

# 공상에 사로잡힌 중생들



황승택  
이세빈  
김성현

# INDEX

주제선정

설계

도면

완성본

ENGINE

BODY

PROPELLER

왜 비행기인가?!

# PART DESIGN

## RADIAL ENGINE

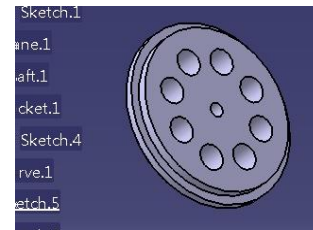
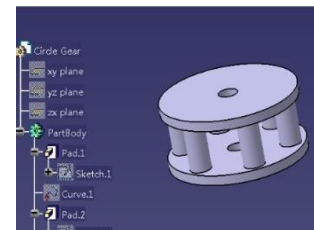
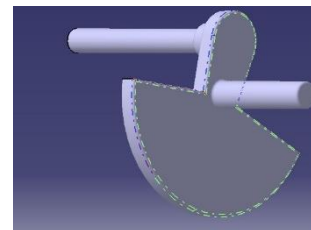
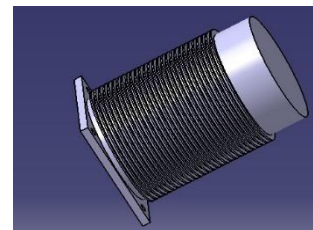
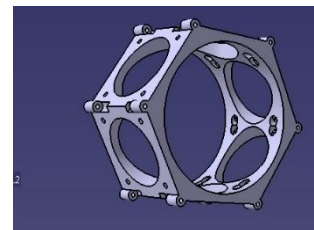
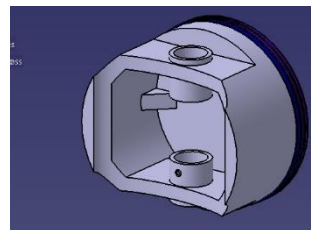
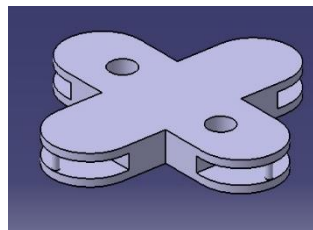
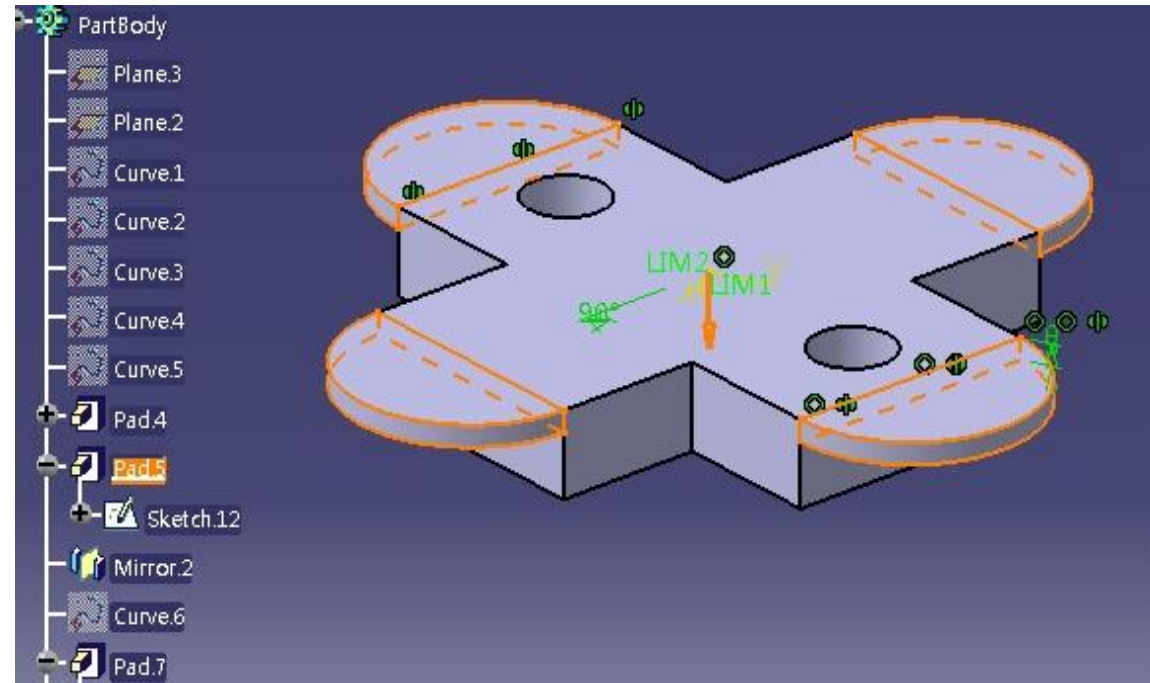
Part : Internal Gear

