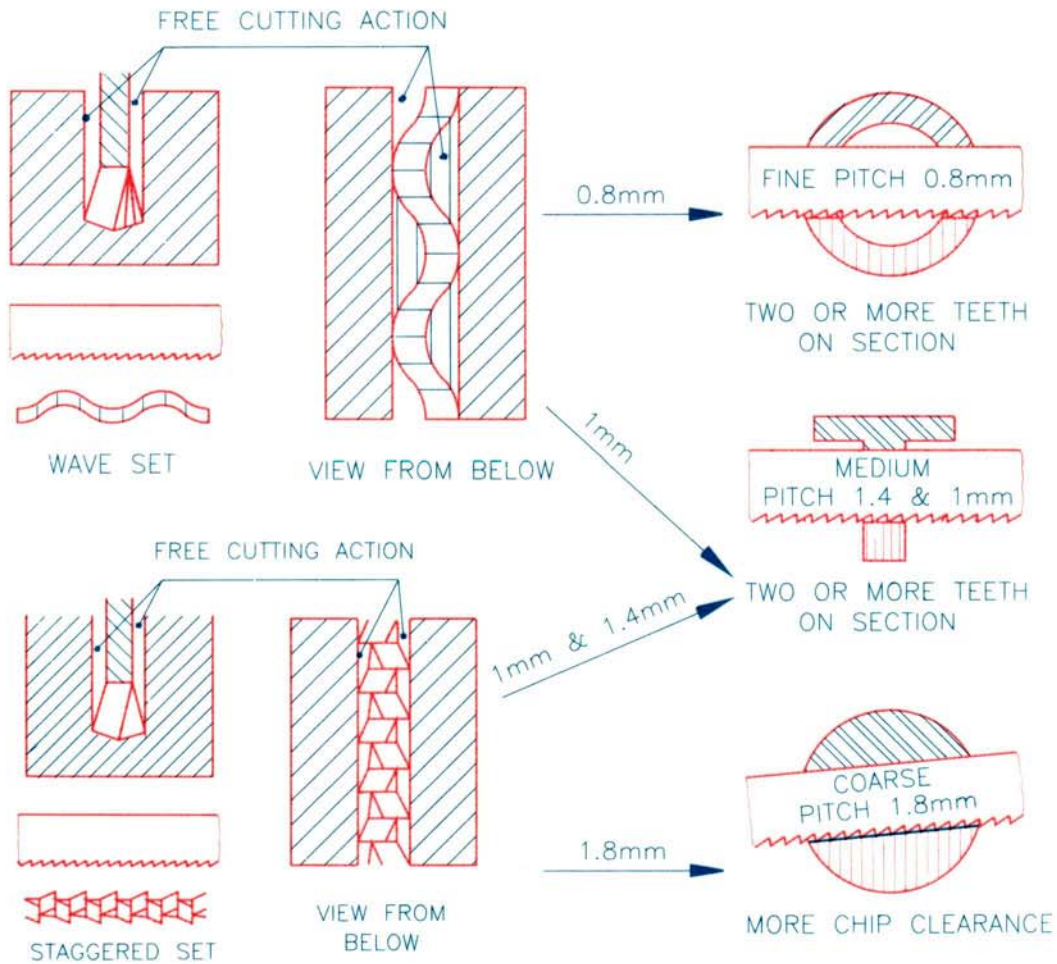
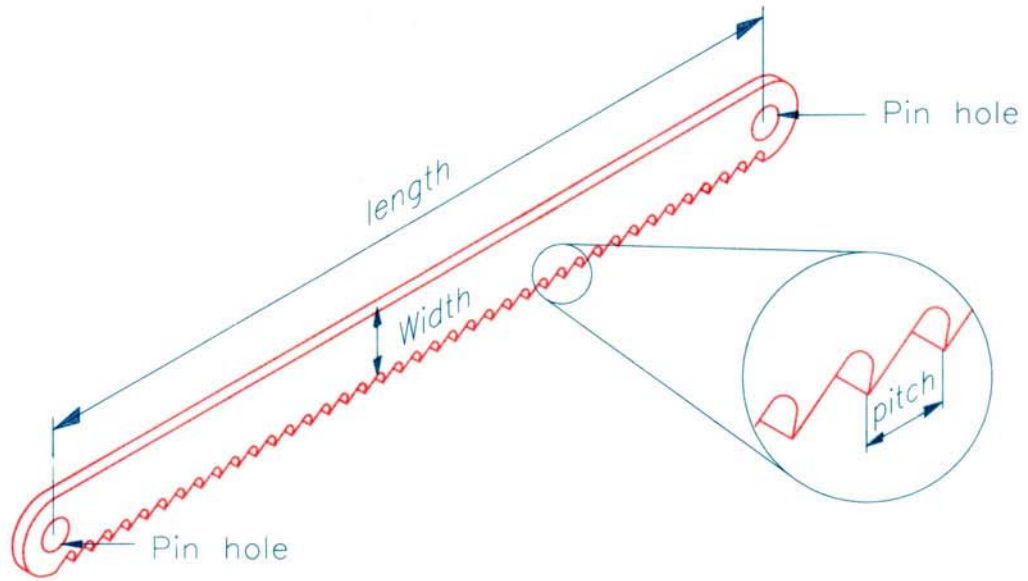


# HAND HAMMERS - APPLICATIONS

TR0101010193

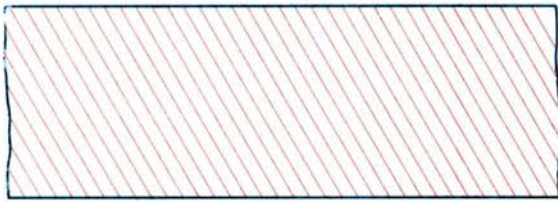


## HACKSAW BLADE – SELECTION

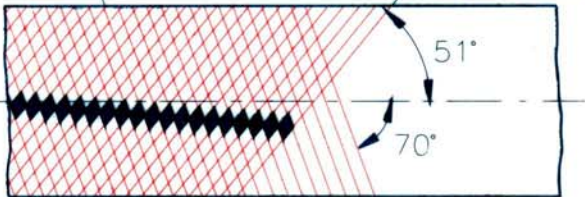
TR0101010293

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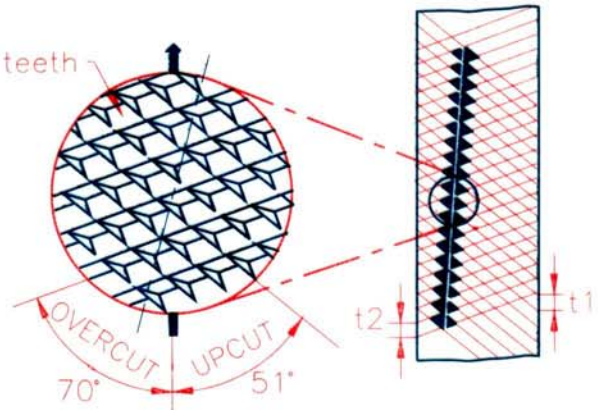
SINGLE CUT



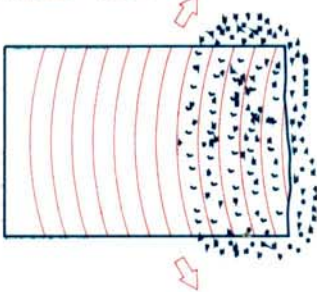
DOUBLE CUT  
UP CUT



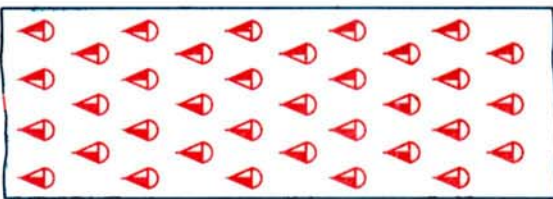
File teeth



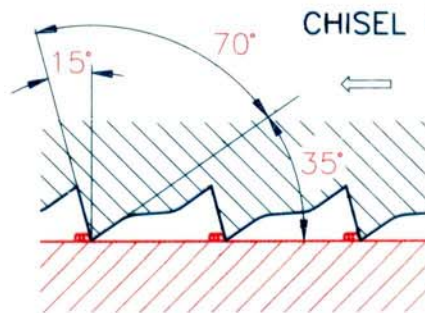
CURVED CUT



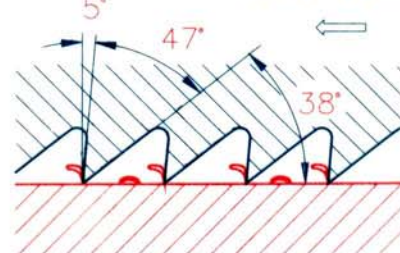
RASP CUT

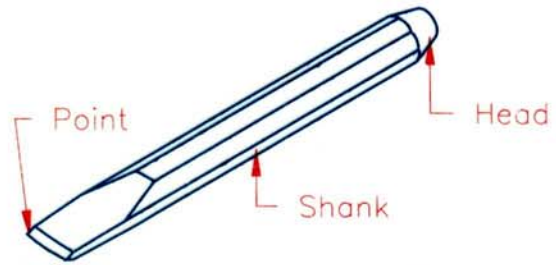
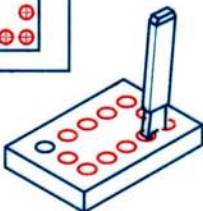
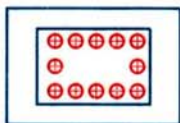
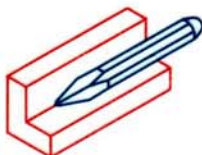
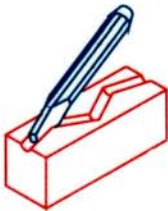
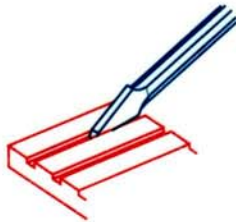
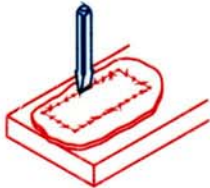
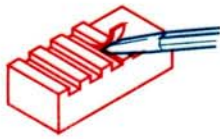


