

# Industrial Drawing

**Spoken Tutorial Project**

**<https://spoken-tutorial.org>**

**National Mission on Education through ICT**

**K. Sakthivel & Madhuri Ganapathi**

**Domain: Dr. Sathiya Narayanan**

**Dr. Jayendra Bharathi**

**SASTRA, IIT Bombay**

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# Learning Objectives





# Learning Objectives

- ▶ Draw the Flange coupling component



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- ▶ Draw the Flange coupling component
- ▶ Convert the diagram from Draft workbench to TechDraw workbench



# Learning Objectives

- ▶ Draw the Flange coupling component
- ▶ Convert the diagram from Draft workbench to TechDraw workbench
- ▶ Annotate the dimensions and tolerance values



# System Requirements





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## ► Windows 11 OS



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- ▶ **Windows 11 OS**
- ▶ **FreeCAD v0.21.2**



# Pre-requisites





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



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- ▶ Learners must be familiar with the FreeCAD interface
- ▶ For pre-requisite tutorials, please visit this site

<https://spoken-tutorial.org>



# Features of Industrial drawing





# Features of Industrial drawing

- ▶ **Industrial drawing is a graphical language**



# Features of Industrial drawing

- ▶ Industrial drawing is a graphical language
- ▶ It gives information about dimensions, tolerances, and geometries of an object



# Flange Coupling





# Flange Coupling

## Flange Coupling





# Flange Coupling

## Flange Coupling

- It is a mechanical device that connects two shafts or pipes together





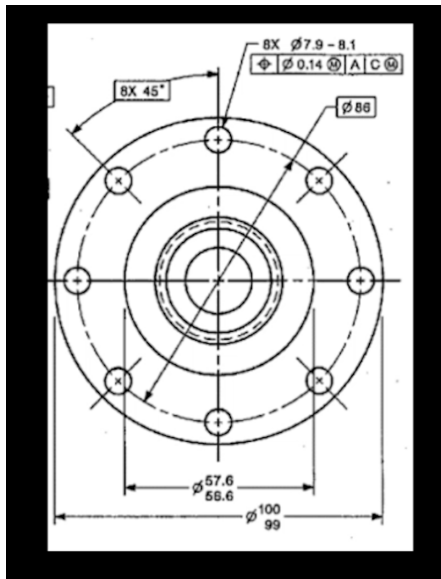


# Industrial Drawing





# Industrial Drawing





# Summary

- ▶ **Drew the Flange coupling component**
- ▶ **Converted the diagram from Draft workbench to TechDraw workbench**
- ▶ **Annotated the dimensions and tolerance values**



# Assignment

- ▶ Practice dimensioning tools
- ▶ Balloon insertion tool
- ▶ Tolerances



# About the Spoken Tutorial Project

- ▶ Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project



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- ▶ It summarises the Spoken Tutorial project
- ▶ 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](mailto: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

**The Spoken Tutorial project was established by the Ministry of Education, Govt. of India**



# Thank You!

- ▶ **This tutorial is contributed by K.Sakthivel & Madhuri Ganapathi**
- ▶ **Thank you for joining**