23K 9/09	1-Punkt Untergruppe	. Arrangements or circuits for arc welding with pulsed current or voltage [3]
B23K 9/095	1-Punkt Untergruppe	. Monitoring or automatic control of welding parameters [5]
B23K 9/10	1-Punkt Untergruppe	. Other electric circuits therefor; Protective circuits; Remote controls
B23K 9/12	1-Punkt Untergruppe	. Automatic feeding or moving of electrodes or work for spot or seam welding or cutting
B23K 9/127	2-Punkt Untergruppe	. . Means for tracking lines during arc welding or cutting (copying in general B23Q 35/00) [5]
B23K 9/133	2-Punkt Untergruppe	. . Means for feeding electrodes, e.g. drums, rolls, motors [5]
B23K 9/14	1-Punkt Untergruppe	. making use of insulated electrodes
B23K 9/16	1-Punkt Untergruppe	. making use of shielding gas
B23K 9/167	2-Punkt Untergruppe	. . and of a non-consumable electrode [5]
B23K 9/173	2-Punkt Untergruppe	. . and of consumable electrode [5]
B23K 9/18	1-Punkt Untergruppe	. Submerged-arc welding
B23K 9/20	1-Punkt Untergruppe	. Stud welding
B23K 9/22	1-Punkt Untergruppe	. Percussion welding
B23K 9/23	1-Punkt Untergruppe	. taking account of the properties of the materials to be welded [3]
B23K 9/235	1-Punkt Untergruppe	. Preliminary treatment [3]
B23K 9/24	1-Punkt Untergruppe	. Features related to electrodes (form or composition of electrodes B23K 35/00)
B23K 9/26	2-Punkt Untergruppe	. . Accessories for electrodes, e.g. ignition tips
B23K 9/28	2-Punkt Untergruppe	. . Supporting devices for electrodes (not restricted to arc welding or cutting B23K 37/02)
B23K 9/29	3-Punkt Untergruppe	. . . Supporting devices adapted for making use of shielding means [5]
B23K 9/30	3-Punkt Untergruppe	. . . Vibrating holders for electrodes (B23K 9/022 takes precedence) [5]
B23K 9/32	1-Punkt Untergruppe	. Accessories (earthing connections H01R)
B23K 10/00	**Hauptgruppe**	**Welding or cutting by means of a plasma [5]**
B23K 10/02	1-Punkt Untergruppe	. Plasma welding [5]
B23K 11/00	**Hauptgruppe**	**Resistance welding; Severing by resistance heating**
B23K 11/02	1-Punkt Untergruppe	. Pressure butt welding
B23K 11/04	1-Punkt Untergruppe	. Flash butt welding
B23K 11/06	1-Punkt Untergruppe	. using roller electrodes
B23K 11/08	1-Punkt Untergruppe	. Seam welding not restricted to one of the preceding subgroups

Symbol	Typ	Titel
B23K 11/087	2-Punkt Untergruppe	. . for rectilinear seams [5]
B23K 11/093	2-Punkt Untergruppe	. . for curved planar seams [5]
B23K 11/10	1-Punkt Untergruppe	. Spot welding; Stitch welding
B23K 11/11	2-Punkt Untergruppe	. . Spot welding [5]
B23K 11/12	2-Punkt Untergruppe	. . making use of vibrations
B23K 11/14	1-Punkt Untergruppe	. Projection welding
B23K 11/16	1-Punkt Untergruppe	. taking account of the properties of the material to be welded
B23K 11/18	2-Punkt Untergruppe	. . of non-ferrous metals (B23K 11/20 takes precedence)
B23K 11/20	2-Punkt Untergruppe	. . of different metals
B23K 11/22	1-Punkt Untergruppe	. Severing by resistance heating
B23K 11/24	1-Punkt Untergruppe	. Electric supply or control circuits therefor
B23K 11/25	2-Punkt Untergruppe	. . Monitoring devices [5]
B23K 11/26	2-Punkt Untergruppe	. . Storage discharge welding
B23K 11/28	1-Punkt Untergruppe	. Portable welding equipment