CHISEL CUT

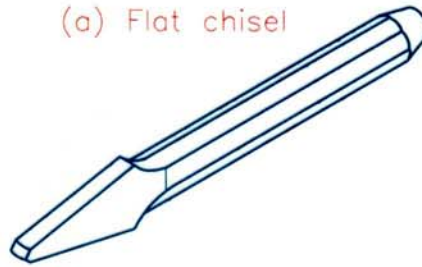


MILL CUT

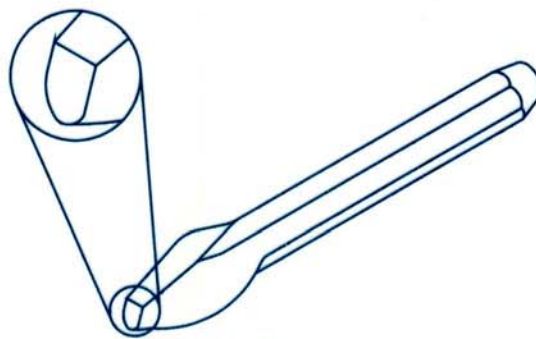




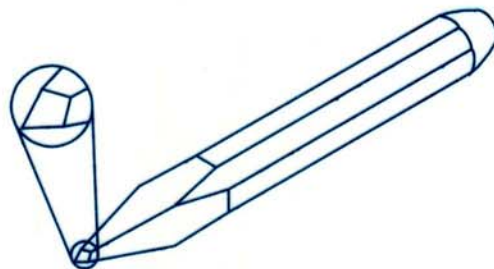
(a) Flat chisel



(b) Cross-Cut Chisel



(c) Round-nose chisel



(D) Diamond-point chisel

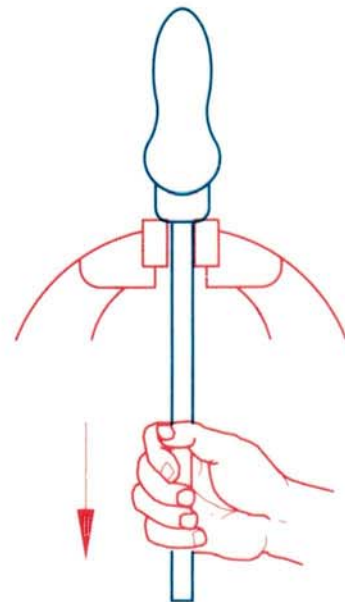
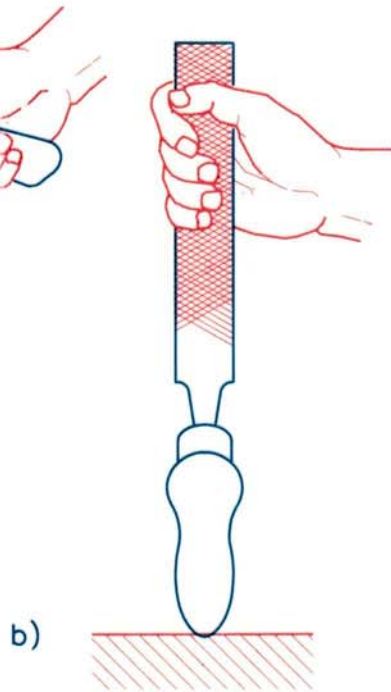
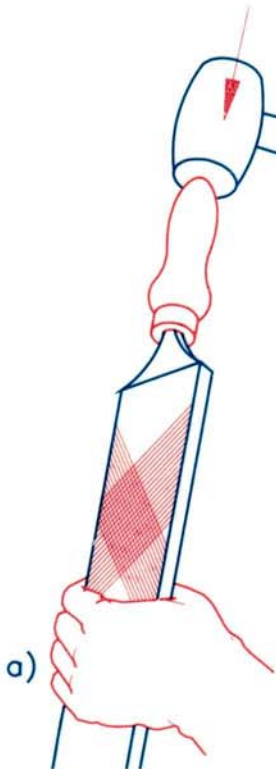
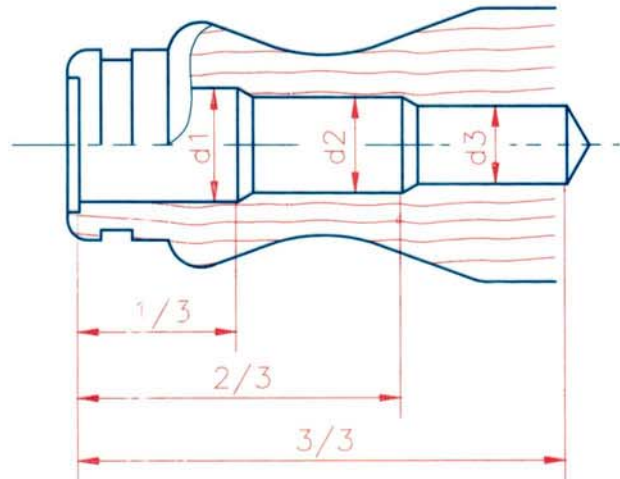
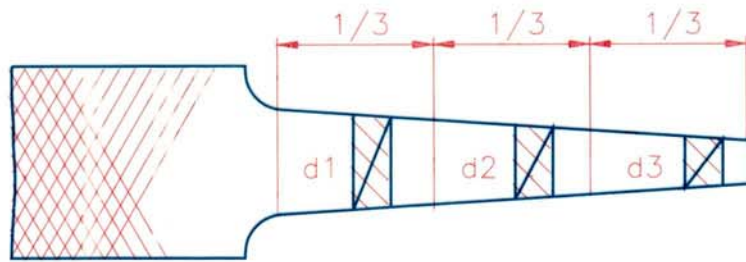


(e) Web chisel

## TYPES OF CHISELS AND APPLICATION

TR01 01 01 0493

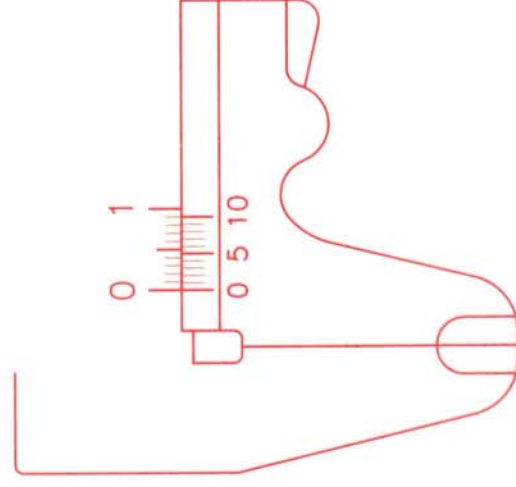
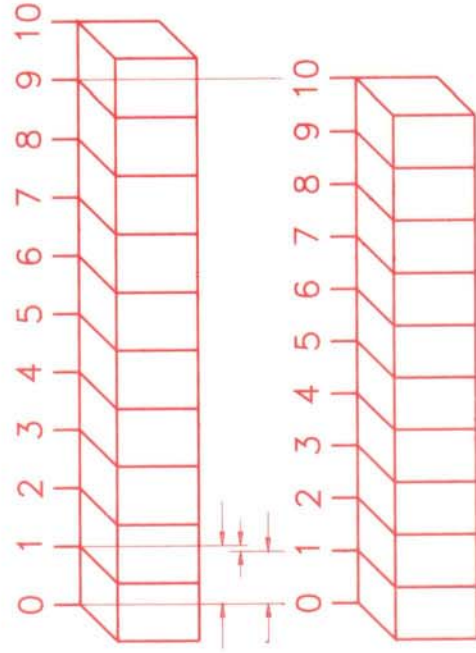
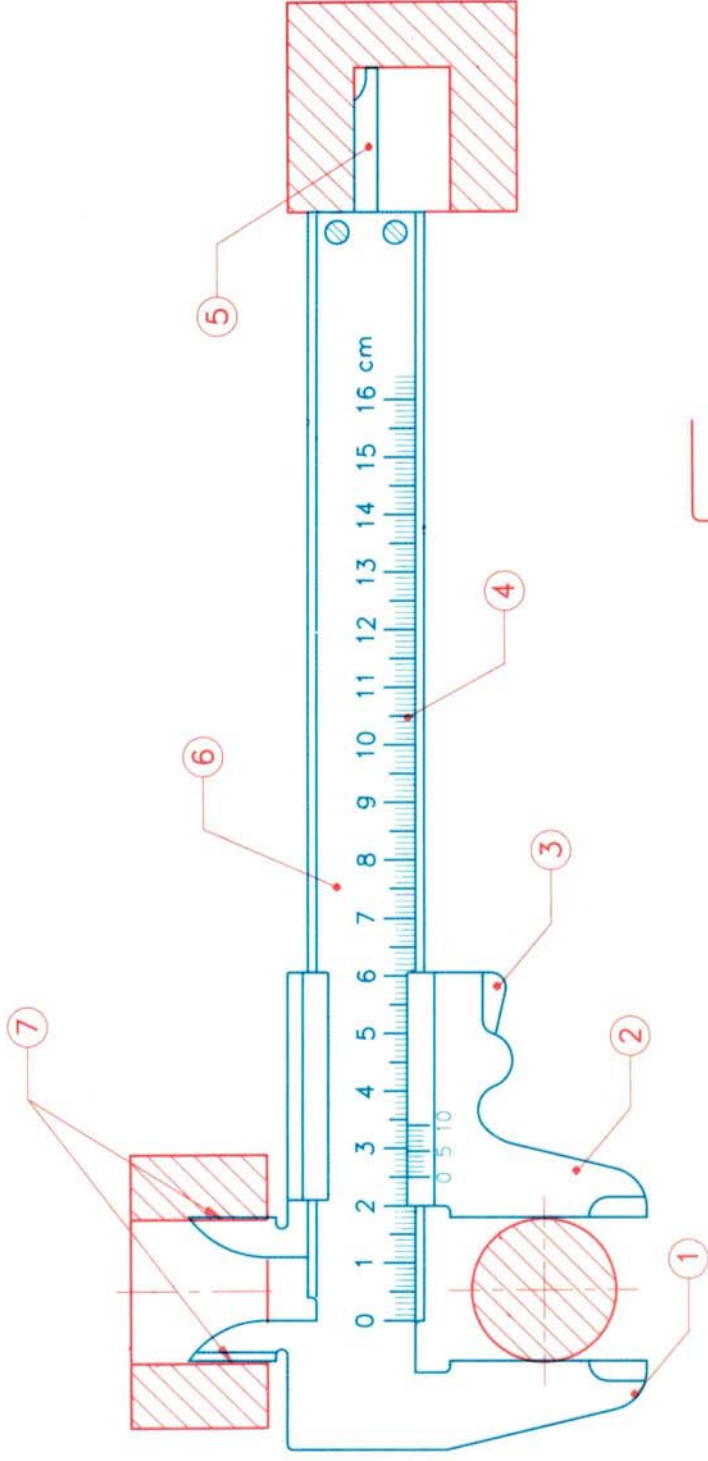
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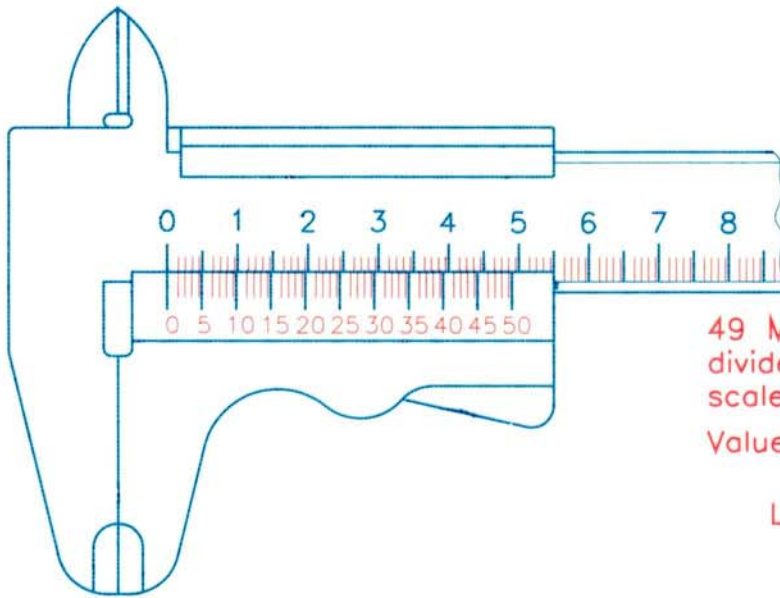


## FIXING FILE HANDLES

TR0101010593

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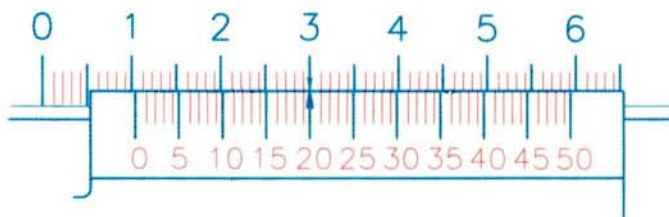




49 Main scale divisions are divided into 50 vernier scale divisions

$$\text{Value of 1 VSD} = \frac{49}{50} \text{ mm}$$

$$\text{Least count} = 1 \text{ MD} - 1 \text{ VSD}$$

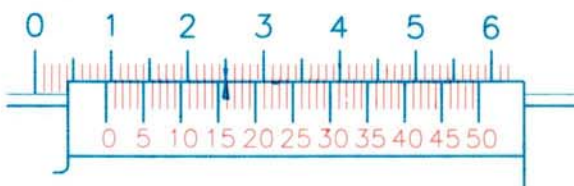


Main scale reading =

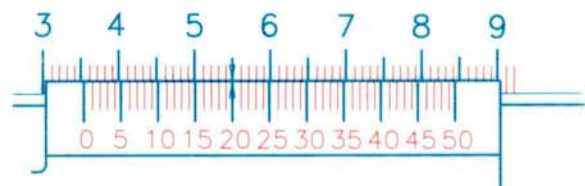
Value of coinciding vernier division } =

