

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, 2006.01]		
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, 2006.01]	1/38 • • with grinding discs guided along the workpiece in accordance with the pitch of the required thread [1, 2006.01]	
1/04 • • Machines with one working-spindle [1, 2006.01]	1/40 • • with grinding discs guided radially to the workpiece [1, 2006.01]	
1/06 • • • specially adapted for making conical screws, e.g. wood-screws [1, 2006.01]	1/42 • Centreless grinding [1, 2006.01]	
1/08 • • Machines with a plurality of working-spindles [1, 2006.01]	1/44 • Equipment or accessories specially designed for machines or devices for thread cutting [1, 2006.01]	
1/10 • • • specially adapted for making conical screws, e.g. wood-screws [1, 2006.01]	1/46 • • for holding the threading tools [1, 2006.01]	
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, 2006.01]	1/48 • • for guiding the threading tools [1, 2006.01]	
1/14 • • • specially adapted for making conical screws, e.g. wood-screws [1, 2006.01]	1/50 • • for cutting thread by successive operations [1, 2006.01]	
1/16 • in holes of workpieces by taps (B23G 1/26, B23G 1/32, B23G 1/36 take precedence) [1, 2006.01]	1/52 • • for operating on pipes or tubes [1, 2006.01]	
1/18 • • Machines with one working-spindle [1, 2006.01]	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 [1, 2006.01]	
1/20 • • Machines with a plurality of working-spindles [1, 2006.01]	3/02 • for withdrawing or resetting the threading tool [1, 2006.01]	
1/22 • Machines specially designed for operating on pipes or tubes [1, 2006.01]	3/04 • • for repeatedly setting the threading tool in a predetermined working position [1, 2006.01]	
1/24 • • portable [1, 2006.01]	3/06 • for compensating inaccuracies in the pitch of the lead-screw [1, 2006.01]	
1/26 • Manually-operated thread-cutting devices (features of the threading tool B23G 5/00) [1, 2006.01]	3/08 • for advancing or controlling the threading tool or the work by templates, cams, or the like [1, 2006.01]	
1/28 • • with means for adjusting the threading tool [1, 2006.01]	3/10 • • for cutting thread of variable pitch [1, 2006.01]	
1/30 • • without means for adjusting the threading tool, e.g. with die-stocks (tap wrenches B25B) [1, 2006.01]	3/12 • • for using several adjacently-arranged threading tools, e.g. using several chasers [1, 2006.01]	
1/32 • by milling [1, 2006.01]	3/14 • • for cutting thread of conical shape [1, 2006.01]	
1/34 • • with a cutting bit moving in a closed path arranged eccentrically with respect to the axis of the rotating workpiece [1, 2006.01]	5/00 Thread-cutting tools; Die-heads [1, 2006.01]	
1/36 • by grinding [1, 2006.01]	5/02 • without means for adjustment [1, 2006.01]	
	5/04 • • Dies [1, 2006.01]	
	5/06 • • Taps (chucks therefor B23B 31/00) [1, 2006.01]	
	5/08 • with means for adjustment [1, 2006.01]	
	5/10 • • Die-heads [1, 2006.01]	

B23G

- 5/12 • • • self-releasing [1, 2006.01]
- 5/14 • • Tapping-heads [1, 2006.01]
- 5/16 • • • self-releasing [1, 2006.01]
- 5/18 • Milling cutters [1, 2006.01]
- 5/20 • combined with other tools, e.g. drills [1, 2006.01]
- 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) [1, 2006.01]
- 7/02 • Tools for this purpose [1, 2006.01]

- 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) [1, 2006.01]
- 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) [1, 2006.01]