B23K 11/30	1-Punkt Untergruppe	. Features relating to electrodes (form or composition of electrodes B23K 35/00)
B23K 11/31	2-Punkt Untergruppe	. . Electrode holders (not restricted to resistance welding or severing by resistance heating B23K 37/02) [5]
B23K 11/34	1-Punkt Untergruppe	. Preliminary treatment [3]
B23K 11/36	1-Punkt Untergruppe	. Auxiliary equipment (B23K 11/31 takes precedence) [3, 5]
B23K 13/00	**Hauptgruppe**	**Welding by high-frequency current heating [5]**
B23K 13/01	1-Punkt Untergruppe	. by induction heating [5]
B23K 13/02	2-Punkt Untergruppe	. . Seam welding
B23K 13/04	1-Punkt Untergruppe	. by conduction heating [5]
B23K 13/06	1-Punkt Untergruppe	. characterised by the shielding of the welding zone against influence of the surrounding atmosphere (selection of media B23K 35/38) [5]
B23K 13/08	1-Punkt Untergruppe	. Electric supply or control circuits therefor [5]
		Other welding or cutting; Working by laser beam [3]
B23K 15/00	**Hauptgruppe**	**Electron-beam welding or cutting (electron- or ion-beam tubes H01J 37/00)**
B23K 15/02	1-Punkt Untergruppe	. Control circuits therefor [5]
B23K 15/04	1-Punkt Untergruppe	. for welding annular seams [5]
B23K 15/06	1-Punkt Untergruppe	. within a vacuum chamber (B23K 15/04 takes precedence) [5]
B23K 15/08	1-Punkt Untergruppe	. Removing material, e.g. by cutting, by hole drilling [5]
B23K 15/10	1-Punkt Untergruppe	. Non-vacuum electron beam-welding or cutting [5]
B23K 17/00	**Hauptgruppe**	**Use of the energy of nuclear particles in welding or related techniques**
B23K 20/00	**Hauptgruppe**	**Non-electric welding by applying impact or other pressure, with or without the application of heat, e.g. cladding or plating [3]**

Symbol	Typ	Titel
B23K 20/02	1-Punkt Untergruppe	. by means of a press [3]
B23K 20/04	1-Punkt Untergruppe	. by means of a rolling mill [3]
B23K 20/06	1-Punkt Untergruppe	. by means of high energy impulses, e.g. magnetic energy [3]
B23K 20/08	2-Punkt Untergruppe	. . Explosive welding [3]
B23K 20/10	1-Punkt Untergruppe	. making use of vibrations, e.g. ultrasonic welding [3]
B23K 20/12	1-Punkt Untergruppe	. the heat being generated by friction; Friction welding [3]
B23K 20/14	1-Punkt Untergruppe	. Preventing or minimising gas access, or using protective gases or vacuum during welding (formed by material interposed between workpieces B23K 20/18) [3]
B23K 20/16	1-Punkt Untergruppe	. with interposition of special material to facilitate connection of the parts, e.g. material for absorbing or producing gas [3]
B23K 20/18	1-Punkt Untergruppe	. Zonal welding by interposing weld-preventing substances between zones not to be welded [3]
B23K 20/20	1-Punkt Untergruppe	. Special methods allowing subsequent separation, e.g. of metals of high quality from scrap material [3]
B23K 20/22	1-Punkt Untergruppe	. taking account of the properties of the materials to be welded [3]
B23K 20/227	2-Punkt Untergruppe	. . with ferrous layer [5]
B23K 20/233	2-Punkt Untergruppe	. . without ferrous layer [5]
B23K 20/24	1-Punkt Untergruppe	. Preliminary treatment [3]
B23K 20/26	1-Punkt Untergruppe	. Auxiliary equipment [3]
B23K 23/00	**Hauptgruppe**	**Alumino-thermic welding**
B23K 25/00	**Hauptgruppe**	**Slag welding, i.e. using a heated layer or mass of powder, slag, or the like in contact with the material to be joined (B23K 23/00 takes precedence; submerged-arc welding B23K 9/18)**