Reading =

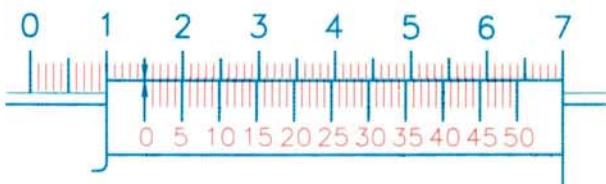
Assignments:-



A Reading



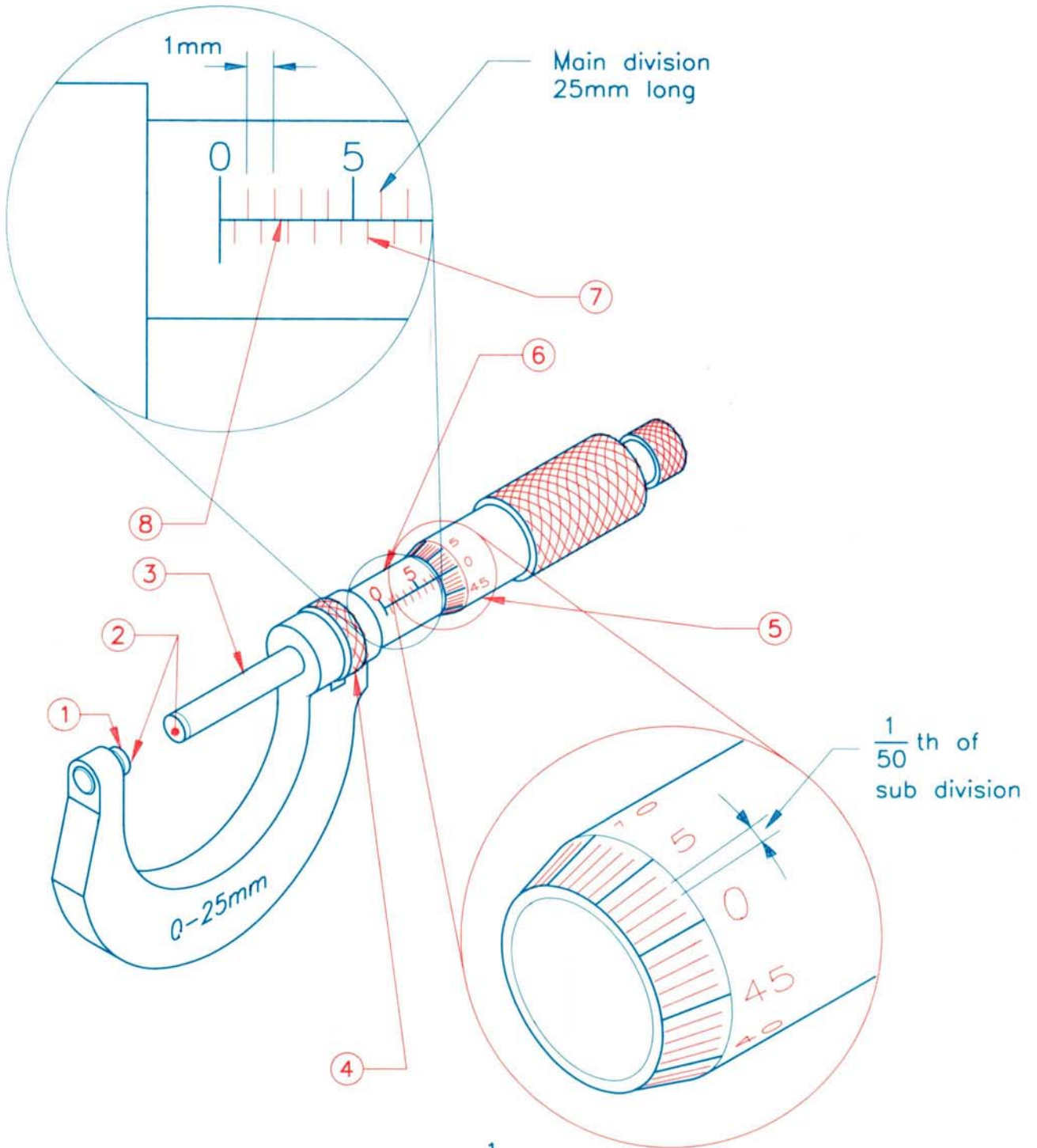
B Reading



C Reading



D Reading



$$\text{Least count} = \frac{1}{50} \text{ th of } 0.5$$

$$= \boxed{\phantom{0.01}}$$

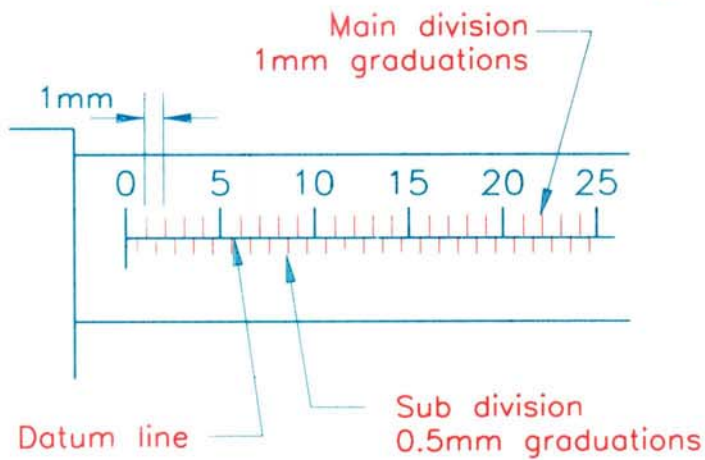
## MICROMETER PARTS AND GRADUATIONS

TR01 020201 93

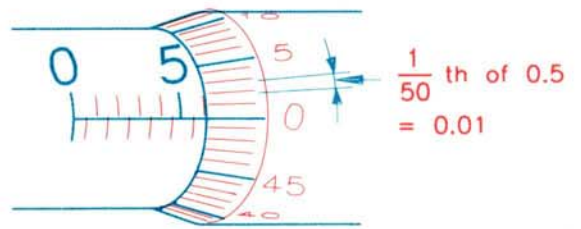
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## Micrometer graduations

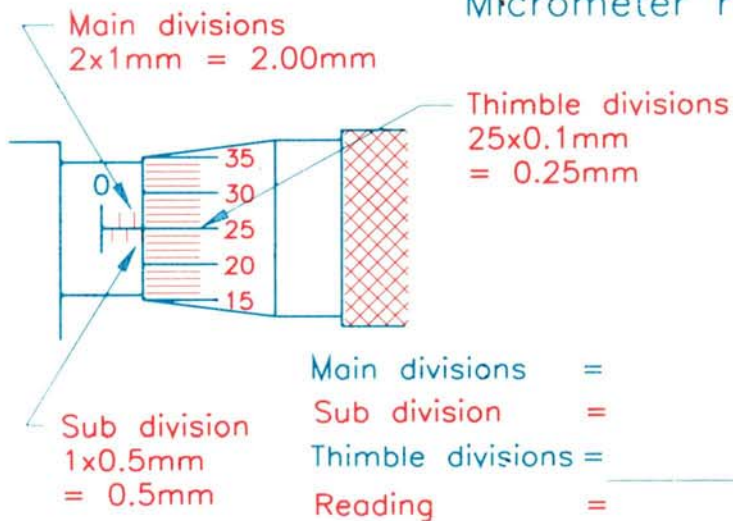


0.5mm - one rotation of thimble-  
graduated into 50 parts

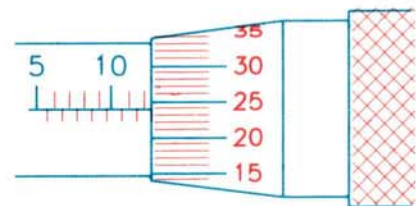


Thimble divisions  
0.01mm graduations

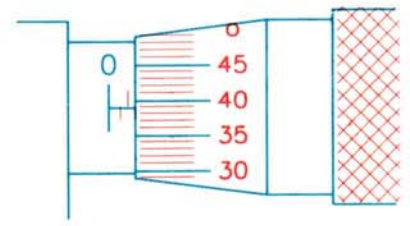
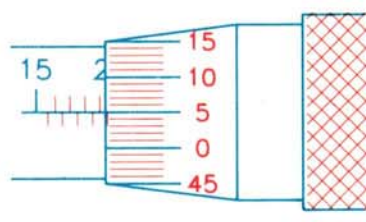
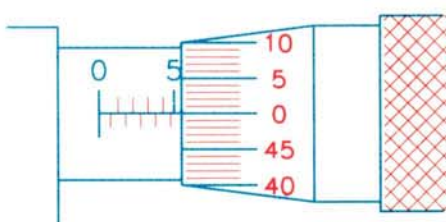
## Micrometer reading