Function

Pad/Pocket

Mirror

Curve



# PART DESIGN

## RADIAL ENGINE

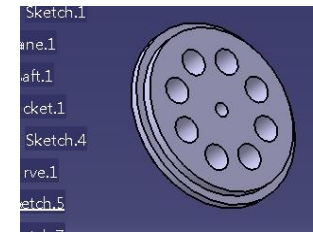
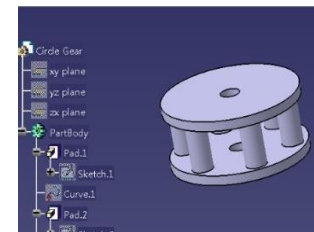
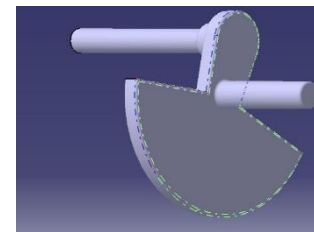
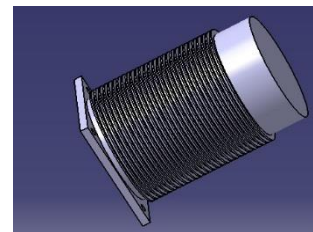
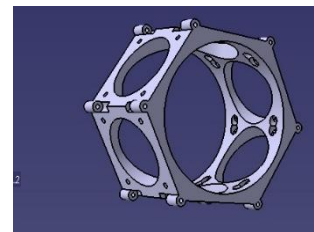
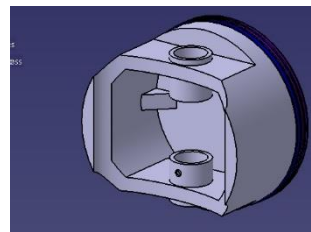
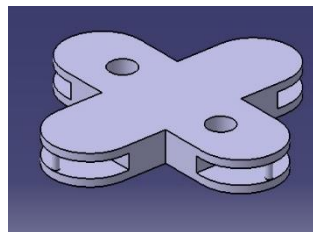
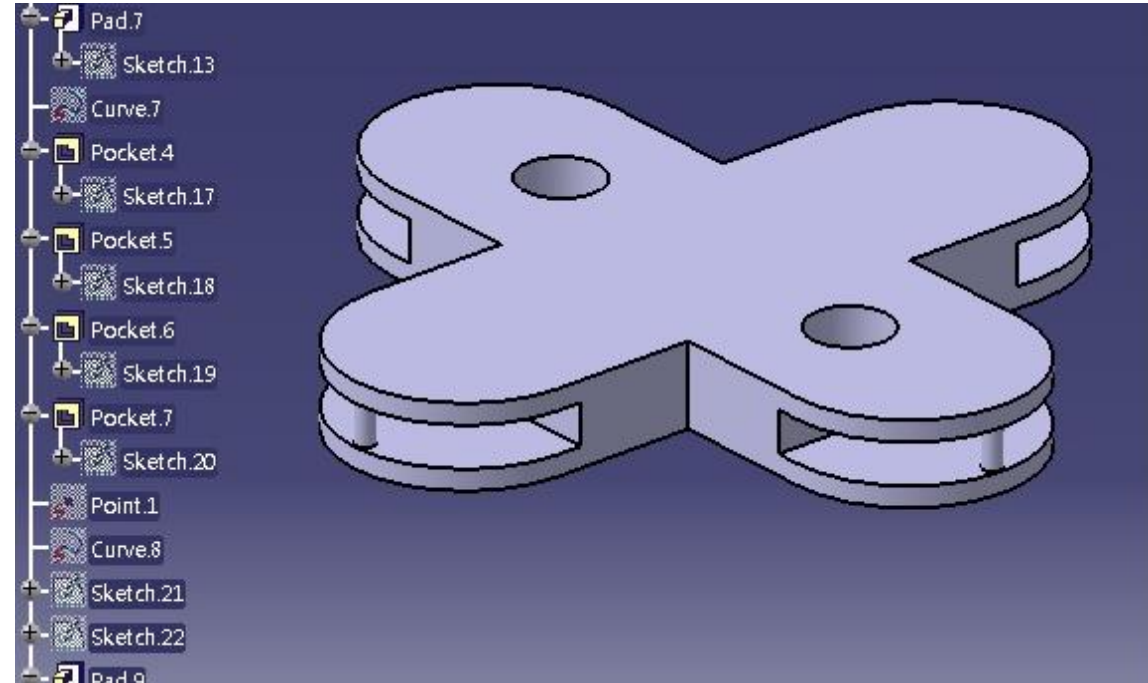
Part : Internal Gear