B23K 26/00	**Hauptgruppe**	**Working by laser beam, e.g. welding, cutting, boring (lasers H01S 3/00) [2, 3]**
B23K 26/02	1-Punkt Untergruppe	. Positioning or observing the workpiece, e.g. with respect to the point of impact; Aligning, aiming or focusing the laser beam [3]
B23K 26/03	2-Punkt Untergruppe	. . Observing the workpiece [7]
B23K 26/04	2-Punkt Untergruppe	. . Automatically aligning, aiming or focusing the laser beam, e.g. using the back-scattered light [3]
B23K 26/06	2-Punkt Untergruppe	. . Shaping the laser beam, e.g. by masks or multi-focusing (optical elements, systems, or apparatus, in general G02B) [3]
B23K 26/067	3-Punkt Untergruppe	. . . Dividing the beam into multiple beams, e.g. multi-focusing [7]
B23K 26/073	3-Punkt Untergruppe	. . . Shaping the laser spot [7]
B23K 26/08	1-Punkt Untergruppe	. Devices involving relative movement between laser beam and workpiece [3]
B23K 26/10	2-Punkt Untergruppe	. . using a fixed support [3]
B23K 26/12	1-Punkt Untergruppe	. in a special atmosphere, e.g. in an enclosure [3]
B23K 26/14	1-Punkt Untergruppe	. using a flow, e.g. a jet of gas, in conjunction with the laser beam (B23K 26/12 takes precedence) [3]
B23K 26/16	1-Punkt Untergruppe	. Removing of by-products, e.g. particles or vapours produced during treatment of a workpiece (by a flow of gas B23K 26/14) [3]
B23K 26/18	1-Punkt Untergruppe	. using absorbing layers on the material being worked, e.g. for marking or protecting purposes [3]

Symbol	Typ	Titel
B23K 26/20	1-Punkt Untergruppe	. Bonding, e.g. welding (soldering by means of radiant energy B23K 1/005; joining of preformed plastics parts by heating using laser beam B29C 65/16) [7]
B23K 26/22	2-Punkt Untergruppe	. . Spot welding [7]
B23K 26/24	2-Punkt Untergruppe	. . Seam welding [7]
B23K 26/26	3-Punkt Untergruppe	. . . of rectilinear seams [7]
B23K 26/28	3-Punkt Untergruppe	. . . of curved planar seams [7]
B23K 26/30	3-Punkt Untergruppe	. . . of three-dimensional seams [7]
B23K 26/32	2-Punkt Untergruppe	. . taking account of the properties of the material involved [7]
B23K 26/34	1-Punkt Untergruppe	. Welding for purposes other than joining, e.g. build-up welding [7]
B23K 26/36	1-Punkt Untergruppe	. Removing material [7]
B23K 26/38	2-Punkt Untergruppe	. . by boring or cutting [7]
B23K 26/40	2-Punkt Untergruppe	. . taking account of the properties of the material involved [7]
B23K 26/42	1-Punkt Untergruppe	. Preliminary treatment; Auxiliary operations or equipment (B23K 26/16 takes precedence) [7]
B23K 28/00	**Hauptgruppe**	**Welding or cutting not covered by groups B23K 5/00-B23K 26/00 (joining workpieces by electrolysis C25D 2/00; electrolytic removal of materials C25F) [2]**
B23K 28/02	1-Punkt Untergruppe	. Combined welding or cutting procedures or apparatus [2]
B23K 31/00	**Hauptgruppe**	**Processes relevant to this subclass, specially adapted for particular articles or purposes, but not covered by any single one of main groups B23K 1/00-B23K 28/00 (making tubes or profiled bars involving operations other than soldering or welding B21C 37/04, B21C 37/08)**
B23K 31/02	1-Punkt Untergruppe	. relating to soldering or welding (dip or wave soldering in the manufacture of printed circuits H05K 3/34)