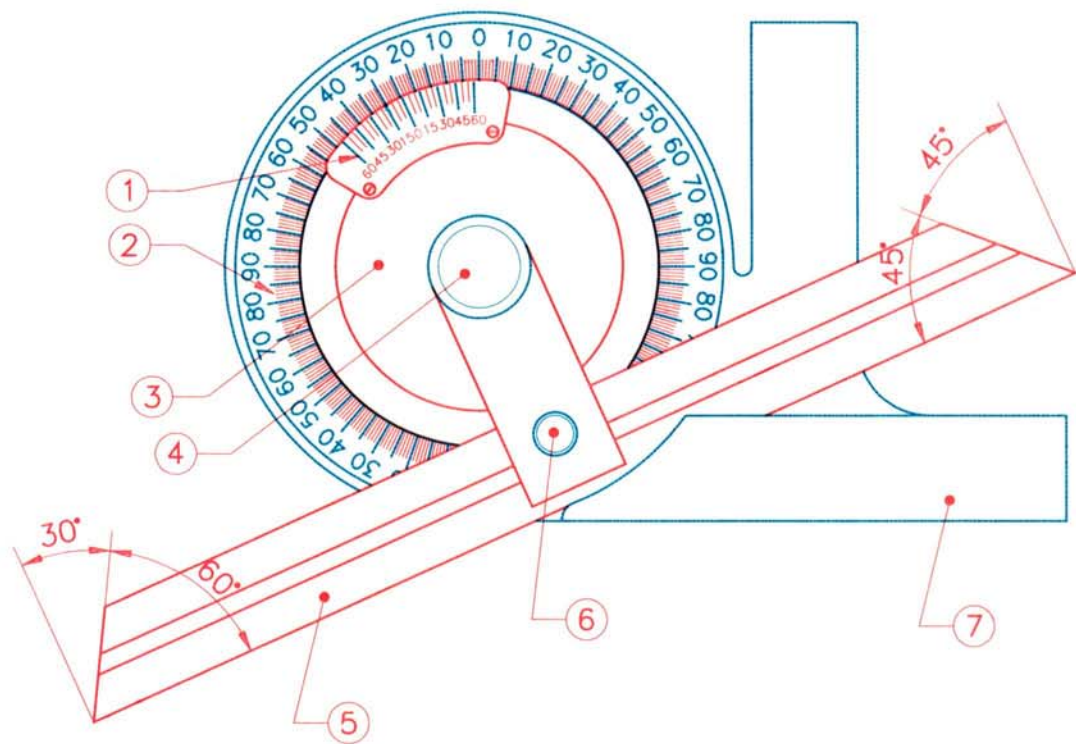


Example

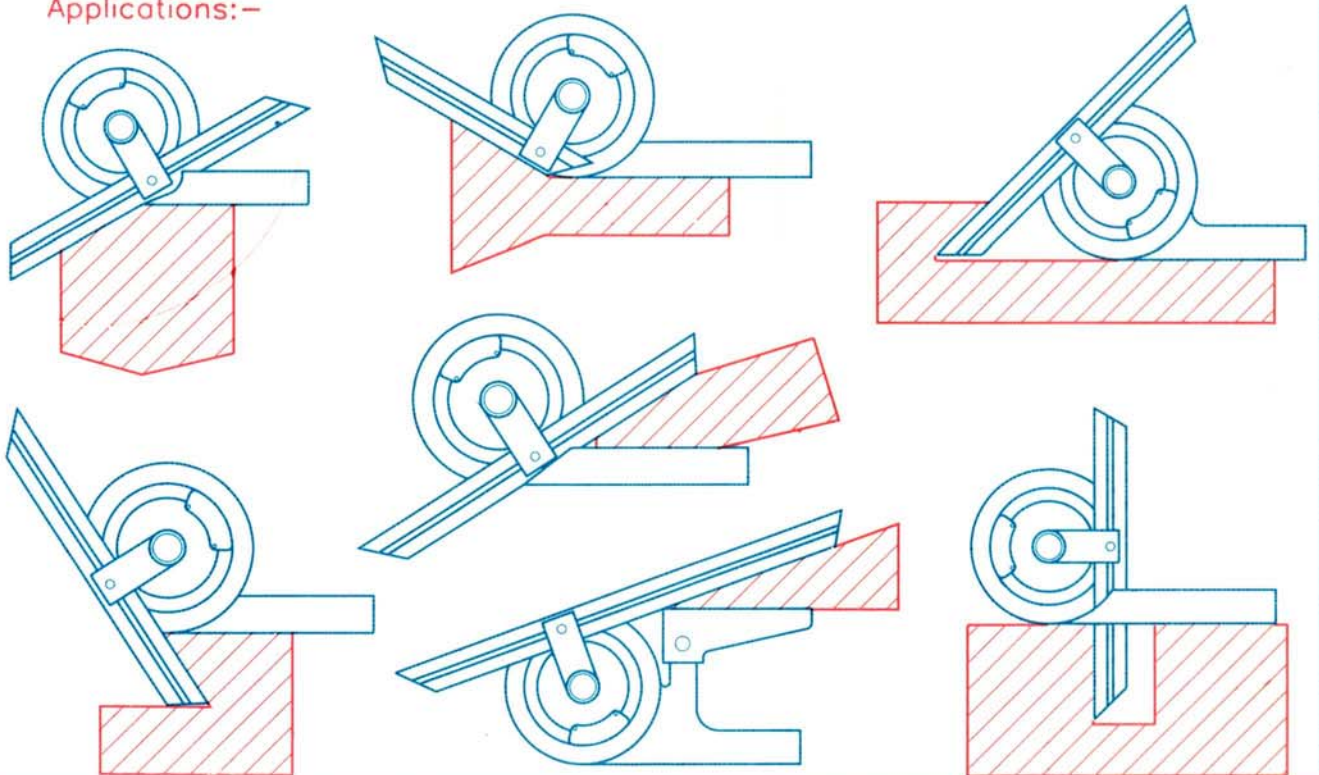


Assignments:-





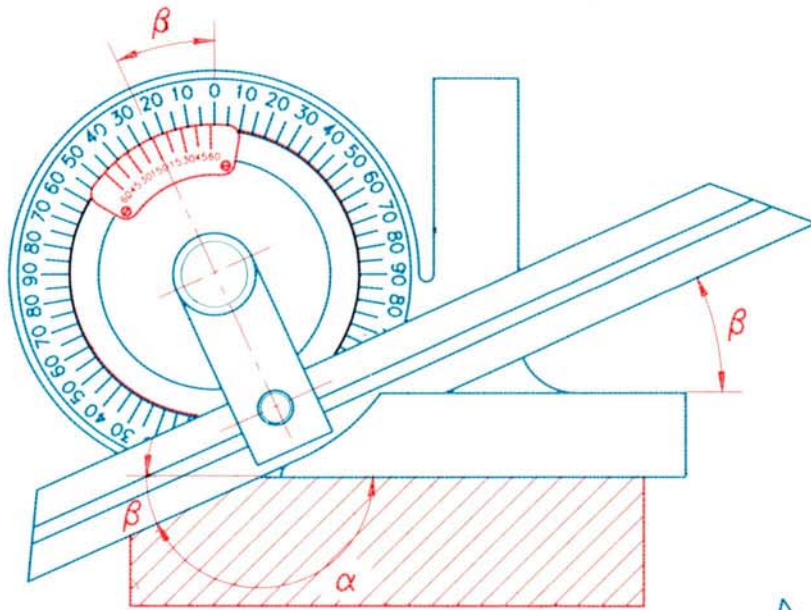
Applications:-



**VERNIER BEVEL PROTRACTOR  
PARTS & APPLICATION**

TR0102030193

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Obtuse angle  
 $\alpha = 180^\circ - \beta$

Assignments:-



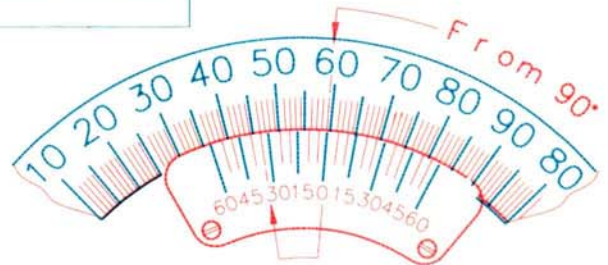
A Reading



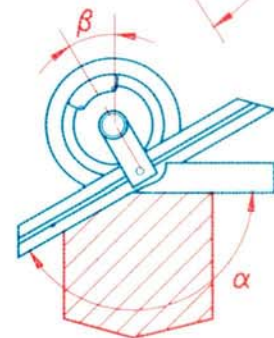
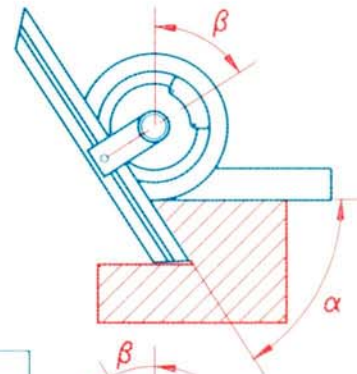
B Reading