Function

Pad/Pocket

Mirror

Curve



# PART DESIGN

## RADIAL ENGINE

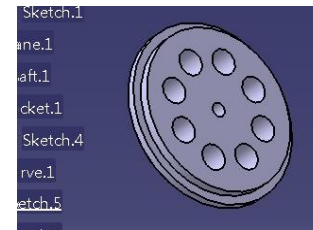
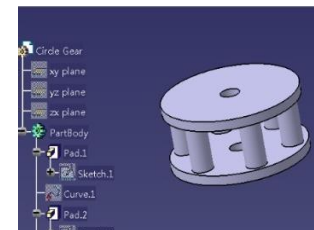
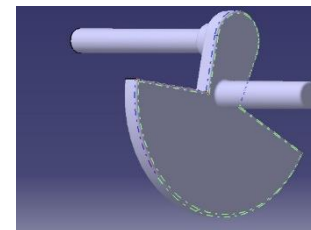
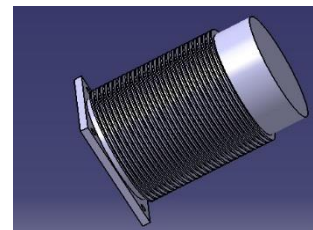
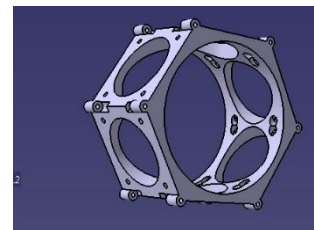
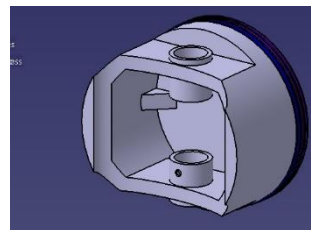
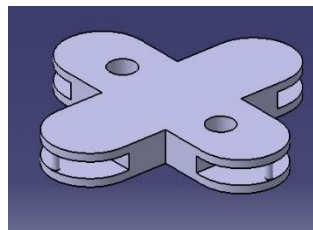
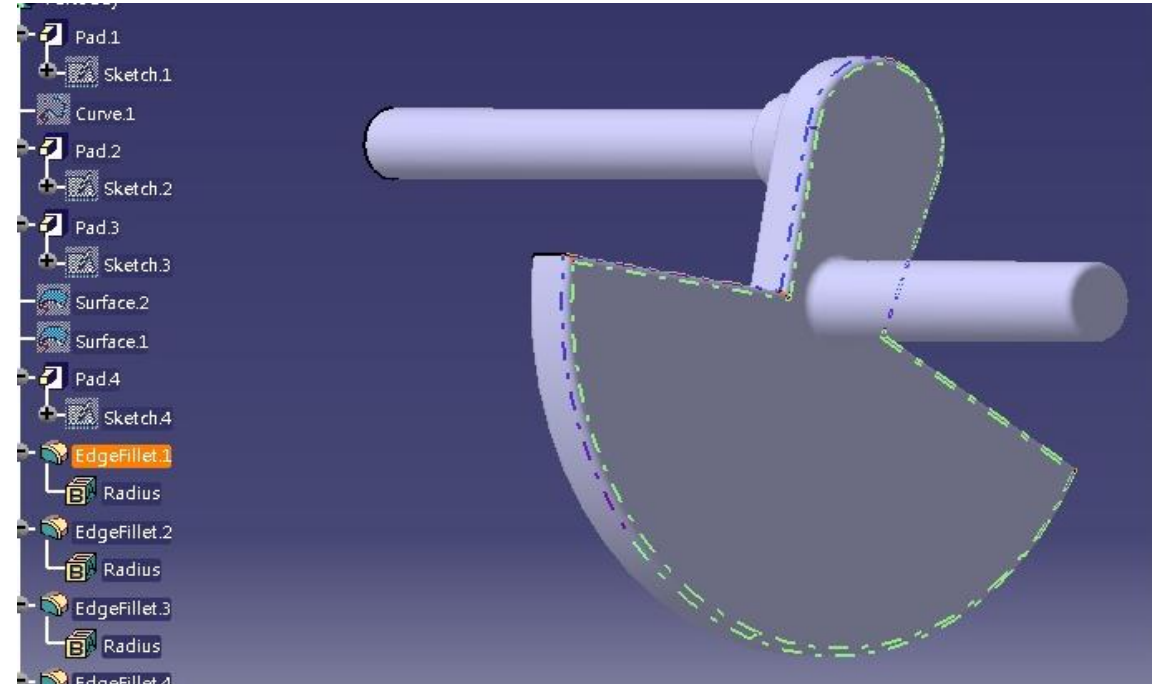
Part : Center Crank Shaft

