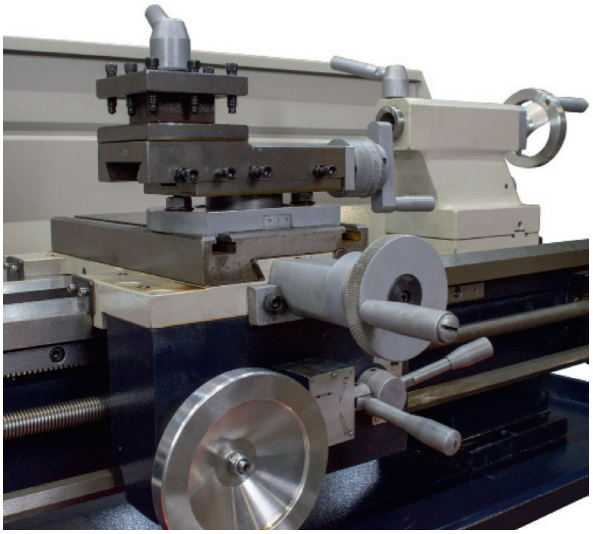
Different types of lathes

The following are the most commonly known types of lathe machines.

Speed Lathe

These lathes may be of bench type or they may have the supporting legs cast and fitted to the bed. These lathes are similar to the others but have no provision for power feed. They have no gear box, carriage and the lead screw. The tool is fed and actuated by hand. Such lathes are usually employed for wood turning.



Centre lathe

A centre lathe is a type of lathe in which the entire change of spindle speed is accomplished by set of gears, which can be operated by a lever to obtain required spindle speed.

Gap Bed Lathe

In a gap bed lathe, a section of the bed adjacent to the headstock is removable. The gap bed may be removed whenever an extra larger diameter workpiece is required to be machined.

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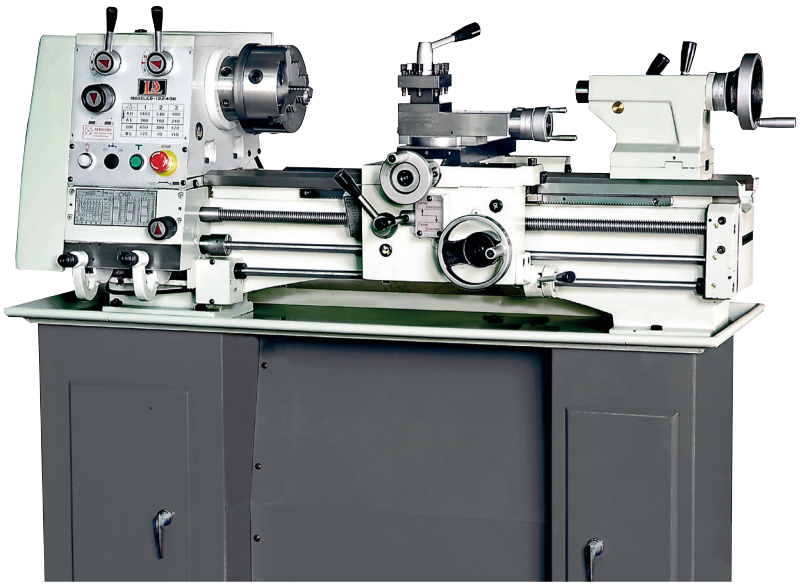
Turret and Capstan Lathe

These lathes are development of the engine lathe and are used for production work. In these machines the tailstock of engine lathe is replaced by a hexagonal turret, on the face of which multiple tools may be fitted and fed into the work in proper sequence. The advantage is that several different types of operations can be done on a job with minimum waste of time.



Bench Lathe

A bench lathe is a small lathe, which can be mounted on workbench for doing small light jobs.

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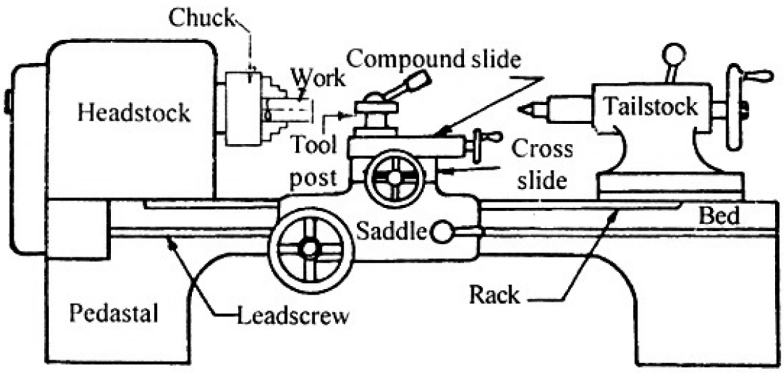
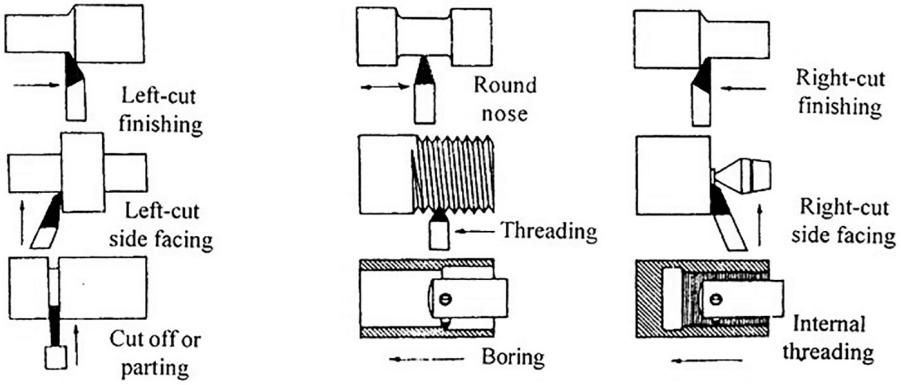
1 Translate into Italian the name of the different parts of a lathe.



2 Look at the pictures and match the operations carried out by a lathe with the correct definition.



OPERATION

1. Boring is the process of… ☐
2. Facing is an operation… ☐
3. Threading means… ☐
4. Finishing processes may be employed to: … ☐
5. Parting is a process used to… ☐
6. A round nose process is used to… ☐

DEFINITION

a. used to produce a flat surface at right angles to the rotational axis of the job.
b. improve appearance, adhesion corrosion resistance, chemical resistance, wear resistance of a workpiece.
c. cut off the workpiece at a specific length.
d. enlarging a hole produced by drilling, casting, punching or forging with the help of a single point tool.
e. produce a rounded cut or surface or to prevent accidents or damage.
f. cutting a screw thread in or on (a hole, screw, or other object).

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