

Symbol	Typ	Titel
B	Sektion	PERFORMING OPERATIONS; TRANSPORTING
B21	Untersektion	SHAPING
B21	Klasse	MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL
B21J	Unterkategorie	FORGING; HAMMERING; PRESSING METAL; RIVETING; FORGE FURNACES (rolling of metal B21B; making particular products by forging or pressing B21K; cladding or plating B23K; finishing surfaces by hammering B23P 9/04; compacting surfaces by blasting with particulate material B24C 1/10; general features of presses, presses for consolidating scrap B30B; furnaces in general F27)
B21J 1/00	Hauptgruppe	Preparing metal stock [1, 2006.01]
B21J 1/02	1-Punkt Untergruppe	. Preliminary treatment of metal stock without particular shaping, e.g. salvaging segregated zones, forging or pressing in the rough (modifying the physical properties by deformation C21D 7/00, C22F 1/00) [1, 2006.01]
B21J 1/04	1-Punkt Untergruppe	. Shaping in the rough solely by forging or pressing [1, 2006.01]
B21J 1/06	1-Punkt Untergruppe	. Heating or cooling methods or arrangements specially adapted for performing forging or pressing operations [1, 2006.01]
B21J 3/00	Hauptgruppe	Lubricating during forging or pressing (lubricating in general F16N) [1, 2006.01]
B21J 5/00	Hauptgruppe	Methods for forging, hammering, or pressing (for working sheet metal or metal tubes, rods, or profiles B21D; for working wire B21F); Special equipment or accessories therefor [1, 2006.01]
B21J 5/02	1-Punkt Untergruppe	. Die forging; Trimming by making use of special dies [1, 2006.01]
B21J 5/04	1-Punkt Untergruppe	. by directly applied fluid pressure or explosive action [1, 2006.01]
B21J 5/06	1-Punkt Untergruppe	. for performing particular operations [1, 2006.01]
B21J 5/08	2-Punkt Untergruppe	.. Upsetting [1, 2006.01]
B21J 5/10	2-Punkt Untergruppe	.. Piercing billets (in combination with extrusion B21C 23/00) [1, 2006.01]
B21J 5/12	2-Punkt Untergruppe	.. Forming profiles on internal or external surfaces (making screw-thread by forging, pressing, or hammering B21K) [1, 2006.01]
B21J 7/00	Hauptgruppe	Hammers; Forging machines with hammers or die jaws acting by impact (hand hammers B25D; electrical features section H) [1, 2006.01]
B21J 7/02	1-Punkt Untergruppe	. Special design or construction [1, 2006.01]
B21J 7/04	2-Punkt Untergruppe	.. Power hammers [1, 2006.01]
B21J 7/06	2-Punkt Untergruppe	.. Drop hammers [1, 2006.01]
B21J 7/08	3-Punkt Untergruppe	... with rigidly-guided hammer [1, 2006.01]
B21J 7/10	2-Punkt Untergruppe	... with both drive and hammer connected to a fulcrumed lever, e.g. tail hammers [1, 2006.01]
B21J 7/12	3-Punkt Untergruppe	... the lever being a spring, i.e. spring hammers [1, 2006.01]
B21J 7/14	2-Punkt Untergruppe	.. Forging machines working with several hammers [1, 2006.01]
B21J 7/16	3-Punkt Untergruppe	... in rotary arrangements [1, 2006.01]
B21J 7/18	2-Punkt Untergruppe	.. Forging machines working with die jaws, e.g. pivoted, movable laterally of the forging or pressing direction, e.g. for swaging [1, 2006.01]
B21J 7/20	1-Punkt Untergruppe	. Drives for hammers; Transmission means therefor [1, 2006.01]

Symbol	Typ	Titel
