

Creating and Meshing aerofoil in Gmsh

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<http://www.sakshat.ac.in>

National Mission on Education through ICT

<http://spoken-tutorial.org>

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August 1, 2014



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Learning Objectives

- Create an aerofoil using Gmsh



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Learning Objectives

- **Create an aerofoil using Gmsh**
- **Mesh the aerofoil**



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Pre-requisite

- Basic knowledge about aerofoil and Gmsh



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Pre-requisite

- **Basic knowledge about aerofoil and Gmsh**
- **Installing and Running Gmsh**



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System Requirement

- **Ubuntu Linux Operating System version 13.10**



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System Requirement

- **Ubuntu Linux Operating System version 13.10**
- **Gmsh version 2.8.4**



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Introduction to Aerofoil

- Streamline shaped wings



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Introduction to Aerofoil

- **Streamline shaped wings**
- **Airplanes and turbo machinery**



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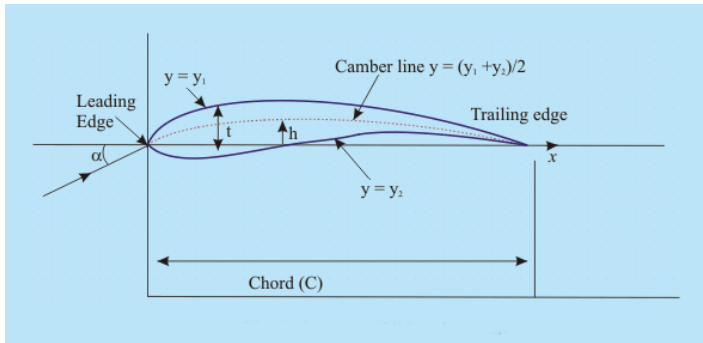
Introduction to Aerofoil

- Streamline shaped wings
- Airplanes and turbo machinery
- Drag force very small compared to lift



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Aerofoil geometry



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Aerofoil coordinates

- Available in text file with .dat extension



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Aerofoil coordinates

- Available in text file with .dat extension
- Download the .dat file and python script from



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Aerofoil coordinates

- Available in text file with .dat extension
- Download the .dat file and python script from
- <http://community.dur.ac.uk/.l.ingram/download.php>



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Assignment

- Create other aerofoil using different .dat file



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Summary

In this tutorial we learnt :

- **To create an aerofoil in Gmsh**
- **Create mesh in Gmsh**



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About the Spoken Tutorial Project

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



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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



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Acknowledgements

- Spoken Tutorial Project is a part of the Talk to a Teacher project
- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at

<http://spoken-tutorial.org/NMEICT-Intro>



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