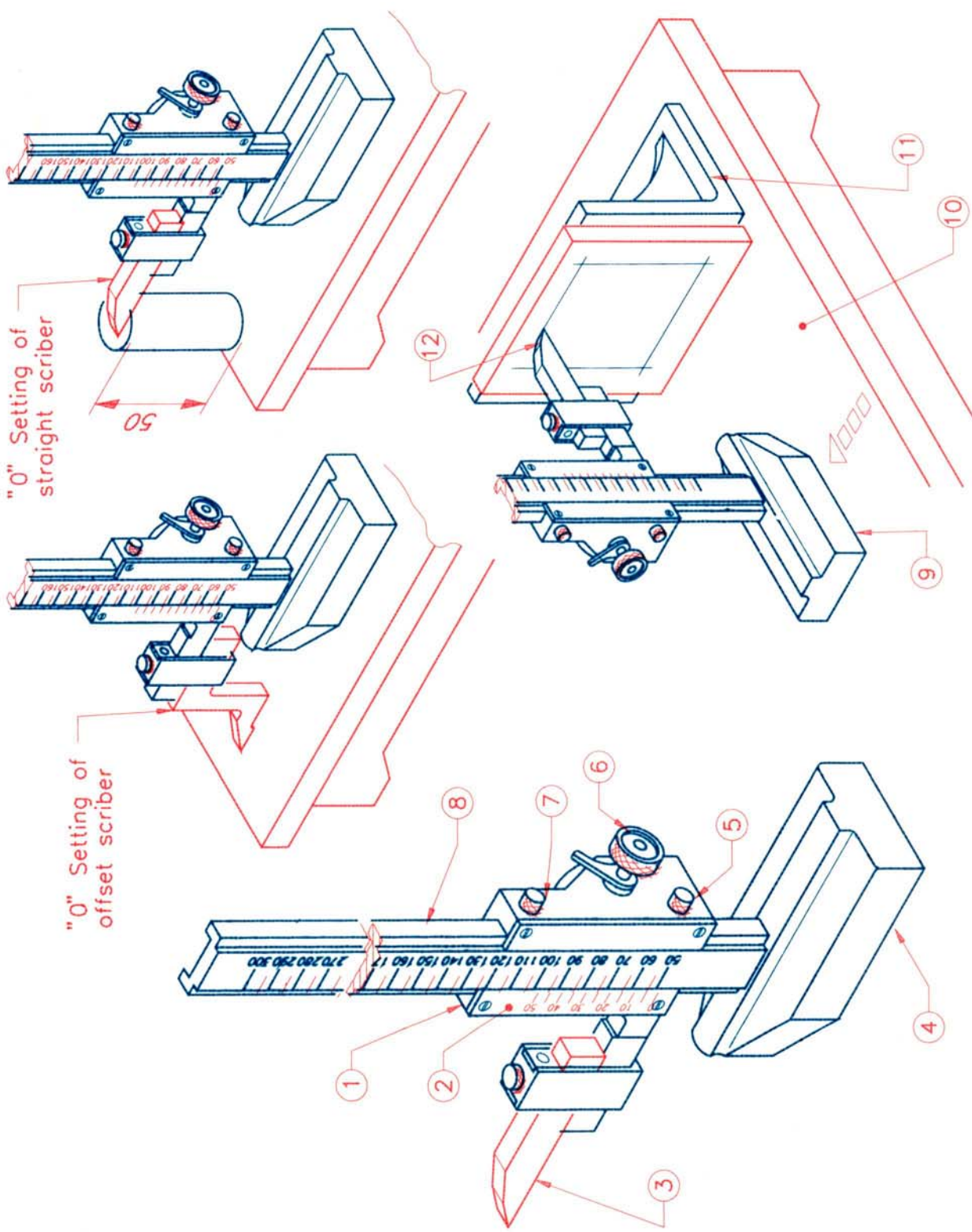


C Reading



D Reading



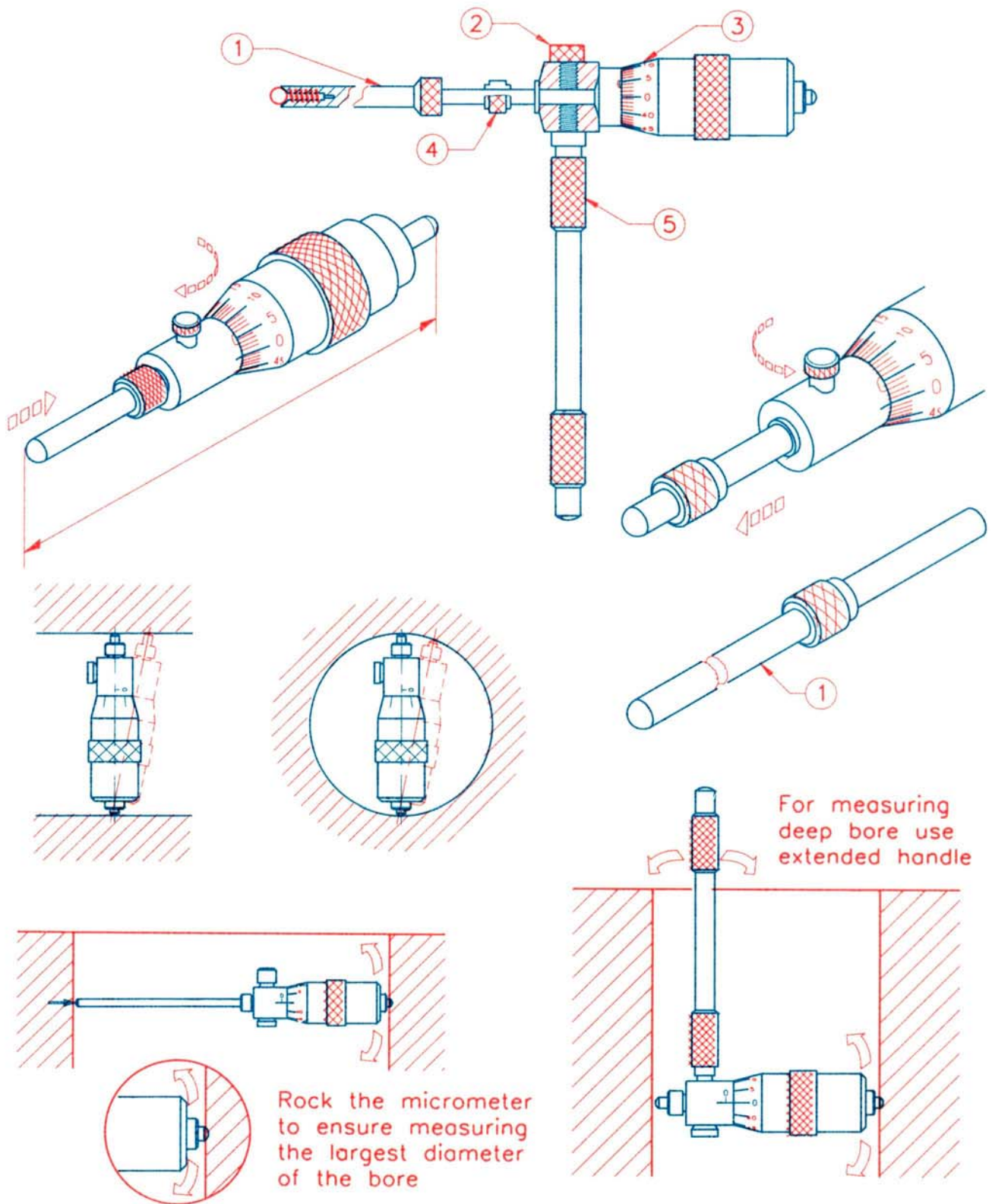


"0" Setting of straight scribe

"0" Setting of offset scribe

# VERNIER HEIGHT GAUGE

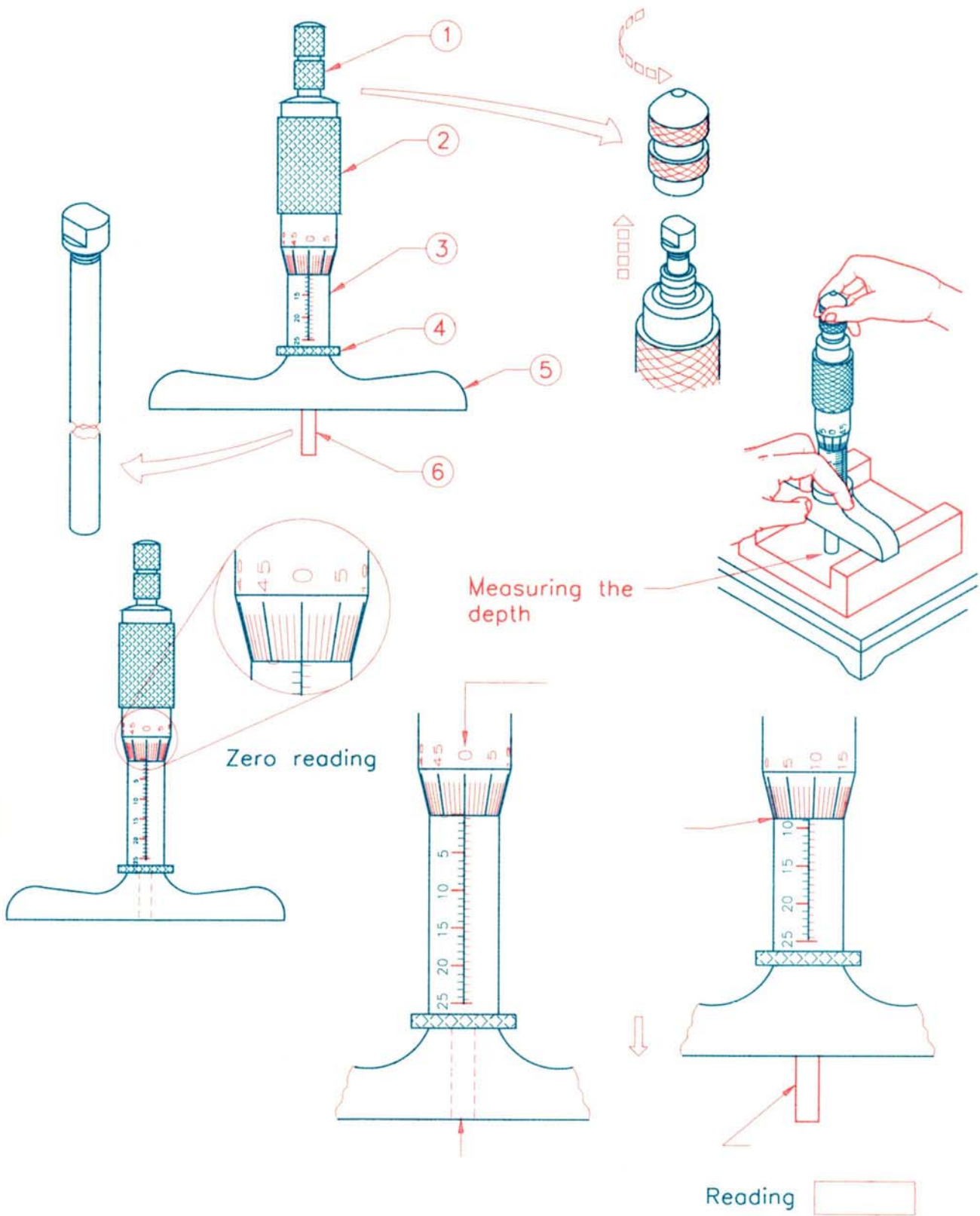
TR01 02 04 01.93



# INSIDE MICROMETER

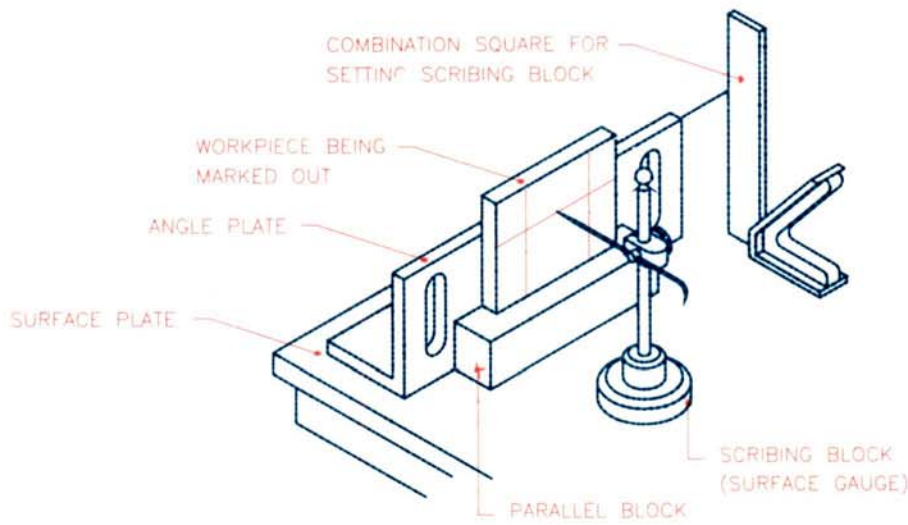
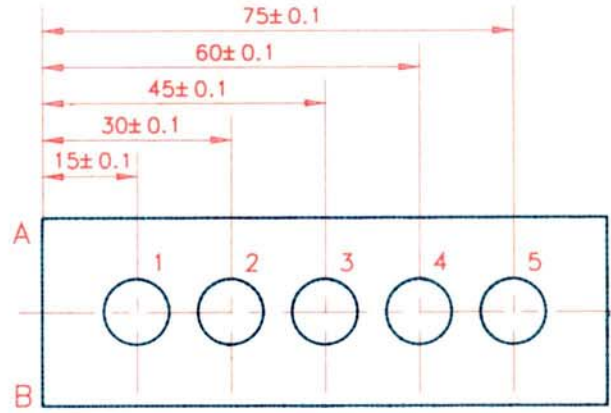
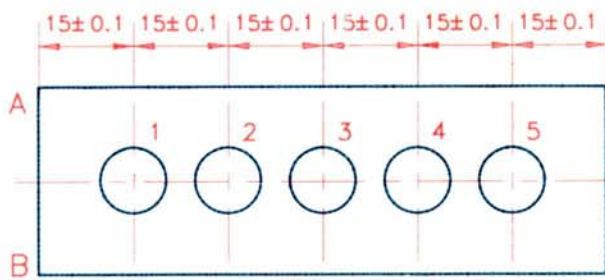
TR0102050193

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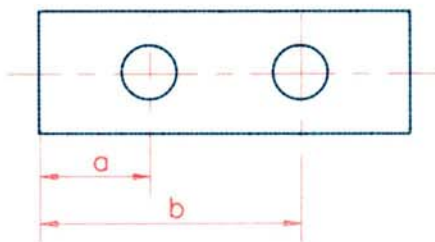


**DEPTH MICROMETER**

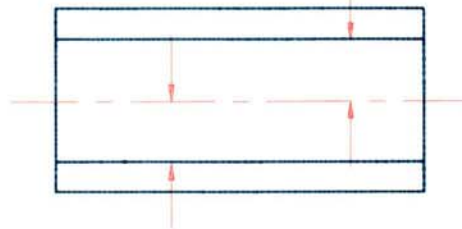
TR0102060193



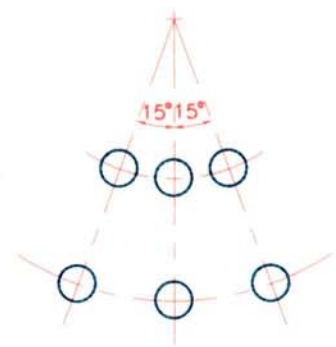
EDGE DATUM



LINE DATUM



POINT DATUM



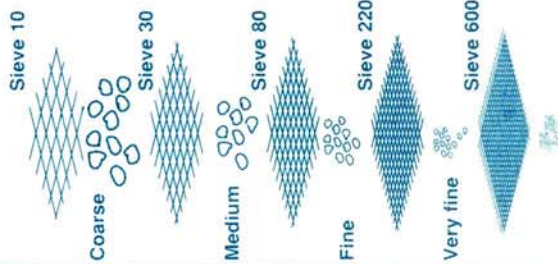
51-A-46-H-5-V-8

Type of abrasive

A - Aluminium oxide  
C - Silicon carbide

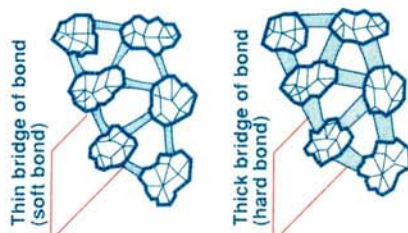
51-A-46-H-5-V-8

Grain size : (grit)  
The actual size of the abrasive grain



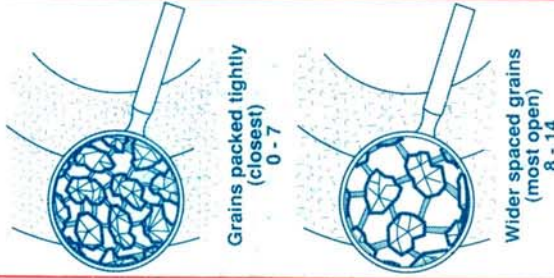
51-A-46-H-5-V-8

Grade :  
The strength of the bond holds the grain in position



51-A-46-H-5-V-8

Structure :  
The amount of bond present between the abrasive grains.



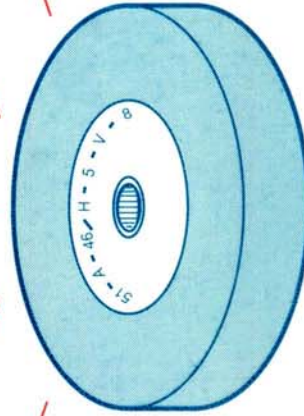
51-A-46-H-5-V-8

Type of bond

V - Vitrified  
S - Silicate  
R - Rubber  
RF - Rubber reinforced  
B - Resinoid (Synthetic resins)  
BF - Resinoid reinforced  
E - Shellac  
Mg - Magnesia

51-A-46-H-5-V-8

Manufacturer's symbol for abrasive (Optional)



