

**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.

**Guidance heading:****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 (bending strip or the like helically [B21D 11/06](#))
- B21H 5/00 Making gear wheels, {racks, spline shafts or worms }**
- B21H 5/005 . {Worms }
- B21H 5/02 . with cylindrical outline, {e.g. by means of die rolls (worms [B21H 5/005](#)) }
- 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 ([B21H 5/022](#) takes precedence) }
- B21H 5/04 . bevel gears
- B21H 5/045 . . {Finishing bevel gear teeth, e.g. burnishing }
- B21H 7/00 Making articles not provided for in the preceding groups, e.g. agricultural tools, dinner forks, knives, spoons (nails, pins [B21G 3/30](#))**
- 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 { ([B21H 5/00](#) takes

precedence) }

- B21H 7/182 . . {Rolling annular grooves }
- B21H 7/185 . . . { Filet rolling, e.g. of crankshafts }
- B21H 7/187 . . {Rolling helical or rectilinear grooves }

**B21H 8/00** **Rolling metal of indefinite length in repetitive shapes specially designed for the manufacture of particular objects {e.g. checkered sheets }**

- B21H 8/005 . { Embossing sheets or rolls }

- B21H 8/02 . Rolls of special shape

**B21H 9/00** **Feeding arrangements for rolling machines or apparatus manufacturing articles dealt with in this subclass**

- B21H 9/02 . for screw-rolling machines