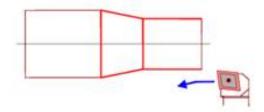
# 1. <u>Definitions of turning operations and tool</u> <u>settings</u>

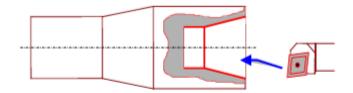
## **Straight turning:**

Machining of an external cylindrical or conical surface



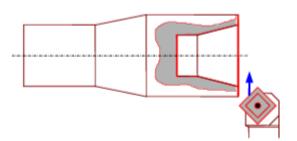
## **Reaming:**

Machining of an inner cylindrical or conical surface.



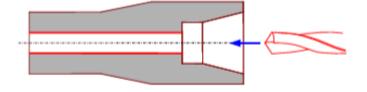
#### **Truing:**

Operation consisting of machining a flat surface perpendicular to the axis of the external or internal spindle.



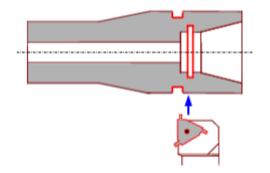
## **Drilling:**

Operation consisting in machining a hole with a drill bit.



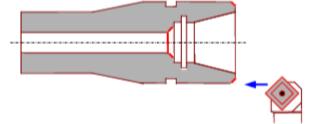
#### **Grooving:**

Operation consisting in machining an internal or external groove to accommodate a circlip or O-ring, for example.



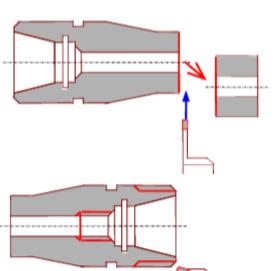
## **Chamfering:**

This operation consists of machining a small cone to eliminate a sharp angle.



## **Parting:**

Operation which consists in machining a groove up to the axis of the part in order to remove a section.



## **Threading:**

This operation consists of making an external or internal thread.

#### 1. Tool assembly and adjustment.

The position of the tool in relation to the workpiece is very important. A poor position will affect the angle of the tool during cutting.

When installing the tool, please note the following points:

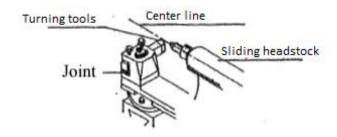
- a. The tool tip height must be aligned with the machine spindle axis.
- b. Guide angle: This angle must be perpendicular to the rolled chips.

Tool mountain height is linked to spindle centerline.

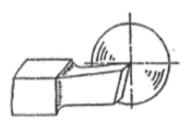
The center line of the spindle is called the "tip height".

#### 2. Tool cutting edge height adjustment.

1. Use a sliding headstock sleeve



2. Use the concentricity of the machined flat face.



3. Cut the flat face directly with the tool. The cut flat surface indicates the height of the tool.