Function

Pad

Edge Fillet

Surface



# PART DESIGN

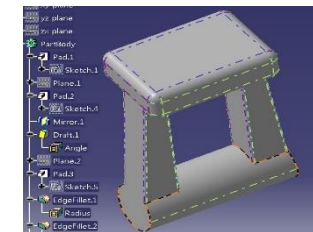
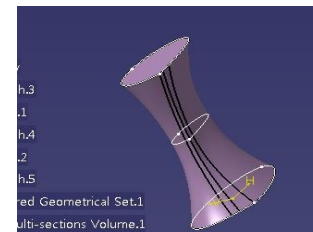
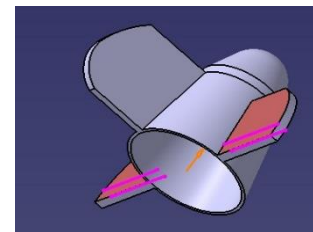
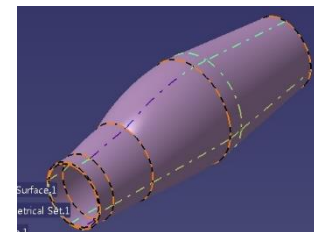
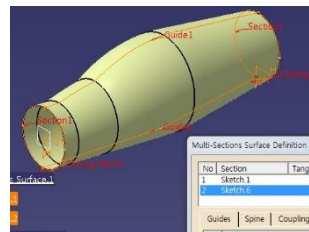
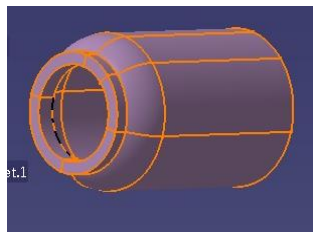
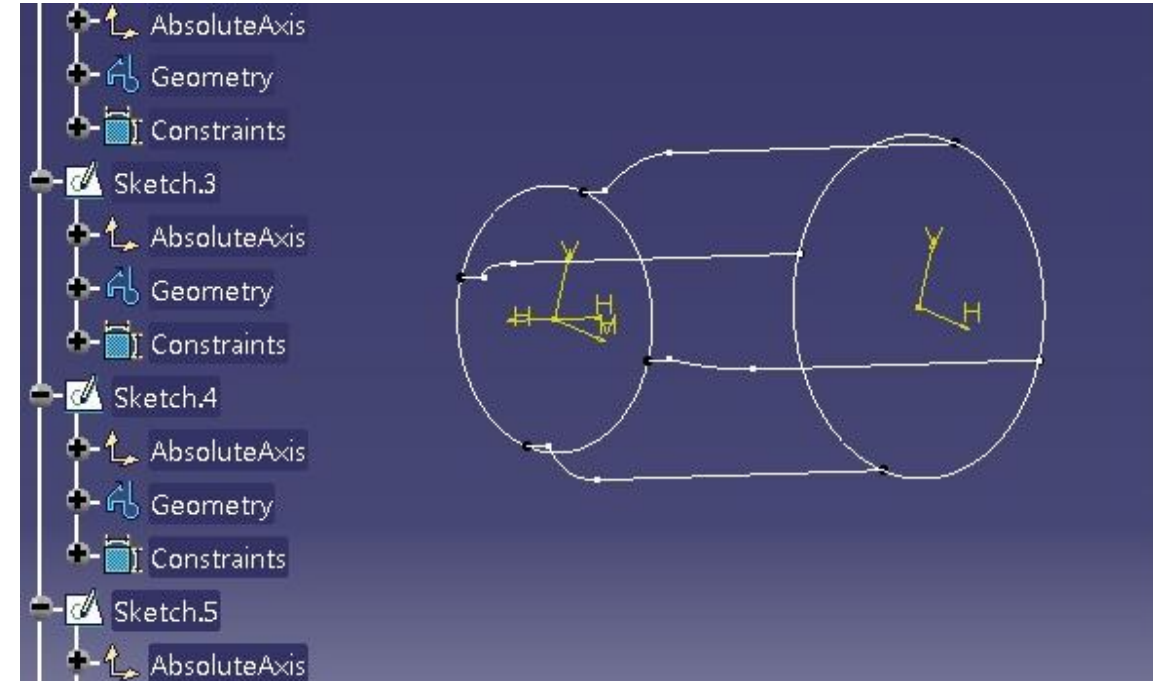
## PLANE BODY

Part : Head

Function

Multi-sections Surface

Thick Surface



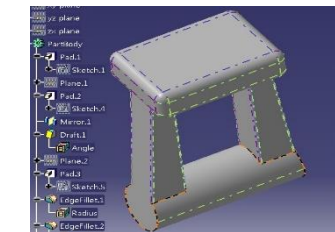
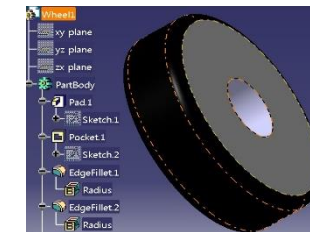
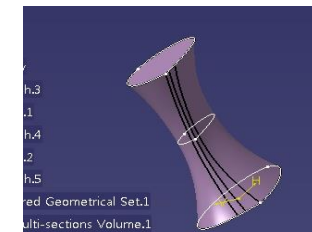
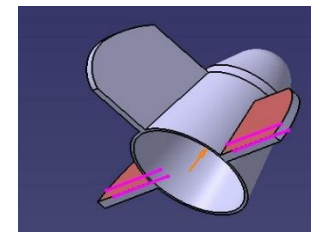
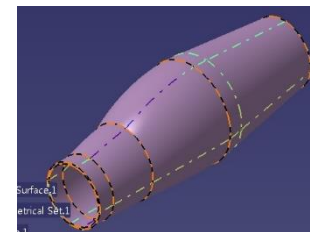
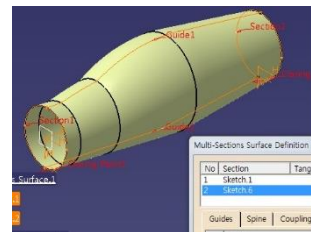
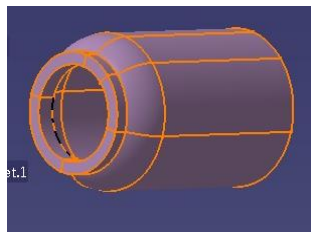
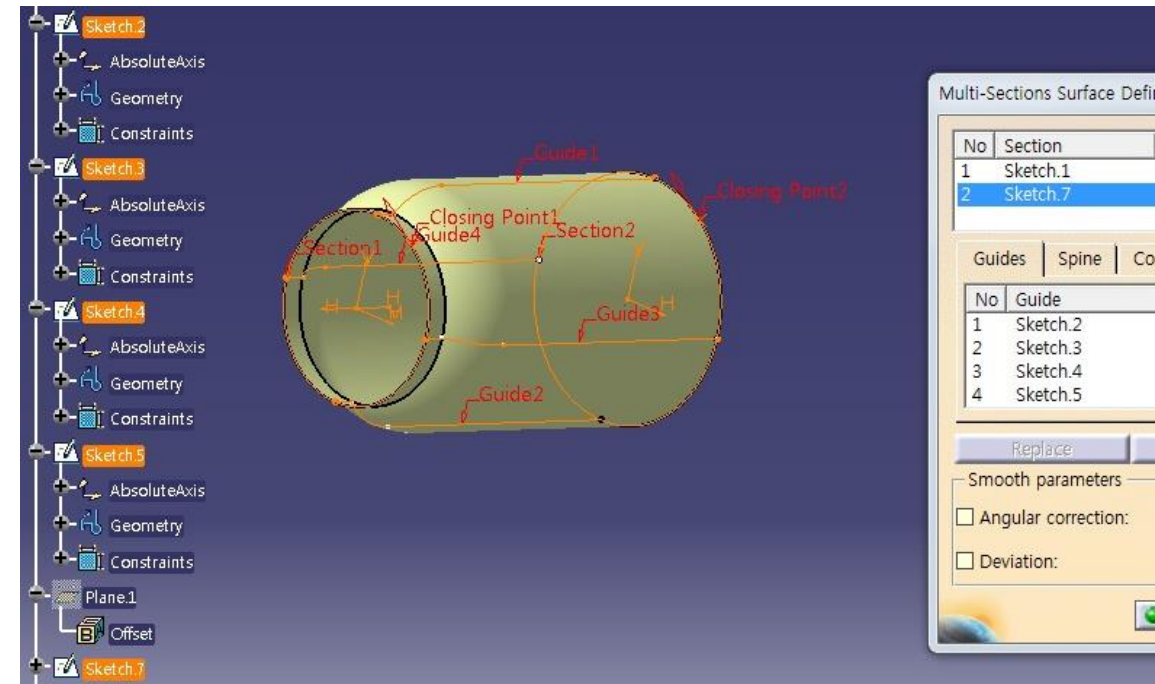
# PART DESIGN

