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Assignment : Technical Drawing B

1. Types of lines in technical drawings:

a. Continuous Thick Line



How lines are drawn:

To make a continuous thick line, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line with the thickness of the continuous line forming 0.7 mm or 0.5 mm, then slide the ruler according to the desired distance

Its use for:

- a). Real lines of the picture
- b). Outline
- c). lines of tangible objects (lines of visible objects)

b. Continuous Thin Line (straight or curved)



How lines are drawn:

To make a continuous thin line, prepare tools and materials such as paper or pencil, use a ruler as a guide for drawing the line to be made, then place the ruler on paper with both sides according to the direction of the line made so that it looks straight but thin and lemuadian draw a straight line slowly until the thickness of the thin line continuously forms 0.35 mm or 0.25 mm, Next, slide the ruler according to the desired distance

Its use for:

- a). Imaginary lines intersect (imaginer)
- b). Measuring line
- c). Auxiliary lines or projections
- d). Pointer line
- e). Shade line
- f). Real lines in cross section rotated in place
- g). Short axis line

c. Free Continuous Thin Line



How lines are drawn:

To make a thin line continuous free, prepare tools and materials such as paper or pencil, then start making a free continuous line by making a line arch can also use a line tracer but this line is made with a thin thickness of 0.35 mm or 0.25 mm

Its use: for as cut border lines, if the border is not a thin scratched line

d. Continuous Thin Line with Zigzag



How lines are drawn:

To make a continuous thin line with a zig zag model, prepare tools and materials such as paper or pencil, then start making a free continuous line by making a zig zag line arch, first draw a straight line then make a zig zag if it is neatly followed up again with a straight line you can also use a line tracer but this line is made with a thin thickness of 0.35 mm or 0.25 mm

Its use: for as cut border lines, if the border is not a thin scratched line

e. Thick Scratch Lines



How lines are drawn:

To make a continuous thick line, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line but broken with the thickness of the line forming 0.5 mm or 0.35 mm, then slide the ruler according to the desired distance dotted

Its uses:

- a). Real lines are blocked
- b). Blocked borders

f. Thin Scratched Lines



How lines are drawn:

To make a thin line, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line but broken with the thickness of the line forming 0.35 mm or 0.25 mm, then slide the ruler according to the desired distance dotted with thin not too pressed so as not to look thick

Its uses:

- a). Axis line
- b). Line symmetry
- c). Track line

g. Thin Scratched Lines that thicken the ends and at a change of direction



How lines are drawn:

To make a thin line that is then thickened, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line that is first not too thick the line, then space the next thin line, space again for the thin line and dance again the line but thicken the line at the end and turn on the change of direction, Then in different directions the thin line dance is like the previous one with the thickness of the end line and the turns forming 0.7 mm or 0.5 mm, then for the TPIS line which is 0.35 mm or 0.25 mm thick.

Its use: i.e. as a line on the cut plane

h. Thick Scratched Lines



How lines are drawn:

To make the thick line broken, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line with the thickness of the broken line forming 0.7 mm or 0.5 mm, then slide the ruler according to the desired distance if the thickness is not in accordance with the size can be thickened again by making a repeating line.

Its use: that is to show the surface of the workpiece that must get special workmanship

i. Thin Double Scratched Line



How lines are drawn:

To make a thin line with a double, prepare a ruler to be used as a guide for the line to be made, then place the ruler on paper with both sides according to the direction of the line made and draw a straight line but break with a double point kemedian followed by draw a straight line with the same distance as the first line made then continue with a thin line double point with a thin line.

Its uses are:

- a). Adjoining parts
- b). Position limit of moving objects
- c). System lines
- d). Reshape before shaping
- e). The part of the object that is in front of the cutting plane

2. Types of shading in technical drawings

a. One-Way Casting

How to draw the shading: the pencils are moved in the same direction, so that parallel and directional rows are visible.

Its use: used to draw a wide variety of images that have a smooth and flat character surface.

b. Countour Hatching

How to depict the shading: the strokes on the pen or pencil follow the contour shape of the plane to be shaded, so that the volume will be seen on the object made.

Its uses: used to form figures such as Mnesia, Animals And plants

c. Crosshatching

Way of depicting shading: similar to the one-way shading technique, but the type of scratch shading looks to intersect each other or there is a crossover of directions from scratches. In the part to be shaded darker, strokes can be stacked using different line directions. Generally, the difference in the direction of the starting line and the next line is 45 degrees.

For the character of an object that has a smooth surface, the pencil used must be pointed and scratched tightly. Meanwhile, to make the character of objects whose surface is a bit rough, the pencil must be scratched rather tenuously.

Its use: used to draw objects with rough and smooth surface characters.

d. Point Alignment (Stippling)

How to draw the shading: This technique makes small dots, as is the case with the pointilism technique. The denser the dots made, the darker the effect.

Its use: the addition of darkness to the shading made.

e. Free Strikethrough Shade (Scumbling)

How the shade is depicted: the pencil strokes are irregular and have free scribbles. This stroke is not in the form of a line, but rather inclined to free stroke. applied which has the character of rough to very rough surface. For example, wood, bark, rocks etc.

The purpose of this shading is to create the character of these objects. If an image of an object is shaded using this method, then the image will look uneven on the surface.

Its Uses: This technique can be applied to draw a wide variety of objects that have rough to very rough surface characteristics.