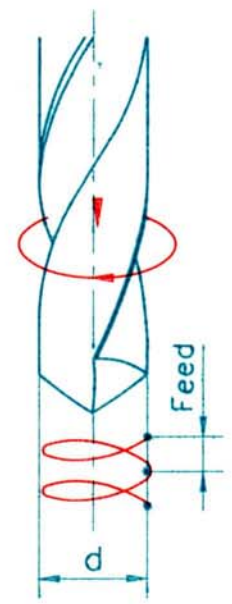
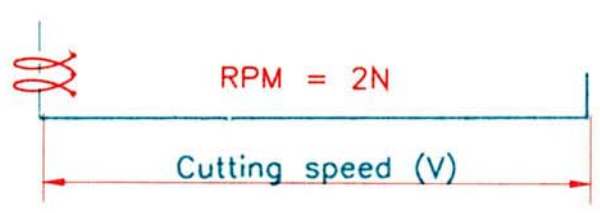
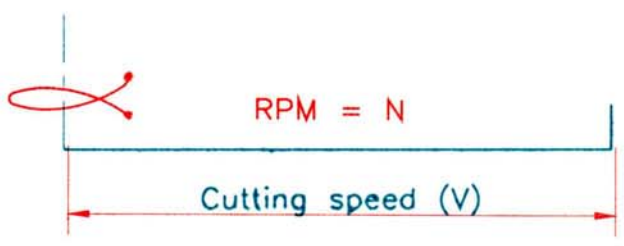
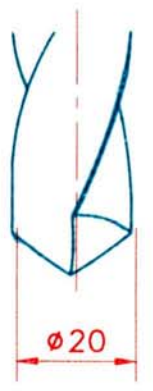
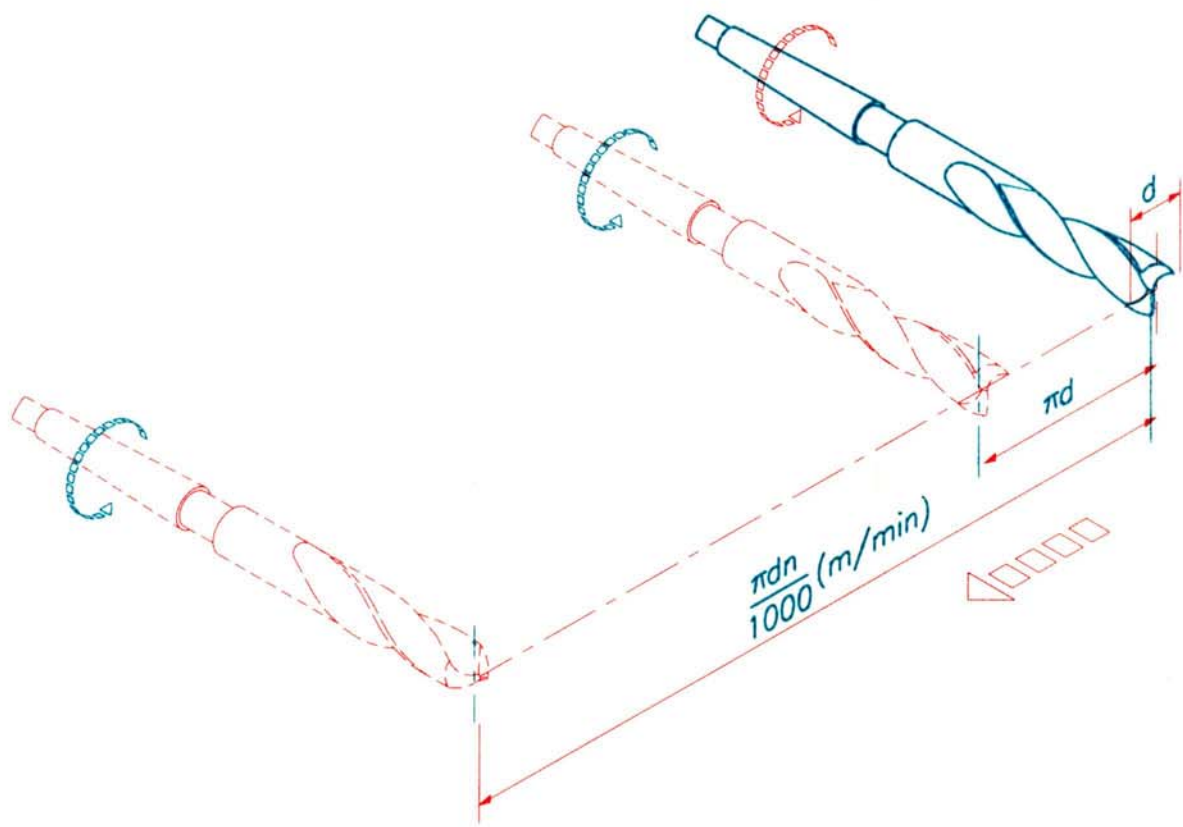
51-A-46-H-5-V-8

Manufacturer's own identification mark for the wheel (Optional)

# GRINDING WHEEL MARKING

TR0104010193

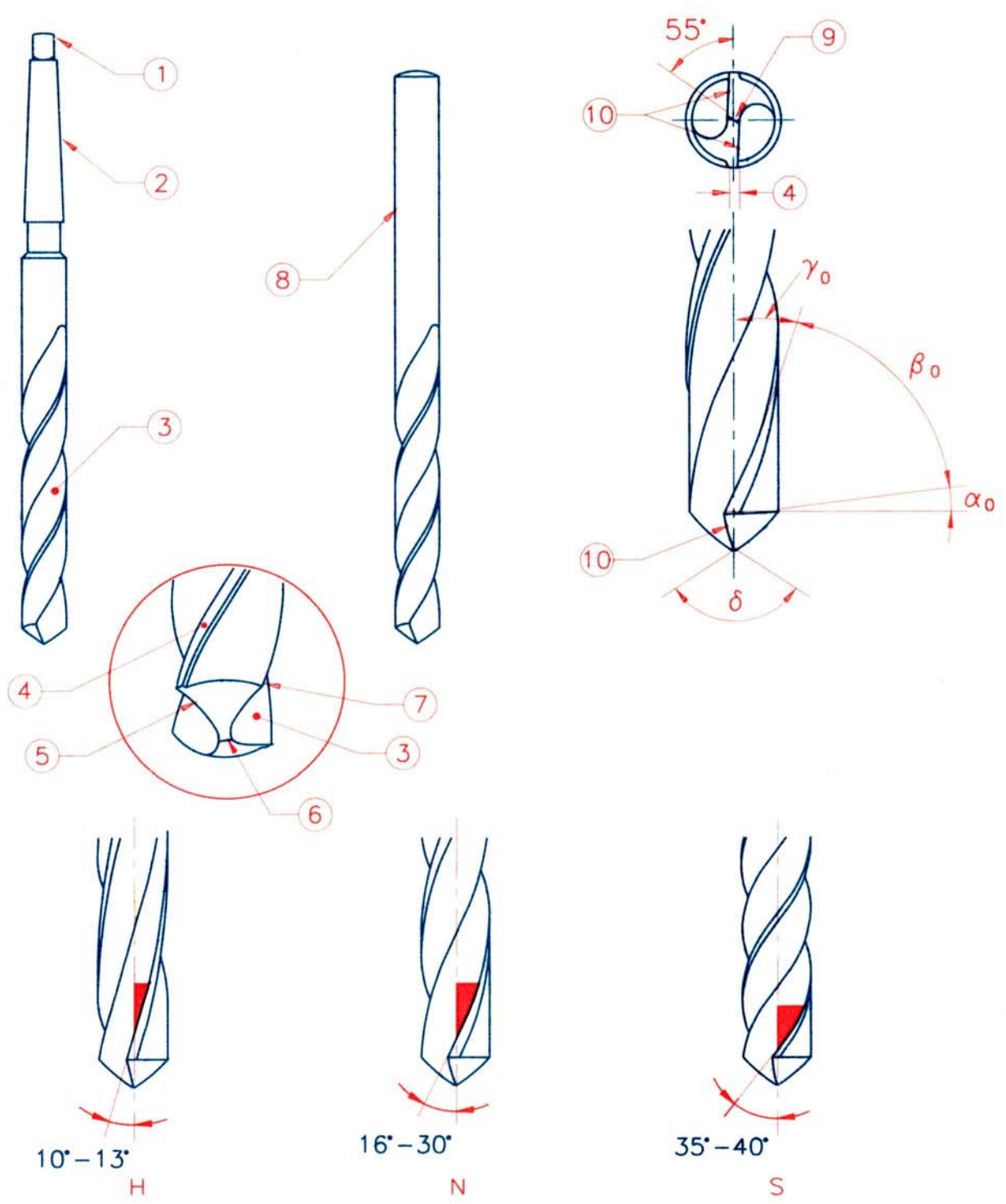




**CUTTING SPEED, FEED AND R.P.M. OF DRILLS**

TR0105010193

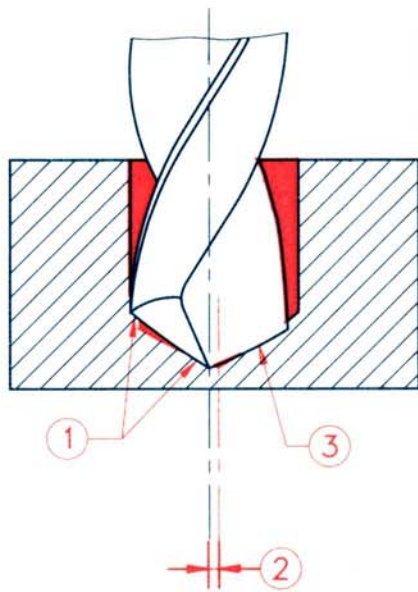
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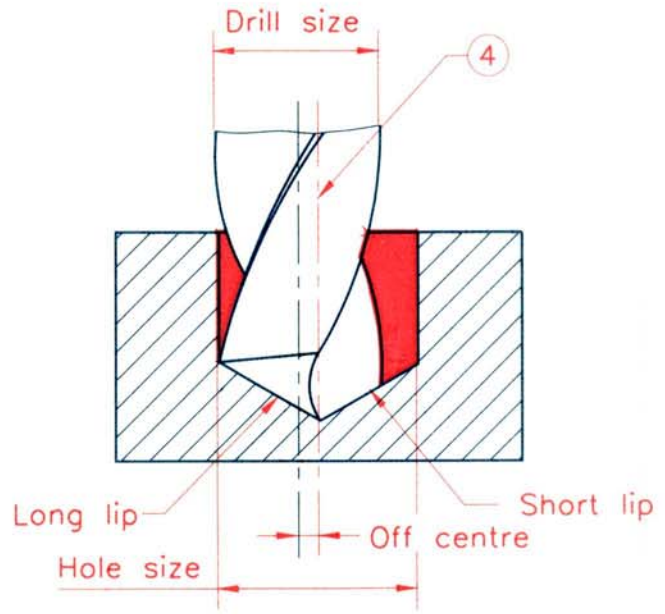
**DRILL PARTS AND ANGLES**

TR01 05 02 01 93

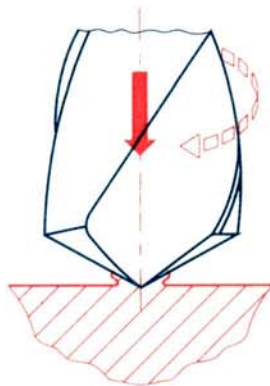
**CIMI** CENTRAL INSTRUCTIONAL MEDIA INSTITUTE, MADRAS  
AN INDO-GERMAN PROJECT



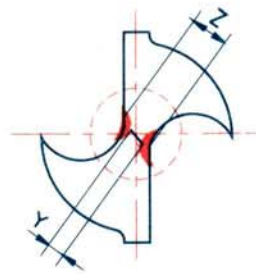
Cutting edges of unequal angles



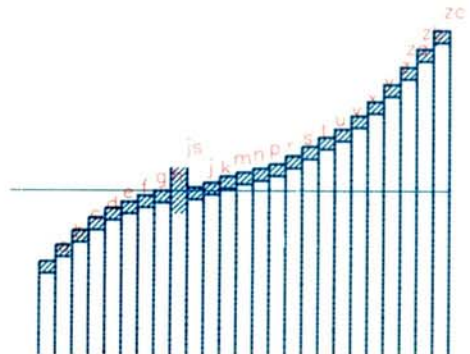
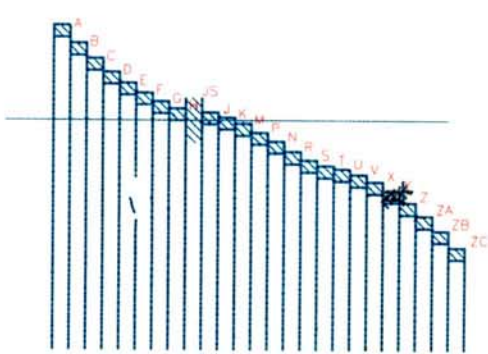
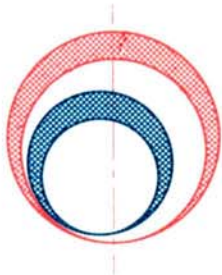
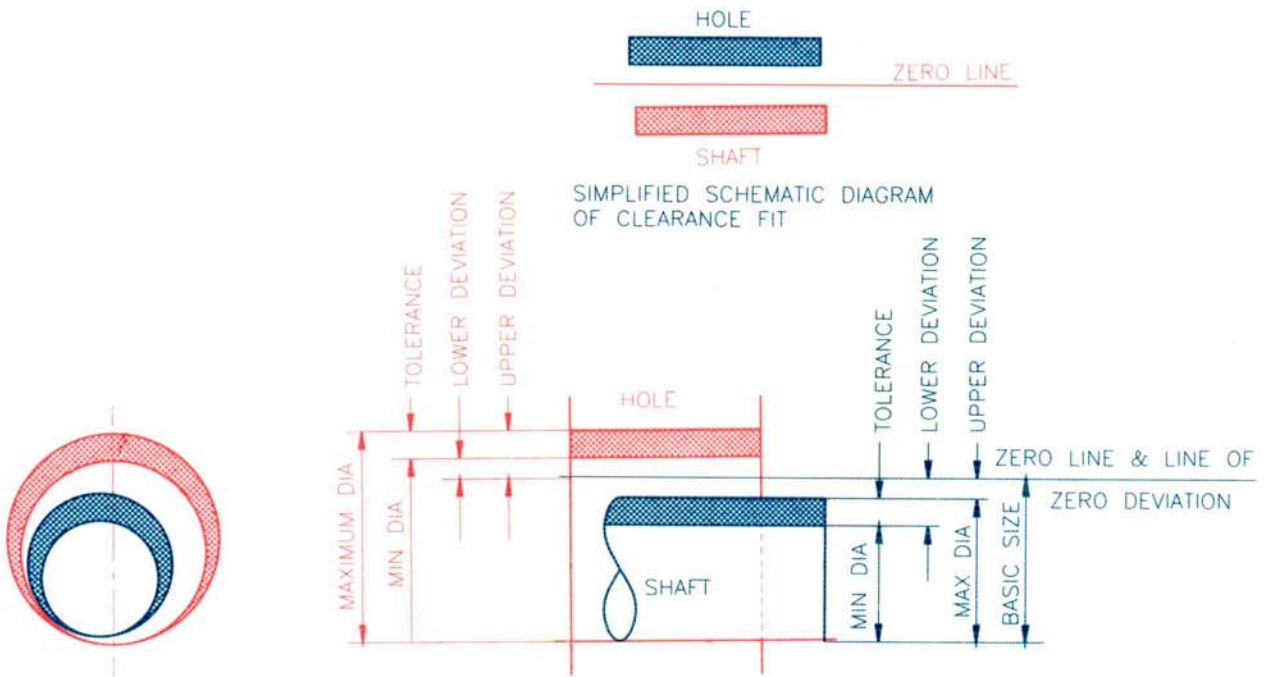
Cutting edges of unequal length but angles equal