## PLANE BODY

Part : Head

Function

Multi-sections Surface  
Thick Surface





# PART DESIGN

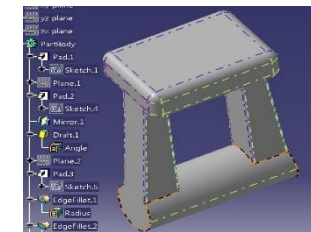
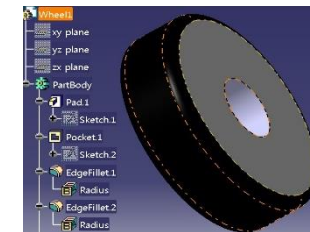
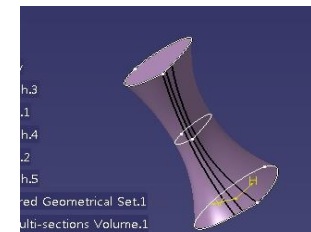
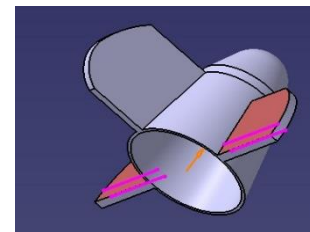
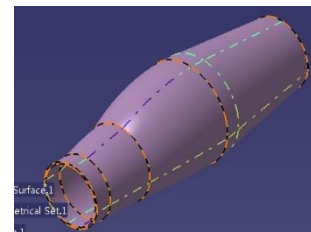
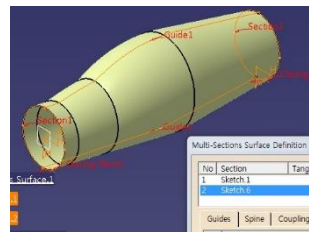
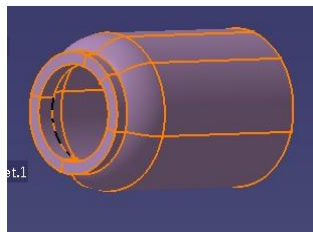
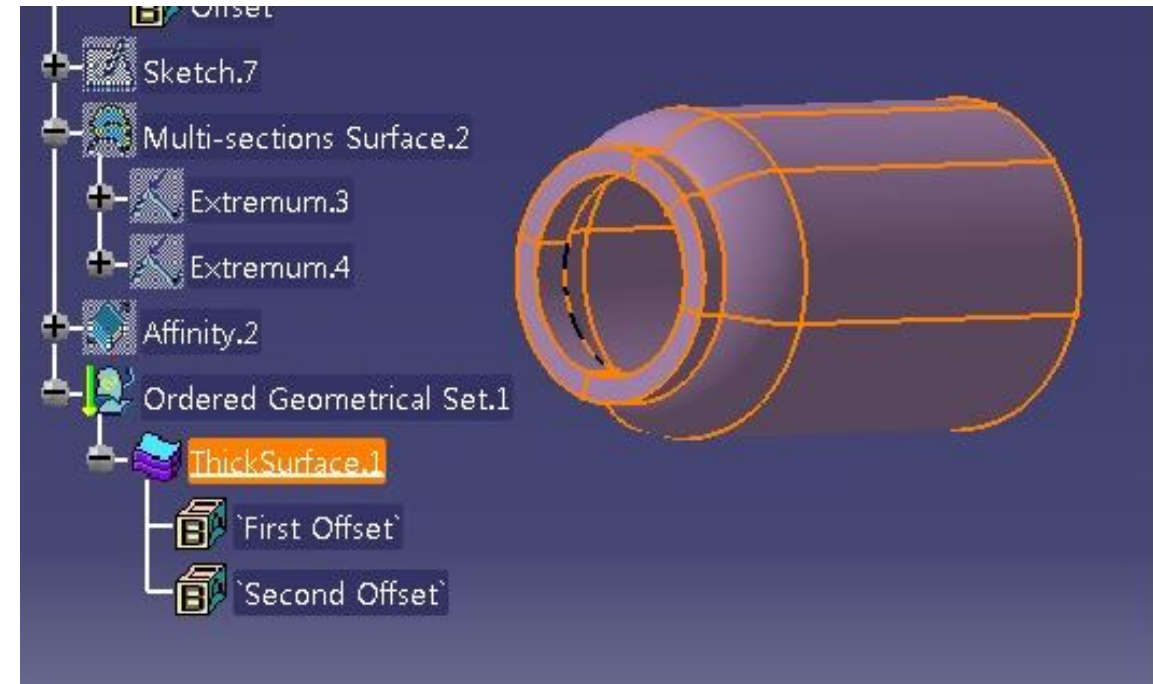
## PLANE BODY

