

**CPC****COOPERATIVE PATENT CLASSIFICATION****B21H**

**MAKING PARTICULAR METAL OBJECTS BY ROLLING, e.g. SCREWS, WHEELS, RINGS, BARRELS, BALLS** (essentially from sheet metal [B21D](#))

**NOTE**

This subclass covers rolling operations which are specially adapted for use in the manufacture of particular objects and which are not essentially combined with any different metal-working operation unless the latter is a subsidiary operation performed in the same machine.

**B21H 1/00**

**Making articles shaped as bodies of revolution** (rolling tubes [B21B 17/00](#) to [B21B 25/00](#))

**B21H 1/02**

- . discs; disc wheels

**B21H 1/04**

- .. with rim, e.g. railways wheels {or pulleys}

**B21H 1/06**

- . rings of restricted axial length (extending closed shapes of metal bands by simultaneous rolling at two or more zones [B21B 5/00](#))

**B21H 1/08**

- .. railway wheel rims

**B21H 1/10**

- .. rims for pneumatic tyres

**B21H 1/12**

- .. rings for ball or roller bearings

**B21H 1/14**

- . balls, rollers, cone rollers, or like bodies

**B21H 1/16**

- .. for bearings

**B21H 1/18**

- . cylinders, e.g. rolled transversely {cross-rolling}

**B21H 1/20**

- .. rolled longitudinally

**B21H 1/22**

- . characterised by use of rolls having circumferentially varying profile; {Die-rolling}

**B21H 3/00**

**Making helical bodies or bodies having parts of helical shape** (helical gears [B21H 5/00](#); forming tubes or tube walls into helical shape [B21D 11/06](#), [B21D 15/04](#))

**B21H 3/02**

- . external screw-threads; {Making dies for thread rolling}

**B21H 3/022**

- .. {combined with rolling splines, ribs, grooves or the like, e.g. using compound dies}

**B21H 3/025**

- .. {Rolling locking screws}

**B21H 3/027**

- .. {Rolling of self-tapping screws}

**B21H 3/04**

- .. Making by means of profiled-rolls {or die rolls}

**B21H 3/042**

- ... {Thread-rolling heads}

**B21H 3/044**

- .... {working axially}

**B21H 3/046**

- .... {working radially}

**B21H 3/048**

- .... {working tangentially}

**B21H 3/06**

- .. Making by means of profiled members other than rolls, e.g. {reciprocating flat dies or} jaws, moved longitudinally or curvilinearly with respect to each other

**B21H 3/065**

- ... {Planetary thread rolling}

**B21H 3/08**

- . internal screw-threads

|                  |   |
|------------------|---|
| B21H 3/10        | . twist-drills; screw-taps  |
| B21H 3/12        | . articles with helicoidal surface ( <a href="#">bending strip or the like helically B21D 11/06</a> )   |
| <b>B21H 5/00</b> | <b>Making gear wheels, {racks, spline shafts or worms}</b>  |
| B21H 5/005       | . {Worms}   |
| B21H 5/02        | . with cylindrical outline, {e.g. by means of die rolls ( <a href="#">worms B21H 5/005</a> )}   |
| B21H 5/022       | . . {Finishing gear teeth with cylindrical outline, e.g. burnishing}  |
| B21H 5/025       | . . { Internally geared wheels}   |
| B21H 5/027       | . . {by rolling using reciprocating flat dies, e.g. racks ( <a href="#">B21H 5/022 takes precedence</a> )}  |
| B21H 5/04        | . bevel gears   |
| B21H 5/045       | . . {Finishing bevel gear teeth, e.g. burnishing}   |
| <b>B21H 7/00</b> | <b>Making articles not provided for in the preceding groups, e.g. agricultural tools, dinner forks, knives, spoons (<a href="#">nails, pins B21G 3/30</a>)</b>      |
| B21H 7/002       | . { Fasteners, rivets}  |
| B21H 7/005       | . {railway sleepers or chains}  |
| B21H 7/007       | . {Taper rolling, e.g. leaf springs}  |
| B21H 7/02        | . spades; shovels   |
| B21H 7/04        | . hoes  |
| B21H 7/06        | . ploughshares; axes  |
| B21H 7/08        | . forks; rakes {spoons}   |
| B21H 7/10        | . knives; sickles; scythes  |
| B21H 7/12        | . horse-shoes; articles of like shape, e.g. wear-resisting attachments for shoes  |
| B21H 7/14        | . knurled articles  |
| B21H 7/16        | . turbine blades; compressor blades; propeller blades   |
| B21H 7/18        | . grooved pins; Rolling grooves, e.g. oil grooves, in articles {( <a href="#">B21H 5/00 takes precedence</a> )}   |
| B21H 7/182       | . . {Rolling annular grooves}   |
| B21H 7/185       | . . . { Filet rolling, e.g. of crankshafts}   |
| B21H 7/187       | . . {Rolling helical or rectilinear grooves}  |
| <b>B21H 8/00</b> | <b>Rolling metal of indefinite length in repetitive shapes specially designed for the manufacture of particular objects {e.g. <a href="#">checkered sheets</a>}</b> |
| B21H 8/005       | . { Embossing sheets or rolls}  |
| B21H 8/02        | . Rolls of special shape  |
| <b>B21H 9/00</b> | <b>Feeding arrangements for rolling machines or apparatus manufacturing articles dealt with in this subclass</b>  |
| B21H 9/02        | . for screw-rolling machines  |