

Symbol	Typ	Titel
B	Sektion	PERFORMING OPERATIONS; TRANSPORTING
B21	Untersektion	SHAPING
B21	Klasse	MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL (casting, powder metallurgy B22; shearing B23D; working of metal by the action of a high concentration of electric current B23H; soldering, welding, flame-cutting B23K; other working of metal B23P; punching sheet material in general B26F; processes for changing of physical properties of metals C21D , C22F; electroforming C25D 1/00)
B21F	Unterklasse	WORKING OR PROCESSING OF WIRE (rolling of metal B21B; by drawing, auxiliary operations used in connection with metal-working without essentially removing material B21C; bundling articles B65B 13/00) <u>Wire working characterised by operations performed</u>
B21F 1/00	Hauptgruppe	Bending wire other than coiling; Straightening wire
B21F 1/02	1-Punkt Untergruppe	. Straightening
B21F 1/04	1-Punkt Untergruppe	. Undulating
B21F 1/06	1-Punkt Untergruppe	. Bending wire-eyes
B21F 3/00	Hauptgruppe	Coiling wire into particular forms
B21F 3/02	1-Punkt Untergruppe	. helically
B21F 3/027	2-Punkt Untergruppe	. . with extended ends formed in a special shape, e.g. for clothes-pegs
B21F 3/04	2-Punkt Untergruppe	. . externally on a mandrel or the like
B21F 3/06	2-Punkt Untergruppe	. . internally on a hollow form
B21F 3/08	1-Punkt Untergruppe	. to flat spiral
B21F 3/10	1-Punkt Untergruppe	. to spirals other than flat, e.g. conical
B21F 3/12	1-Punkt Untergruppe	. of interconnected helical springs
B21F 5/00	Hauptgruppe	Upsetting wire (in the manufacture of nails or pins B21G 3/12)
B21F 7/00	Hauptgruppe	Twisting wire; Twisting wire together (for connections of limited size B21F 15/04)
B21F 9/00	Hauptgruppe	Straining wire (straining prestressing wires for concrete E04G 21/12; connections or attachments adapted for straining F16G 11/00)
B21F 9/02	1-Punkt Untergruppe	. by tools adapted also for making connections
B21F 11/00	Hauptgruppe	Cutting wire (hand cutting tools B26B)
B21F 13/00	Hauptgruppe	Splitting wire
B21F 15/00	Hauptgruppe	Connecting wire to wire or other metallic material or objects; Connecting parts by means of wire (tools for both straining and connecting B21F 9/00; jacketing or reinforcing B21F 17/00; manufacture of wire network B21F 27/00; in making bands B21F 43/00)
B21F 15/02	1-Punkt Untergruppe	. wire with wire
B21F 15/04	2-Punkt Untergruppe	. . without additional connecting elements or material, e.g. by twisting
B21F 15/06	2-Punkt Untergruppe	. . with additional connecting elements or material
B21F 15/08	3-Punkt Untergruppe	. . . making use of soldering or welding
B21F 15/10	1-Punkt Untergruppe	. wire with sheet metal
B21F 17/00	Hauptgruppe	Jacketing or reinforcing articles with wire (by winding B65H 54/00 , B65H 81/00; by braiding D04C)