Part : Head

Function

Multi-sections Surface

Thick Surface



# PART DESIGN

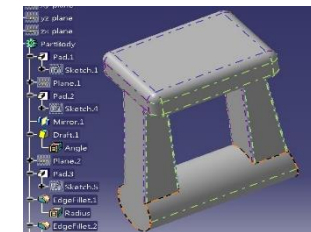
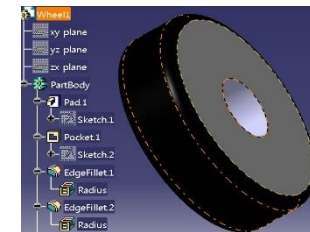
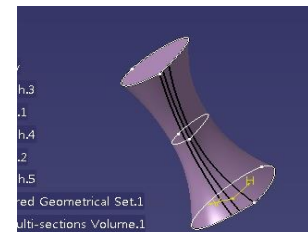
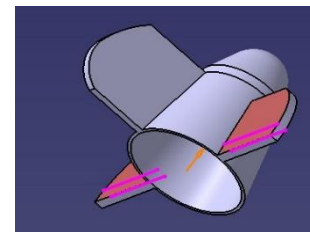
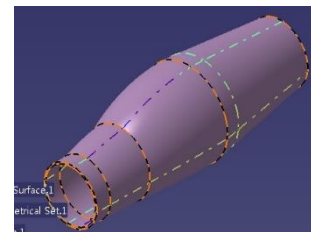
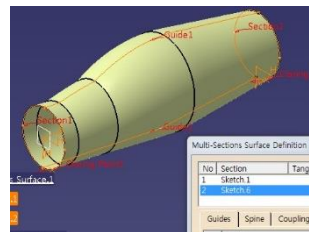
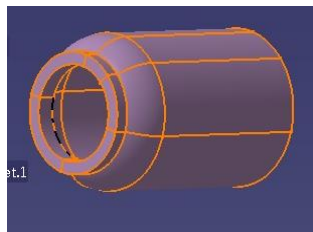
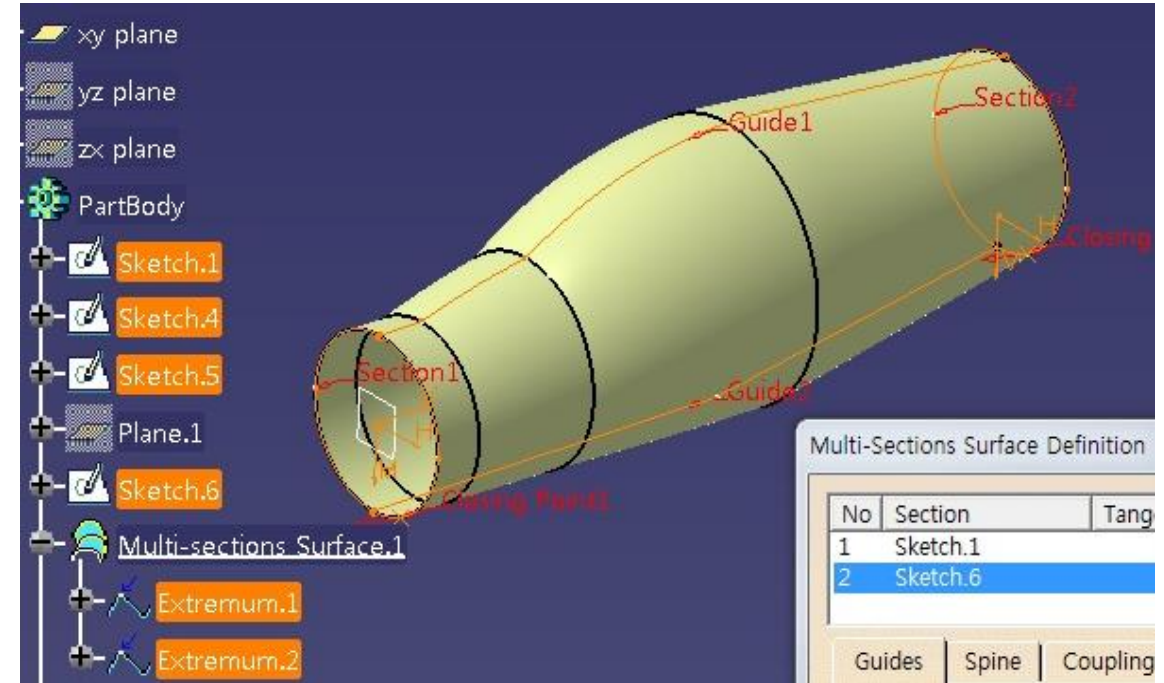
## PLANE BODY