B21J 7/22	2-Punkt Untergruppe	... for power hammers [1, 2006.01]
B21J 7/24	3-Punkt Untergruppe	... operated by steam, air, or other gaseous pressure [1, 2006.01]
B21J 7/26	4-Punkt Untergruppe operated by internal combustion [1, 2006.01]
B21J 7/28	3-Punkt Untergruppe	... operated by hydraulic or liquid pressure [1, 2006.01]
B21J 7/30	3-Punkt Untergruppe	... operated by electro-magnets [1, 2006.01]
B21J 7/32	3-Punkt Untergruppe	... operated by rotary drive, e.g. electric motor [1, 2006.01]
B21J 7/34	3-Punkt Untergruppe	... operating both the hammer and the anvil, so-called counter-tup [1, 2006.01]
B21J 7/36	2-Punkt Untergruppe	... for drop hammers [1, 2006.01]
B21J 7/38	3-Punkt Untergruppe	... driven by steam, air, or other gaseous pressure [1, 2006.01]
B21J 7/40	3-Punkt Untergruppe	... driven by hydraulic or liquid pressure [1, 2006.01]
B21J 7/42	3-Punkt Untergruppe	... operated by rotary drive, e.g. electric motors [1, 2006.01]
B21J 7/44	4-Punkt Untergruppe equipped with belts, ropes, cables, chains [1, 2006.01]
B21J 7/46	2-Punkt Untergruppe	.. Control devices specially adapted to forging hammers, not restricted to one of the preceding subgroups [1, 2006.01]
B21J 9/00	Hauptgruppe	Forging presses [1, 2006.01]
B21J 9/02	1-Punkt Untergruppe	. Special design or construction [1, 2006.01]
B21J 9/04	2-Punkt Untergruppe	... Piercing presses [1, 2006.01]
B21J 9/06	2-Punkt Untergruppe	... Swaging presses; Upsetting presses [1, 2006.01]
B21J 9/08	3-Punkt Untergruppe	... equipped with devices for heating the workpiece (electric heating elements H05B) [1, 2006.01]
B21J 9/10	1-Punkt Untergruppe	. Drives for forging presses [1, 2006.01]
B21J 9/12	2-Punkt Untergruppe	... operated by hydraulic or liquid pressure [1, 2006.01]
B21J 9/14	3-Punkt Untergruppe	... in conjunction with electric power [1, 2006.01]
B21J 9/16	3-Punkt Untergruppe	... in conjunction with steam or gas power [1, 2006.01]
B21J 9/18	2-Punkt Untergruppe	.. operated by making use of gearing mechanisms, e.g. levers, spindles, crankshafts, eccentrics, toggle-levers, rack bars [1, 2006.01]
B21J 9/20	2-Punkt Untergruppe	.. Control devices specially adapted to forging presses not restricted to one of the preceding subgroups [1, 2006.01]
B21J 11/00	Hauptgruppe	Forging hammers combined with forging presses; Forging machines with provision for hammering and pressing [1, 2006.01]
B21J 13/00	Hauptgruppe	Details of machines for forging, pressing, or hammering [1, 2006.01]
B21J 13/02	1-Punkt Untergruppe	. Dies or mountings therefor [1, 2, 2006.01]
B21J 13/03	2-Punkt Untergruppe	.. Die mountings [2, 2006.01]
B21J 13/04	1-Punkt Untergruppe	. Frames; Guides [1, 2006.01]
B21J 13/06	1-Punkt Untergruppe	. Hammer tups; Anvils; Anvil blocks [1, 2006.01]
B21J 13/08	1-Punkt Untergruppe	. Accessories for handling work or tools [1, 2006.01]

Symbol	Typ	Titel
B21J 13/10	2-Punkt Untergruppe	... Manipulators (in general B25) [1, 2006.01]
B21J 13/12	3-Punkt Untergruppe	... Turning means [1, 2006.01]
B21J 13/14	2-Punkt Untergruppe	... Ejecting devices [1, 2006.01]
B21J 15/00	Hauptgruppe	Riveting [1, 2006.01]
B21J 15/02	1-Punkt Untergruppe	. Riveting procedures [1, 2006.01]
