

| Symbol            | Typ                 | Titel   |
|-------------------|---------------------|---|
| <b>B</b>          | <b>Sektion</b>      | <b>PERFORMING OPERATIONS; TRANSPORTING</b>  |
| <b>B21</b>        | <b>Untersektion</b> | <b>SHAPING</b>  |
| <b>B21</b>        | <b>Klasse</b>       | <b>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)</b> |
| <b>B21L</b>       | <b>Unterklasse</b>  | <b>MAKING CHAINS (chains in general F16G)</b>   |
| <b>B21L 1/00</b>  | <b>Hauptgruppe</b>  | <b>Making chains or chain links by bending workpieces of rod, wire, or strip to form links of oval or other simple shape (B21L 3/00 , B21L 7/00 take precedence)</b>  |
| B21L 1/02         | 1-Punkt Untergruppe | . by bending the ends of the workpieces to abut   |
| B21L 1/04         | 1-Punkt Untergruppe | . by bending and interconnecting the ends of the workpieces with or without separate jointing members   |
| <b>B21L 3/00</b>  | <b>Hauptgruppe</b>  | <b>Making chains or chain links by bending the chain links or link parts and subsequently welding or soldering the abutting ends (B21L 7/00 takes precedence)</b>   |
| B21L 3/02         | 1-Punkt Untergruppe | . Machines or devices for welding chain links   |
| B21L 3/04         | 2-Punkt Untergruppe | . . by making use of forge or pressure welding  |
| <b>B21L 5/00</b>  | <b>Hauptgruppe</b>  | <b>Making chains or chain links by working the starting material in such a way that integral, i.e. jointless, chain links are formed</b>  |
| B21L 5/02         | 1-Punkt Untergruppe | . in such a way that interconnected links are formed  |
| <b>B21L 7/00</b>  | <b>Hauptgruppe</b>  | <b>Making chains or chain links by cutting single loops or loop-parts from coils, assembling the cut parts and subsequently subjecting same to twisting with or without welding</b>   |
| <b>B21L 9/00</b>  | <b>Hauptgruppe</b>  | <b>Making chains or chain links, the links being composed of two or more different parts, e.g. drive chains (B21L 1/04 , B21L 7/00 , B21L 11/14 , B21L 13/00 take precedence)</b>   |
| B21L 9/02         | 1-Punkt Untergruppe | . of roller-chain or other plate-link type  |
| B21L 9/04         | 2-Punkt Untergruppe | . . Punching or bending the different parts of the chain links  |
| B21L 9/06         | 2-Punkt Untergruppe | . . Sorting, feeding, assembling, riveting, or finishing parts of chains  |
| B21L 9/08         | 2-Punkt Untergruppe | . . Combining the chain links with auxiliary parts, e.g. welding-on wear-resistant parts  |
| <b>B21L 11/00</b> | <b>Hauptgruppe</b>  | <b>Making chains or chain links of special shape</b>  |
| B21L 11/02        | 1-Punkt Untergruppe | . each link being formed of a single member of which both ends are bent or shaped to engage the middle portion of the next link   |
| B21L 11/04        | 2-Punkt Untergruppe | . . the ends being pierced or punched to form eyes  |
| B21L 11/06        | 3-Punkt Untergruppe | . . . the workpiece being of thin strip metal   |
| B21L 11/08        | 2-Punkt Untergruppe | . . the ends being interengaged with other parts of the same link   |
| B21L 11/10        | 1-Punkt Untergruppe | . the chain links having opposed correspondingly shaped cylindrical and hook-like parts of which one part forms a hinge-like support for the adjacent link (B21L 11/02 takes precedence)  |
| B21L 11/12        | 1-Punkt Untergruppe | . Forming bead chains   |
| B21L 11/14        | 1-Punkt Untergruppe | . Making chain links with inserted or integrally- formed studs  |
| <b>B21L 13/00</b> | <b>Hauptgruppe</b>  | <b>Making terminal or intermediate chain links of special shape; Making couplings for chains, e.g. swivels, shackles</b>  |
| <b>B21L 15/00</b> | <b>Hauptgruppe</b>  | <b>Finishing or dressing chains or chain links, e.g. removing burr material, calibrating (B21L 9/06</b>   |

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|                   |                     | <b>takes precedence)</b>  |
| B21L 15/02        | 1-Punkt Untergruppe | . Twisting already closed links   |
| <b>B21L 17/00</b> | <b>Hauptgruppe</b>  | <b>Making chains or chain links not covered by one of the preceding main groups (by casting B22D 25/02)</b>             |
| <b>B21L 19/00</b> | <b>Hauptgruppe</b>  | <b>Appurtenances for chain-making not restricted to any particular process</b>  |
| <b>B21L 21/00</b> | <b>Hauptgruppe</b>  | <b>Tools or implements for repairing chains using metal-working operations, e.g. for detaching deformed chain links</b> |