

Hatch and Array

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

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Learning Objectives



Learning Objectives

► Clone an object



Learning Objectives

- ▶ **Clone an object**
- ▶ **About Hatching**

Learning Objectives

- ▶ Clone an object
- ▶ About Hatching
- ▶ Download hatches from cadhatch.com

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- ▶ Clone an object
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- ▶ Download hatches from cadhatch.com
- ▶ About hatch lines



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- ▶ Clone an object
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- ▶ About arrays



Learning Objectives

- ▶ **Clone an object**
- ▶ **About Hatching**
- ▶ **Download hatches from cadhatch.com**
- ▶ **About hatch lines**
- ▶ **About arrays**
- ▶ **Add various types of arrays**



System Requirements



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► Windows 11 OS



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- ▶ **Windows 11 OS**
- ▶ **FreeCAD 0.21.1**

Pre-requisites



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- **Learners must be familiar with the FreeCAD interface**

Pre-requisites

- ▶ **Learners must be familiar with the FreeCAD interface**
- ▶ **For pre-requisite tutorials, please visit this site**
<https://spoken-tutorial.org>

What is a Hatch?



What is a Hatch?

- Cross sections of a drawing are filled with thin parallel equally spaced lines

What is a Hatch?

- ▶ Cross sections of a drawing are filled with thin parallel equally spaced lines
- ▶ Thus user can differentiate between various areas with ease in a drawing

What is an Array?



What is an Array?

- ▶ **Array is specified number copies of an object placed in a pre-defined order**

What is an Array?

- ▶ Array is specified number copies of an object placed in a pre-defined order
- ▶ They can be placed along a line, row-wise, column wise, circular and so on

Summary



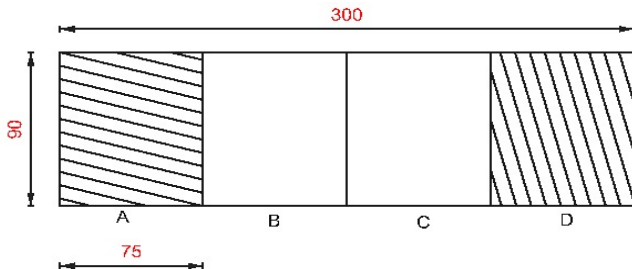
Summary

- ▶ **Cloning an object**
- ▶ **Hatching**
- ▶ **Downloaded hatches from**
`cadhatch.com`
- ▶ **About hatch lines**
- ▶ **About arrays**
- ▶ **Added various types of arrays**



Assignment

Create hatches as seen here



ALL DIMENSIONS ARE IN mm

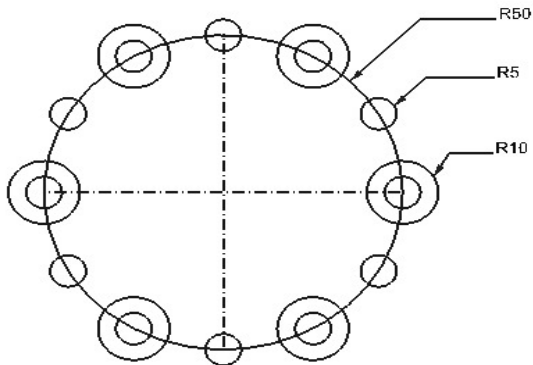
HATCH ANGLE:

A BOX: 15°

B BOX: 75°

Assignment

Create an array as seen here



ALL DIMENSIONS ARE IN mm

About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project

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- ▶ If you do not have good bandwidth, you can download and watch it

Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Forum questions

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



Acknowledgements

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