B23K 31/10	1-Punkt Untergruppe	. relating to cutting or desurfacing
B23K 31/12	1-Punkt Untergruppe	. relating to investigating the properties, e.g. the weldability, of materials [5]
B23K 33/00	**Hauptgruppe**	**Specially-profiled edge portions of workpieces for making soldering or welding connections; Filling the seams formed thereby**
B23K 35/00	**Hauptgruppe**	**Rods, electrodes, materials, or media, for use in soldering, welding, or cutting**
B23K 35/02	1-Punkt Untergruppe	. characterised by mechanical features, e.g. shape
B23K 35/04	2-Punkt Untergruppe	. . specially designed for use as electrodes (ignition tips for arc welding or cutting B23K 9/26)
B23K 35/06	3-Punkt Untergruppe	. . . of non-circular cross-section; with special arrangement, e.g. internal
B23K 35/08	4-Punkt Untergruppe	. . . . multi-cored; multiple
B23K 35/10	4-Punkt Untergruppe	. . . . with more than one layer of coating or sheathing material
B23K 35/12	2-Punkt Untergruppe	. . not specially designed for use as electrodes
B23K 35/14	3-Punkt Untergruppe	. . . for soldering
B23K 35/16	3-Punkt Untergruppe	. . . of non-circular cross-section; with special arrangement, e.g. internal (B23K 35/14 takes precedence)
B23K 35/18	4-Punkt Untergruppe	. . . . multi-cored; multiple
B23K 35/20	4-Punkt Untergruppe	. . . . with more than one layer of coating or sheathing material
B23K 35/22	1-Punkt Untergruppe	. characterised by the composition or nature of the material

Symbol	Typ	Titel
B23K 35/24	2-Punkt Untergruppe	. . Selection of soldering or welding materials proper (B23K 35/34 takes precedence)
B23K 35/26	3-Punkt Untergruppe	. . . with the principal constituent melting at less than 400°C
B23K 35/28	3-Punkt Untergruppe	. . . with the principal constituent melting at less than 950°C
B23K 35/30	3-Punkt Untergruppe	. . . with the principal constituent melting at less than 1550°C
B23K 35/32	3-Punkt Untergruppe	. . . with the principal constituent melting at more than 1550°C
B23K 35/34	2-Punkt Untergruppe	. . comprising compounds which yield metals when heated
B23K 35/36	2-Punkt Untergruppe	. . Selection of non-metallic compositions, e.g. coatings, fluxes (B23K 35/34 takes precedence); Selection of soldering or welding materials, conjoint with selection of non-metallic compositions, both selections being of interest (selection of soldering or welding materials proper B23K 35/24) [2]
B23K 35/362	3-Punkt Untergruppe	. . . Selection of compositions of fluxes (B23K 35/365, B23K 35/368 take precedence) [2]
B23K 35/363	4-Punkt Untergruppe	. . . . for soldering or brazing [4]
B23K 35/365	3-Punkt Untergruppe	. . . Selection of non-metallic compositions of coating materials either alone or conjoint with selection of soldering or welding materials [2]
B23K 35/368	3-Punkt Untergruppe	. . . Selection of non-metallic compositions of core materials either alone or conjoint with selection of soldering or welding materials [2]
B23K 35/38	2-Punkt Untergruppe	. . Selection of media, e.g. special atmospheres for surrounding the working area
B23K 35/40	1-Punkt Untergruppe	. Making wire or rods for soldering or welding (processes involving a single technical art, see the relevant subclasses, e.g. B05D, B21C)