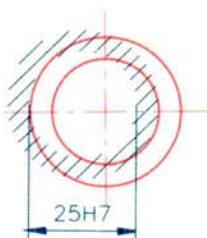
Thick web due to frequent grinding



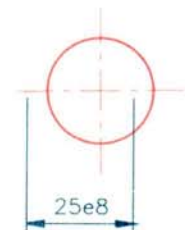
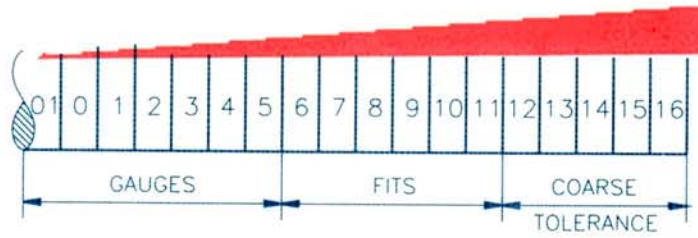
Web thinned by grinding



18 GRADES OF TOLERANCES



WHAT DOES 25H7 INDICATE?

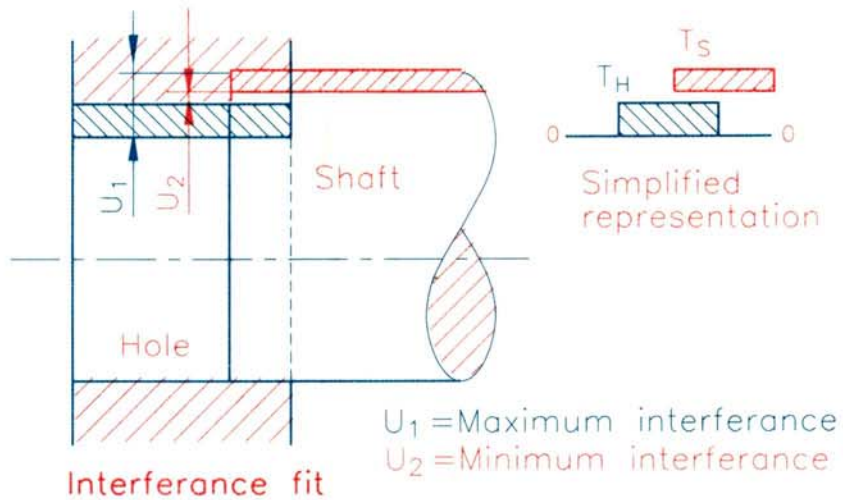
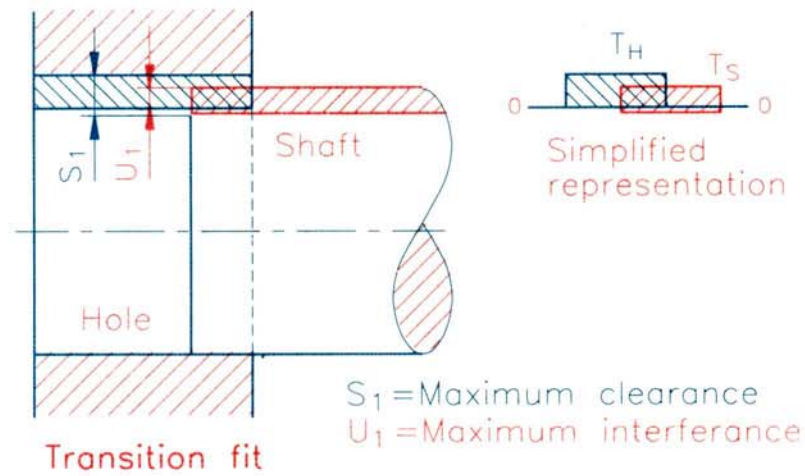
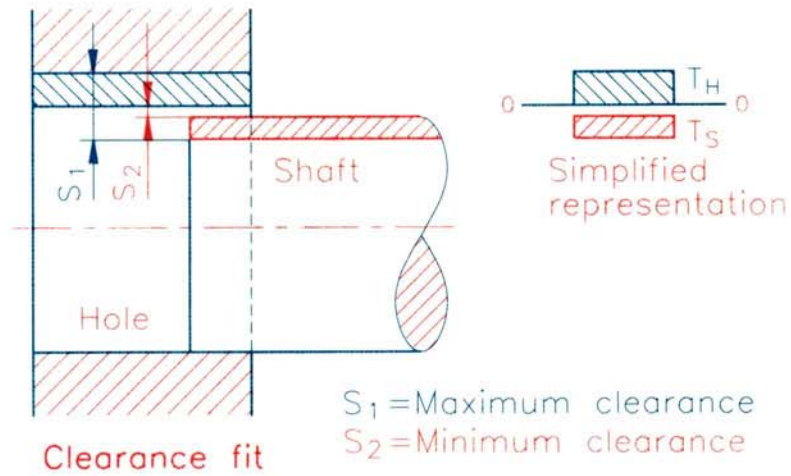


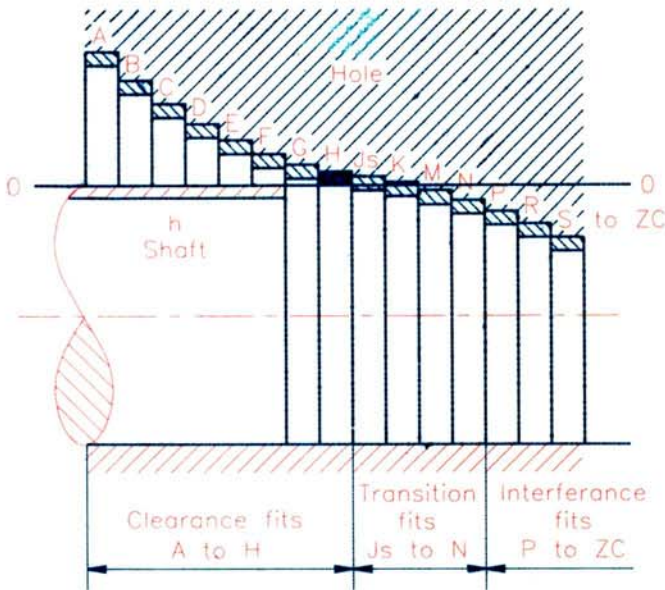
WHAT DOES 25e8 INDICATE?

**FUNDAMENTALS OF LIMITS AND FITS**

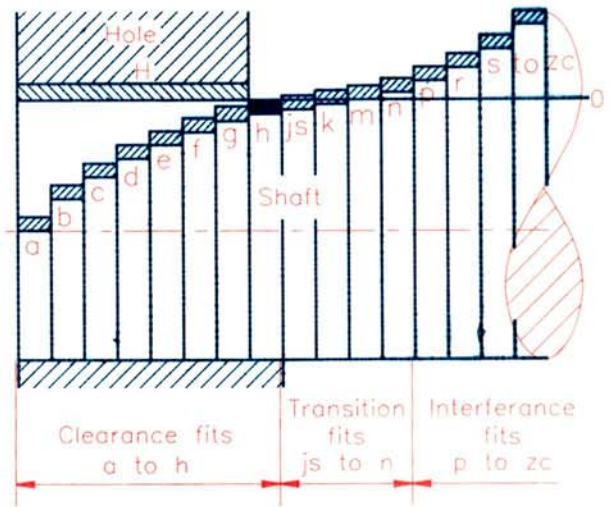
TR0106010193

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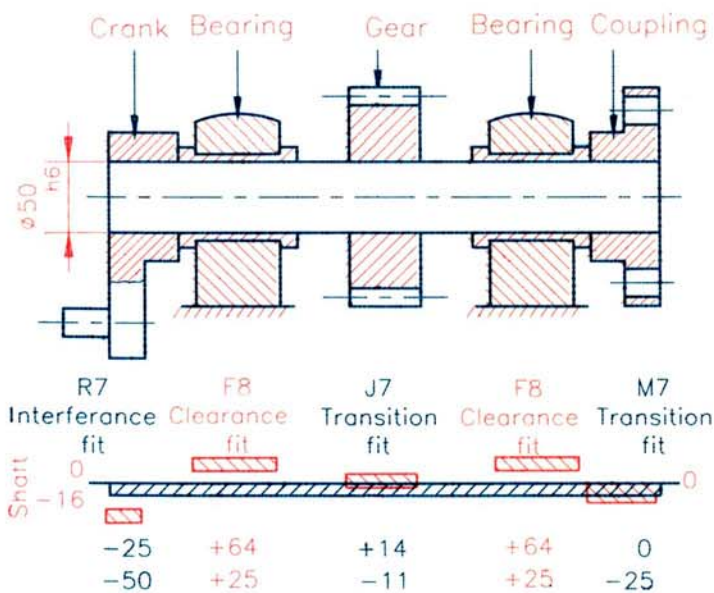