B21J 15/04	2-Punkt Untergruppe	... Riveting hollow rivets mechanically [1, 2006.01]
B21J 15/06	2-Punkt Untergruppe	... Riveting hollow rivets by means of hydraulic, liquid, or gas pressure [1, 2006.01]
B21J 15/08	2-Punkt Untergruppe	... Riveting by applying heat to the end parts of the rivets to enable heads to be formed [1, 2006.01]
B21J 15/10	1-Punkt Untergruppe	. Riveting machines (electric heating elements H05B) [1, 2006.01]
B21J 15/12	2-Punkt Untergruppe	... with tools or tool parts having a movement additional to the feed movement, e.g. spin [1, 2006.01]
B21J 15/14	2-Punkt Untergruppe	... specially adapted for riveting specific articles, e.g. brake lining machines [1, 2006.01]
B21J 15/16	2-Punkt Untergruppe	... Drives for riveting machines; Transmission means therefor [1, 2006.01]
B21J 15/18	3-Punkt Untergruppe	... operated by air pressure or other gas pressure, e.g. explosion pressure [1, 2006.01]
B21J 15/20	3-Punkt Untergruppe	... operated by hydraulic or liquid pressure [1, 2006.01]
B21J 15/22	3-Punkt Untergruppe	... operated by both hydraulic or liquid pressure and gas pressure [1, 2006.01]
B21J 15/24	3-Punkt Untergruppe	... operated by electro-magnets [1, 2006.01]
B21J 15/26	3-Punkt Untergruppe	... operated by rotary drive, e.g. by electric motor [1, 2006.01]
B21J 15/28	2-Punkt Untergruppe	... Control devices specially adapted to riveting machines not restricted to one of the preceding subgroups [1, 2006.01]
B21J 15/30	2-Punkt Untergruppe	... Particular elements, e.g. supports; Suspension equipment specially adapted for portable riveters [1, 2006.01]
B21J 15/32	3-Punkt Untergruppe	... Devices for inserting or holding rivets in position with or without feeding arrangements [1, 2006.01]
B21J 15/34	4-Punkt Untergruppe for installing tubular rivets [1, 2006.01]
B21J 15/36	2-Punkt Untergruppe	... Rivet sets, i.e. tools for forming heads; Mandrels for expanding parts of hollow rivets [1, 2006.01]
B21J 15/38	1-Punkt Untergruppe	. Accessories for use in connection with riveting, e.g. pliers for upsetting; Hand tools for riveting [1, 2006.01]
B21J 15/40	2-Punkt Untergruppe	... for forming rivet heads [1, 2006.01]
B21J 15/42	2-Punkt Untergruppe	... Special clamping devices for workpieces to be riveted together, e.g. operating through the rivet holes [1, 2006.01]
B21J 15/44	2-Punkt Untergruppe	... Rivet hole positioners [1, 2006.01]
B21J 15/46	2-Punkt Untergruppe	... Positioners for rivets for making tube joints [1, 2006.01]
B21J 15/48	2-Punkt Untergruppe	... Devices for caulking rivets [1, 2006.01]
B21J 15/50	2-Punkt Untergruppe	... Removing or cutting devices for rivets [1, 2006.01]
B21J 17/00	Hauptgruppe	Forge furnaces (furnaces for heat treatment C21D 9/00; furnaces in general F27) [1, 2006.01]
B21J 17/02	1-Punkt Untergruppe	. electrically heated (electric heating elements H05B) [1, 2006.01]

Symbol	Typ	Titel
B21J 19/00	Hauptgruppe	Blacksmiths' requisites not otherwise provided for [1, 2006.01]
B21J 19/02	1-Punkt Untergruppe	. Hearths; Air supply arrangements specially adapted therefor [1, 2006.01]
B21J 19/04	1-Punkt Untergruppe	. Anvils; Associated items [1, 2006.01]