

# Save and Import input values in Osdag

**Spoken Tutorial Project**

<https://spoken-tutorial.org>

**National Mission on Education through ICT**

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# Learning Objectives

**In this tutorial, we will learn how to**



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In this tutorial, we will learn how to

► **Save input values in Osdag**



# Learning Objectives

In this tutorial, we will learn how to

- ▶ Save input values in Osdag
- ▶ Import OSI file and perform design



# System Requirements

**To record this tutorial, I am using**



# System Requirements

To record this tutorial, I am using

► **Windows 11**



# System Requirements

To record this tutorial, I am using

- ▶ Windows 11
- ▶ Osdag v2021.02.a.a12f



# Pre-requisites

**To follow this tutorial you should have,**





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**To follow this tutorial you should have,**

**► Osdag installed on your system**

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To follow this tutorial you should have,

- ▶ Osdag installed on your system
- ▶ **Basic knowledge of structural steel design**



# Pre-requisites

**To follow this tutorial you should have,**

- ▶ **Osdag installed on your system**
- ▶ **Basic knowledge of structural steel design**

**The pre-requisite tutorials are available on <https://spoken-tutorial.org>**



# Sample Design Example

- **Design a Tension Member with a bolted end connection**



# Sample Design Example

- ▶ **Design a Tension Member with a bolted end connection**
- ▶ **The member carries a factored axial force of 600 kN**



# Sample Design Example

- ▶ **Design a Tension Member with a bolted end connection**
- ▶ **The member carries a factored axial force of 600 kN**
- ▶ **Perform a design check by adopting the given design specifications:**



# Sample Design Example

**Section:**

# Sample Design Example

## Section:

► **Profile: Star Angles**



# Sample Design Example

## Section:

- ▶ Profile: Star Angles
- ▶ Connection Location: Long Leg

# Sample Design Example

## Section:

- ▶ Profile: Star Angles
- ▶ Connection Location: Long Leg
- ▶ Section Size: 80 x 80 x 8



# Sample Design Example

## Section:

- ▶ **Profile: Star Angles**
- ▶ **Connection Location: Long Leg**
- ▶ **Section Size: 80 x 80 x 8**
- ▶ **Material Grade: E 250(Fe 410 W)A**

# Sample Design Example

## Section:

- ▶ **Profile: Star Angles**
- ▶ **Connection Location: Long Leg**
- ▶ **Section Size: 80 x 80 x 8**
- ▶ **Material Grade: E 250(Fe 410 W)A**
- ▶ **Length: 3200 mm**

# Sample Design Example

## End Connections:

# Sample Design Example

## End Connections:

### ► Connector:

# Sample Design Example

## End Connections:

- ▶ **Connector:**
  - ▶ **Type: Bolted**

# Sample Design Example

## End Connections:

- ▶ **Connector:**
  - ▶ **Type: Bolted**
  - ▶ **Diameter: 16**



# Sample Design Example

## End Connections:

### ► Connector:

- Type: Bolted
- Diameter: 16
- Bolt Type: Friction Grip Bolt



# Sample Design Example

## End Connections:

### ► Connector:

- Type: Bolted
- Diameter: 16
- Bolt Type: Friction Grip Bolt
- **Grade: 8.8**



# Sample Design Example

## End Connections:

### ▶ Connector:

- ▶ Type: Bolted
- ▶ Diameter: 16
- ▶ Bolt Type: Friction Grip Bolt
- ▶ Grade: 8.8

### ▶ Gusset Plate:

# Sample Design Example

## End Connections:

### ► Connector:

- Type: Bolted
- Diameter: 16
- Bolt Type: Friction Grip Bolt
- Grade: 8.8

### ► Gusset Plate:

- Thickness: 12 mm



# Summary

**In this tutorial, we have**

- ▶ **Saved input values**
- ▶ **Imported OSI file and performed design**



# Assignment

**As an assignment, do the following:**

- ▶ **Open Welded to End Gusset module of the Tension Member module**



# Assignment

**As an assignment, do the following:**

- ▶ **Open Welded to End Gusset module of the Tension Member module**
- ▶ **Give your inputs**



# Assignment

**As an assignment, do the following:**

- ▶ **Open Welded to End Gusset module of the Tension Member module**
- ▶ **Give your inputs**
- ▶ **Save the OSI file**





# Assignment

- Check if the design is safe or unsafe

# 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
- ▶ 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)



# Answers for THIS Spoken Tutorial

- ▶ 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



- For any general or technical questions on Osdag, visit the FOSSEE forum and post your question <https://forums.fossee.in/>

# Sample Design Examples

- ▶ The Osdag team at FOSSEE creates sample design examples for self-learning
- ▶ These examples can be practised using the Osdag software
- ▶ For more details, please visit:  
<https://osdag.fossee.in/resources/sample-design>



# Acknowledgements

- ▶ **The Spoken Tutorial project is funded by the Ministry of Education, Government of India**

# Thank You!

- ▶ **This is Anandajith TS, FOSSEE IIT Bombay signing off**
- ▶ **Thanks for joining**