Part : Main Body

Function

Multi-sections Surface

Thick Surface



# PART DESIGN

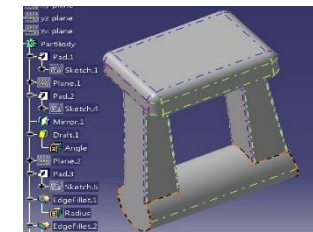
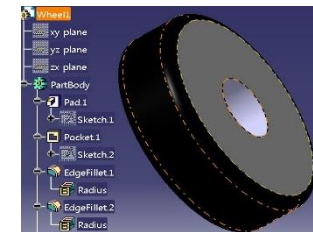
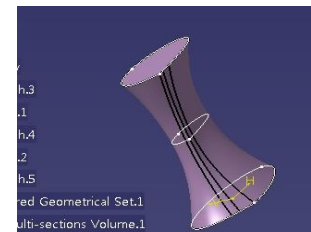
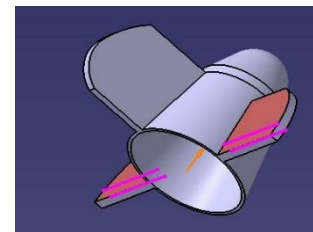
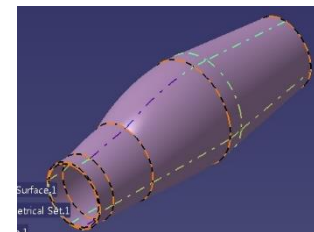
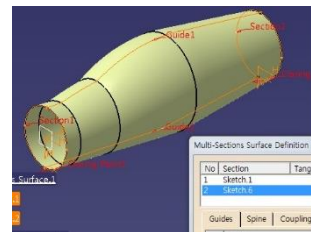
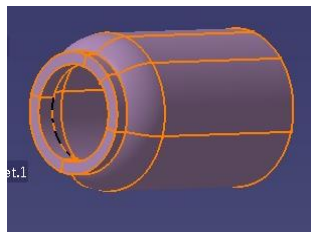
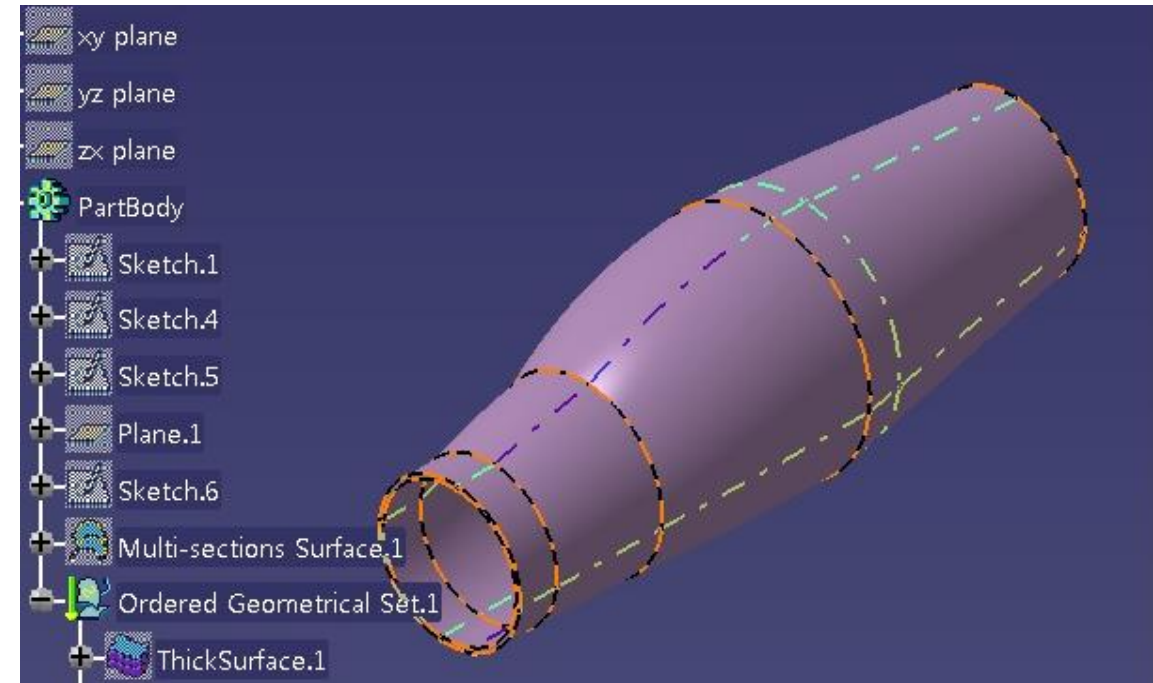
## PLANE BODY