B23K 37/00	**Hauptgruppe**	**Auxiliary devices or processes, not specially adapted to a procedure covered by only one of the other main groups of this subclass (eye-shields for welders worn on the operator's body or carried in the hand A61F 9/00; applicable to metal-working machines other than soldering, welding, or flame-cutting machines B23Q; other protective shields F16P 1/06)**
B23K 37/02	1-Punkt Untergruppe	. Carriages for supporting the welding or cutting element
B23K 37/04	1-Punkt Untergruppe	. for holding or positioning work
B23K 37/047	2-Punkt Untergruppe	. . moving work to adjust its position between soldering, welding or cutting steps (B23K 37/053 takes precedence) [5]
B23K 37/053	2-Punkt Untergruppe	. . aligning cylindrical work; Clamping devices therefor [5]
B23K 37/06	1-Punkt Untergruppe	. for positioning the molten material, e.g. confining it to a desired area
B23K 37/08	1-Punkt Untergruppe	. for flash removal [5]
		Indexing scheme associated with groups B23K 1/00-B23K 31/00, relating to articles made by soldering, welding or cutting or to materials to be soldered, welded or cut. [5]
B23K 101/00	**Hauptgruppe**	**Articles made by soldering, welding or cutting [5]**
B23K 101/02	1-Punkt Untergruppe	. Honeycomb structures [5]
B23K 101/04	1-Punkt Untergruppe	. Tubular or hollow articles [5]
B23K 101/06	2-Punkt Untergruppe	. . Tubes [5]
B23K 101/08	3-Punkt Untergruppe	. . . finned or ribbed [5]
B23K 101/10	2-Punkt Untergruppe	. . Pipe-lines [5]
B23K 101/12	2-Punkt Untergruppe	. . Vessels [5]

Symbol	Typ	Titel
B23K 101/14	2-Punkt Untergruppe	. . Heat exchangers [5]
B23K 101/16	1-Punkt Untergruppe	. Bands or sheets of indefinite length [5]
B23K 101/18	1-Punkt Untergruppe	. Sheet panels [5]
B23K 101/20	1-Punkt Untergruppe	. Tools [5]
B23K 101/22	1-Punkt Untergruppe	. Nets, wire fabrics or the like [5]
B23K 101/24	1-Punkt Untergruppe	. Frameworks [5]
B23K 101/26	1-Punkt Untergruppe	. Railway- or like rails [5]
B23K 101/28	1-Punkt Untergruppe	. Beams [5]
B23K 101/30	1-Punkt Untergruppe	. Chains, hoops or rings [5]
B23K 101/32	1-Punkt Untergruppe	. Wires [5]
B23K 101/34	1-Punkt Untergruppe	. Coated articles [5]
B23K 101/36	1-Punkt Untergruppe	. Electric or electronic devices [5]
B23K 101/38	2-Punkt Untergruppe	. . Conductors [5]
B23K 101/40	2-Punkt Untergruppe	. . Semiconductor devices [5]
B23K 101/42	2-Punkt Untergruppe	. . Printed circuits [5]
B23K 103/00	**Hauptgruppe**	**Materials to be soldered, welded or cut [5]**
B23K 103/02	1-Punkt Untergruppe	. Iron or ferrous alloys [5]
B23K 103/04	2-Punkt Untergruppe	. . Steel alloys [5]
B23K 103/06	2-Punkt Untergruppe	. . Cast-iron alloys [5]
B23K 103/08	1-Punkt Untergruppe	. Non-ferrous metals or alloys [5]
B23K 103/10	2-Punkt Untergruppe	. . Aluminium or alloys thereof [5]
B23K 103/12	2-Punkt Untergruppe	. . Copper or alloys thereof [5]
B23K 103/14	2-Punkt Untergruppe	. . Titanium or alloys thereof [5]
B23K 103/16	1-Punkt Untergruppe	. Composite materials [5]
B23K 103/18	1-Punkt Untergruppe	. Dissimilar materials [5]
B23K 103/20	2-Punkt Untergruppe	. . Ferrous alloys and aluminium or alloys thereof [5]
B23K 103/22	2-Punkt Untergruppe	. . Ferrous alloys and copper or alloys thereof [5]
B23K 103/24	2-Punkt Untergruppe	. . Ferrous alloys and titanium or alloys thereof [5]