

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.

- 1/00 Making articles shaped as bodies of revolution**
(rolling tubes [B21B 17/00](#) - [B21B 25/00](#))
 - 1/02 . discs; disc wheels
 - 1/04 . . with rim, e.g. railways wheels {or pulleys}
 - 1/06 . rings of restricted axial length (extending closed shapes of metal bands by simultaneous rolling at two or more zones [B21B 5/00](#))
 - 1/08 . . railway wheel rims
 - 1/10 . . rims for pneumatic tyres
 - 1/12 . . rings for ball or roller bearings
 - 1/14 . balls, rollers, cone rollers, or like bodies
 - 1/16 . . for bearings
 - 1/18 . cylinders, e.g. rolled transversely {cross-rolling}
 - 1/20 . . rolled longitudinally
 - 1/22 . characterised by use of rolls having circumferentially varying profile; {Die-rolling}
- 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](#))
 - 3/02 . external screw-threads; {Making dies for thread rolling}
 - 3/022 . . {combined with rolling splines, ribs, grooves or the like, e.g. using compound dies}
 - 3/025 . . {Rolling locking screws}
 - 3/027 . . {Rolling of self-tapping screws}
 - 3/04 . . Making by means of profiled-rolls {or die rolls}
 - 3/042 . . . {Thread-rolling heads}
 - 3/044 {working axially}
 - 3/046 {working radially}
 - 3/048 {working tangentially}
 - 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
 - 3/065 . . . {Planetary thread rolling}
 - 3/08 . internal screw-threads
 - 3/10 . twist-drills; screw-taps
 - 3/12 . articles with helicoidal surface (bending strip or the like helically [B21D 11/06](#))
- 5/00 Making gear wheels, {racks, spline shafts or worms}**
 - 5/005 . {Worms}
 - 5/02 . with cylindrical outline, {e.g. by means of die rolls (worms [B21H 5/005](#))}
 - 5/022 . . {Finishing gear teeth with cylindrical outline, e.g. burnishing}
 - 5/025 . . {Internally geared wheels}
 - 5/027 . . {by rolling using reciprocating flat dies, e.g. racks ([B21H 5/022](#) takes precedence)}
- 5/04 . bevel gears
- 5/045 . . {Finishing bevel gear teeth, e.g. burnishing}
- 7/00 Making articles not provided for in the preceding groups, e.g. agricultural tools, dinner forks, knives, spoons** (nails, pins [B21G 3/30](#))
 - 7/002 . {Fasteners, rivets}
 - 7/005 . {railway sleepers or chains}
 - 7/007 . {Taper rolling, e.g. leaf springs}
 - 7/02 . spades; shovels
 - 7/04 . hoes
 - 7/06 . ploughshares; axes
 - 7/08 . forks; rakes {spoons}
 - 7/10 . knives; sickles; scythes
 - 7/12 . horse-shoes; articles of like shape, e.g. wear-resisting attachments for shoes
 - 7/14 . knurled articles
 - 7/16 . turbine blades; compressor blades; propeller blades
 - 7/18 . grooved pins; Rolling grooves, e.g. oil grooves, in articles {(B21H 5/00 takes precedence)}
 - 7/182 . . {Rolling annular grooves}
 - 7/185 . . . {Filet rolling, e.g. of crankshafts}
 - 7/187 . . {Rolling helical or rectilinear grooves}
- 8/00 Rolling metal of indefinite length in repetitive shapes specially designed for the manufacture of particular objects {, e.g. checkered sheets}**
 - 8/005 . {Embossing sheets or rolls}
 - 8/02 . Rolls of special shape
- 9/00 Feeding arrangements for rolling machines or apparatus manufacturing articles dealt with in this subclass**
 - 9/02 . for screw-rolling machines