Symbol	Typ	Titel
B21F 19/00	Hauptgruppe	Metallic coating of wire (by extruding B21C 23/24; by soldering or welding, e.g. cladding or plating, B23K; by other non-mechanical means C23; electroplating C25D)
B21F 21/00	Hauptgruppe	Working or processing wire not otherwise provided for
B21F 23/00	Hauptgruppe	Feeding wire in wire-working machines or apparatus (applicable also to feeding rods or strips B21D 43/00)
		<u>Wire working characterised by the particular articles produced</u>
B21F 25/00	Hauptgruppe	Making barbed wire
B21F 27/00	Hauptgruppe	Making wire network, i.e. wire nets (meshed-ring network B21F 31/00; in making bands B21F 43/00; using looms D03D)
B21F 27/02	1-Punkt Untergruppe	. without additional connecting elements or material at crossings, e.g. connected by knitting
B21F 27/04	2-Punkt Untergruppe	. . Manufacturing on machines with rotating blades or formers
B21F 27/06	2-Punkt Untergruppe	. . Manufacturing on twister-gear machines
B21F 27/08	1-Punkt Untergruppe	. with additional connecting elements or material at crossings
B21F 27/10	2-Punkt Untergruppe	. . with soldered or welded crossings
B21F 27/12	1-Punkt Untergruppe	. Making special types or portions of network by methods or means specially adapted therefor
B21F 27/14	2-Punkt Untergruppe	. . Specially bending or deforming free wire ends
B21F 27/16	2-Punkt Untergruppe	. . for spring mattresses
B21F 27/18	2-Punkt Untergruppe	. . of meshed work for filters or sieves
B21F 27/20	2-Punkt Untergruppe	. . of plaster-carrying network
B21F 27/22	2-Punkt Untergruppe	. . of network for wire-reinforced glass or the like
B21F 29/00	Hauptgruppe	Making fencing or like material made partly of wire (B21F 25/00 , B21F 27/00 take precedence) [2]
B21F 29/02	1-Punkt Untergruppe	. comprising bars or the like connected by wires
B21F 31/00	Hauptgruppe	Making meshed-ring network from wire
B21F 33/00	Hauptgruppe	Tools or devices specially designed for handling or processing wire fabrics or the like
B21F 33/02	1-Punkt Untergruppe	. Mounting of wire network on frames
B21F 33/04	1-Punkt Untergruppe	. Connecting ends of helical springs for mattresses
B21F 35/00	Hauptgruppe	Making springs from wire (by coiling wire B21F 3/00; making resilient rings B21F 37/02)
B21F 35/02	1-Punkt Untergruppe	. Bending or deforming ends of coil springs to special shape
B21F 35/04	1-Punkt Untergruppe	. Making flat springs, e.g. sinus springs
B21F 37/00	Hauptgruppe	Manufacture of rings from wire (in chain making B21L; producing bead-rings or bead-cores for tyres B29D 30/48)
B21F 37/02	1-Punkt Untergruppe	. or resilient rings, e.g. key-rings
B21F 37/04	1-Punkt Untergruppe	. of washers (B21F 37/02 takes precedence)
B21F 39/00	Hauptgruppe	Making wheel spokes from wire
B21F 41/00	Hauptgruppe	Making umbrella frames or members from wire
B21F 43/00	Hauptgruppe	Making bands, e.g. bracelets, or wire (making chains B21L; using looms D03D)
B21F 45/00	Hauptgruppe	Wire-working in the manufacture of other particular articles (of pins, needles, nails, hairpins B21G; of chains B21L)
B21F 45/02	1-Punkt Untergruppe	. of clothes hangers
B21F 45/04	1-Punkt Untergruppe	. of elements, e.g. levers or links, for bottle stoppers

Symbol	Typ	Titel
B21F 45/06	1-Punkt Untergruppe	. of flexible shafts or hollow conduits, e.g. for Bowden mechanisms
B21F 45/08	1-Punkt Untergruppe	. of loom heddles
B21F 45/10	1-Punkt Untergruppe	. of cards for fabric-napping machines
B21F 45/12	1-Punkt Untergruppe	. of fishing hooks
B21F 45/14	1-Punkt Untergruppe	. of end-pieces for laces or ropes
B21F 45/16	1-Punkt Untergruppe	. of devices for fastening or securing purposes
B21F 45/18	2-Punkt Untergruppe	. . of slide fastener elements
B21F 45/20	2-Punkt Untergruppe	. . of spring hooks; of spring safety hooks
B21F 45/22	2-Punkt Untergruppe	. . of paper fasteners or clips (staples B21F 45/24)
B21F 45/24	2-Punkt Untergruppe	. . of staples; of belt-fastening elements
B21F 45/26	2-Punkt Untergruppe	. . of buttons
B21F 45/28	3-Punkt Untergruppe	. . . of "patent-fastener" or press-button type