SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B23 MACHINE TOOLS; METAL-WORKING NOT OTHERWISE PROVIDED FOR

B23G THREAD CUTTING; WORKING OF SCREWS, BOLT HEADS OR NUTS, IN CONJUNCTION THEREWITH (thread-forming by corrugating tubes B21D 15/04, by rolling B21H 3/02, by forging, pressing or hammering B21K 1/56; making helical grooves by turning B23B 5/48, by milling B23C 3/32, by grinding B24B 19/02; arrangements for copying or controlling B23Q)

Note(s)

In this subclass, the following expression is used with the meaning indicated:

- "thread cutting" includes the use of tools similar both in form and in manner of use to thread-cutting tools, but without removing any material.

Subclass index

THREAD-CUTTING METHODS, MACHINES OR DEVICES THEREFOR.....1/00, 3/00, 7/00, 9/00
FINISHING.....9/00
TOOLS.....5/00, 7/02
ACCESSORIES.....11/00

1/00 Thread cutting; Automatic machines specially designed therefor

1/02 • on an external or internal cylindrical or conical surface, e.g. on recesses (B23G 1/16, B23G 1/22, B23G 1/32, B23G 1/36 take precedence)
1/04 • • Machines with one working-spindle
1/06 • • • specially adapted for making conical screws, e.g. wood-screws
1/08 • • Machines with a plurality of working-spindles
1/10 • • • specially adapted for making conical screws, e.g. wood-screws
1/12 • • Machines with a toothed cutter in the shape of a spur gear or the like which is rotated to generate the thread profile as the work rotates
1/14 • • • specially adapted for making conical screws, e.g. wood-screws
1/16 • in holes of workpieces by taps (B23G 1/26, B23G 1/32, B23G 1/36 take precedence)
1/18 • • Machines with one working-spindle
1/20 • • Machines with a plurality of working-spindles
1/22 • Machines specially designed for operating on pipes or tubes
1/24 • • portable
1/26 • Manually-operated thread-cutting devices (features of the threading tool B23G 5/00)
1/28 • • with means for adjusting the threading tool
1/30 • • without means for adjusting the threading tool, e.g. with die-stocks (tap wrenches B25B)
1/32 • by milling
1/34 • • with a cutting bit moving in a closed path arranged eccentrically with respect to the axis of the rotating workpiece
1/36 • by grinding
1/38 • • with grinding discs guided along the workpiece in accordance with the pitch of the required thread
1/40 • • with grinding discs guided radially to the workpiece
1/42 • Centreless grinding
1/44 • Equipment or accessories specially designed for machines or devices for thread cutting
1/46 • • for holding the threading tools
1/48 • • for guiding the threading tools
1/50 • • for cutting thread by successive operations
1/52 • • for operating on pipes or tubes

3/00 Arrangements or accessories for enabling machine tools not specially designed only for thread cutting to be used for this purpose, e.g. arrangements for reversing the working-spindle

3/02 • for withdrawing or resetting the threading tool
3/04 • • for repeatedly setting the threading tool in a predetermined working position
3/06 • for compensating inaccuracies in the pitch of the lead-screw
3/08 • for advancing or controlling the threading tool or the work by templates, cams, or the like
3/10 • • for cutting thread of variable pitch
3/12 • • for using several adjacently-arranged threading tools, e.g. using several chasers
3/14 • • for cutting thread of conical shape

5/00 Thread-cutting tools; Die-heads

5/02 • without means for adjustment
5/04 • • Dies
5/06 • • Taps (chucks therefor B23B 31/00)
5/08 • with means for adjustment
5/10 • • Die-heads
5/12 • • • self-releasing
5/14 • • Tapping-heads
5/16 • • • self-releasing
5/18 • Milling cutters

5/20 • combined with other tools, e.g. drills

7/00 **Forming thread by means of tools similar both in form and in manner of use to thread-cutting tools, but without removing any material** (features of machines or devices not specially adapted to the particular mode of forming the thread B23G 1/00)

7/02 • Tools for this purpose

9/00 **Working screws, bolt heads or nuts in conjunction with thread cutting, e.g. slotting screw heads or shanks, removing burrs from screw heads or shanks; Finishing, e.g. polishing, any screw thread** (making washers or nuts by processing metal sheets, tubes or profiles without essentially removing material B21D 53/20, B21D 53/24)

11/00 **Feeding or discharging mechanisms combined with, or arranged in, or specially adapted for use in connection with, thread-cutting machines** (for machine tools in general B23Q)