

**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. <b>checkered sheets</b>}</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