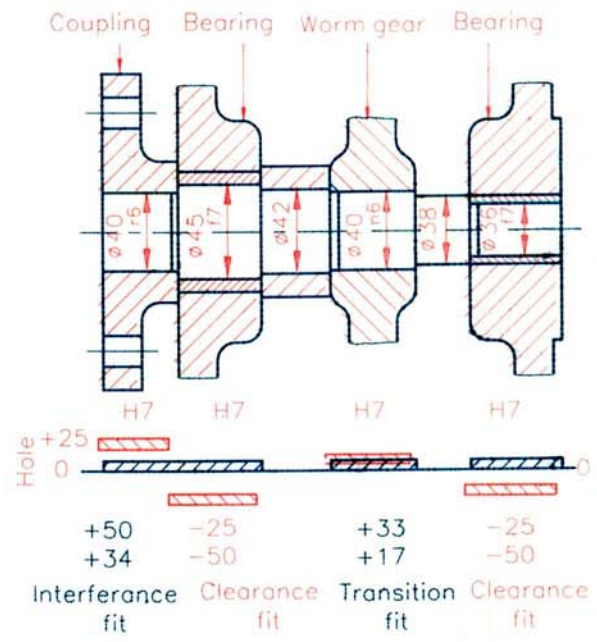
BASIC SHAFT SYSTEM



BASIC HOLE SYSTEM



APPLICATION FOR THE BASIC SHAFT SYSTEM

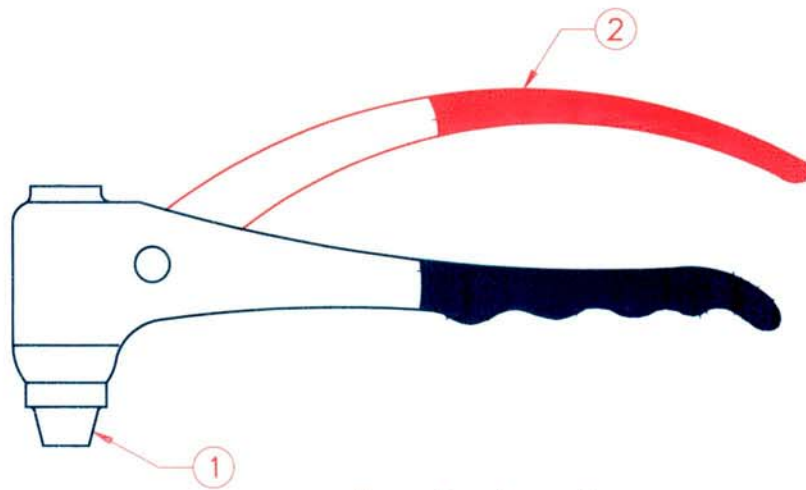


APPLICATION FOR THE BASIC HOLE SYSTEM

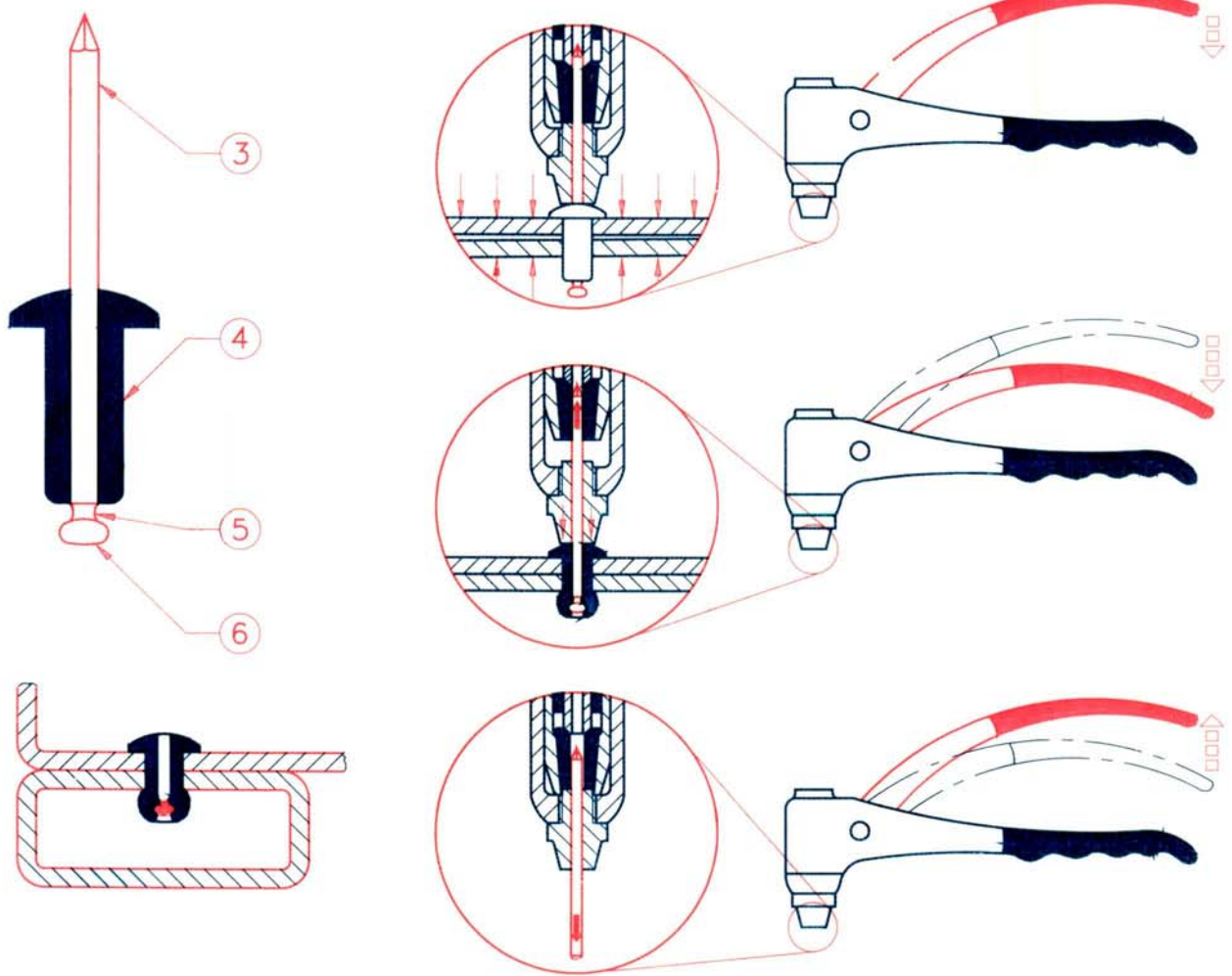
**SHAFT BASIS AND HOLE BASIS SYSTEM OF LIMITS AND FITS**

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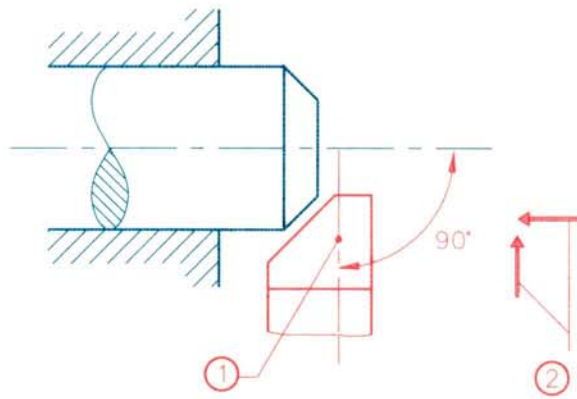
Pop riveting plier



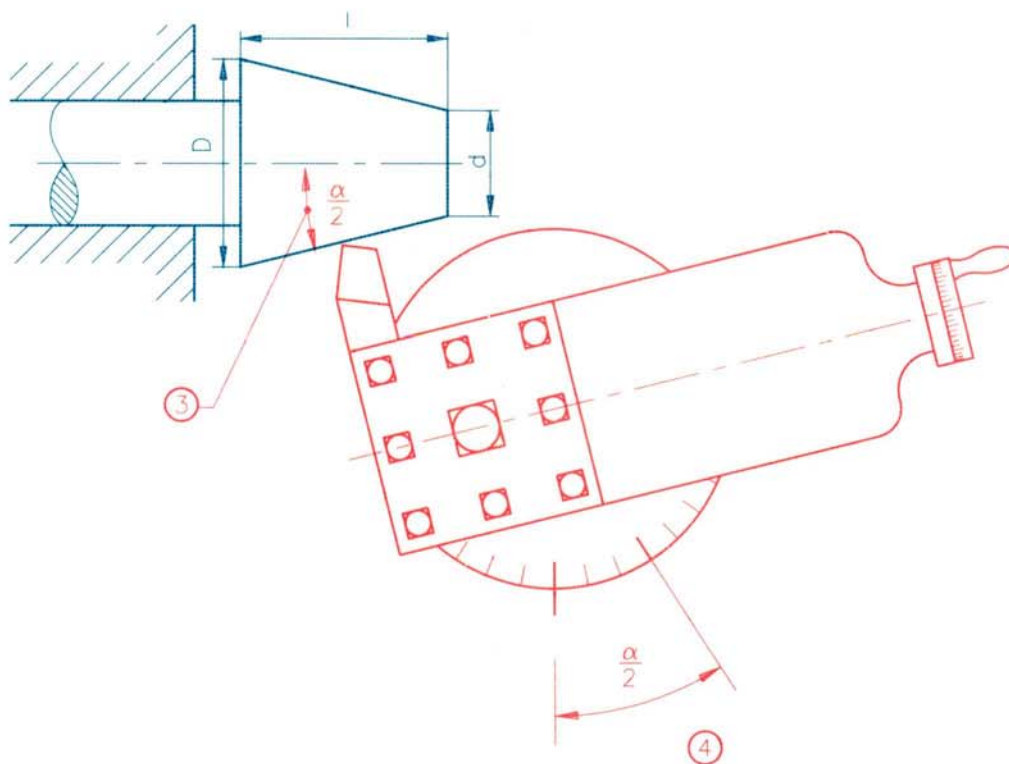
**BLIND RIVETING  
WITH POP RIVETS**

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FORM TOOL METHOD



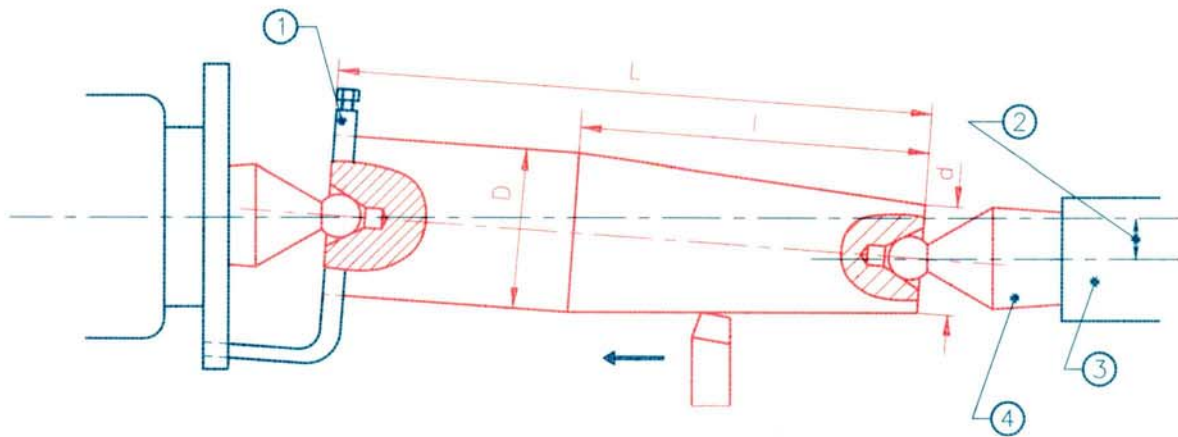
COMPOUND SLIDE METHOD

**DIFFERENT METHODS OF  
TAPER TURNING**  
(FORM TOOL AND COMPOUND REST)

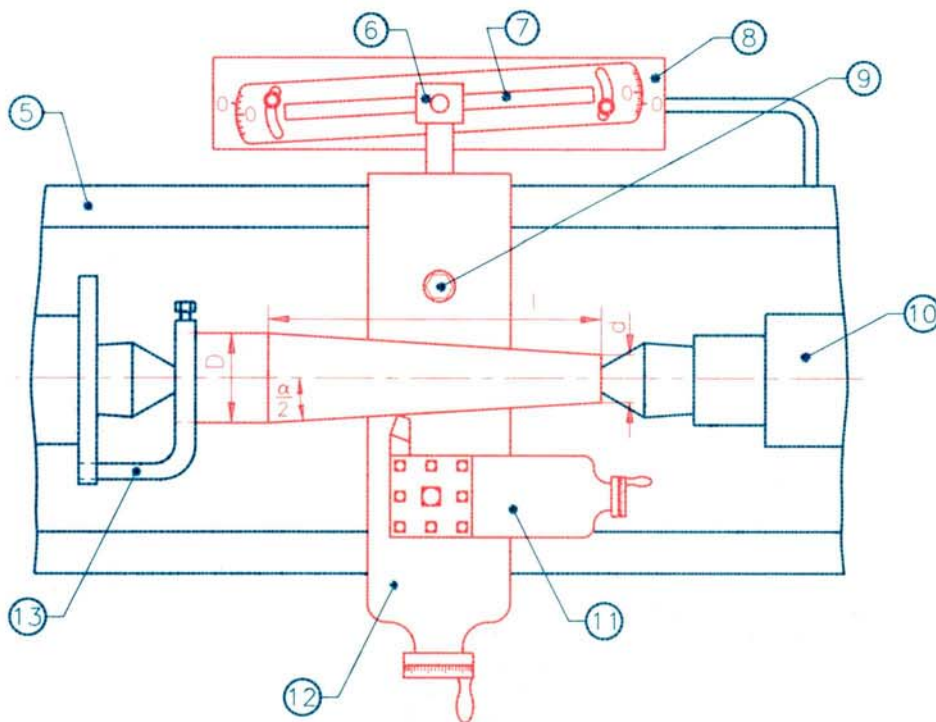
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TAILSTOCK OFFSET METHOD



TAPER TURNING ATTACHMENT METHOD

## DIFFERENT METHODS OF TAPER TURNING

(TAILSTOCK SET OVER AND TAPER TURNING ATTACHMENT)

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