Part : Main Body

Function

Multi-sections Surface

Thick Surface



# PART DESIGN

## PLANE BODY

Part : Rear Wing

Function

Groove

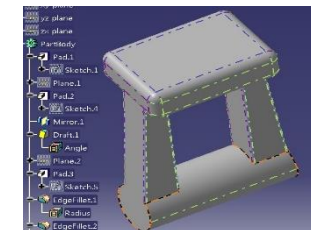
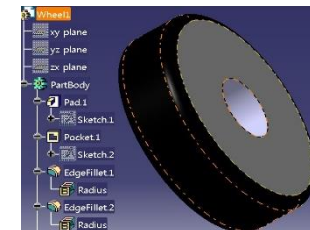
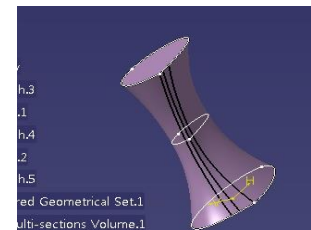
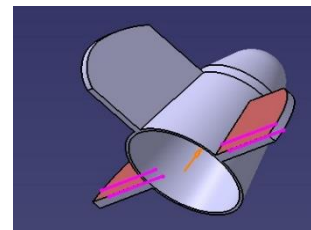
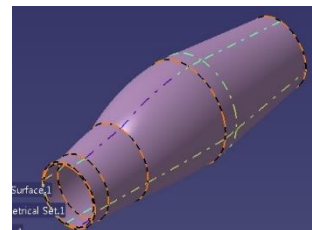
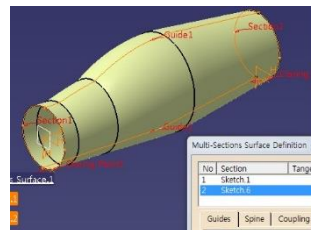
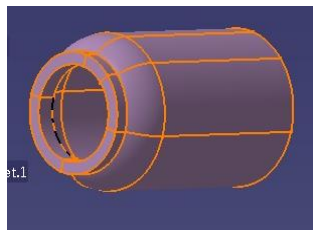
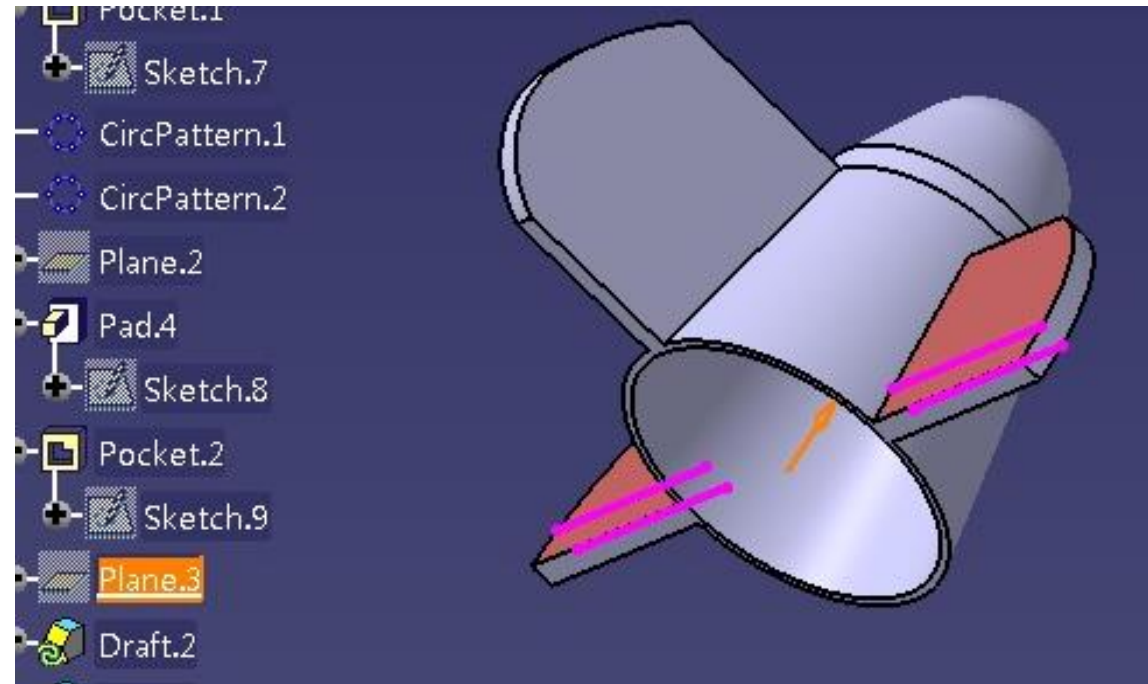
Shell

Pad/Pocket

Circle Pattern

Draft

Edge Fillet



# PART DESIGN

## PLANE BODY

Part : Rear Wing

Function

Groove

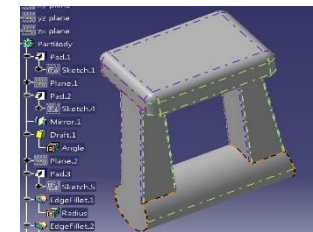
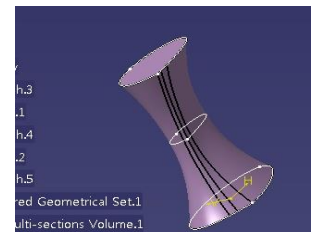
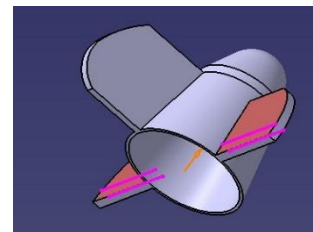
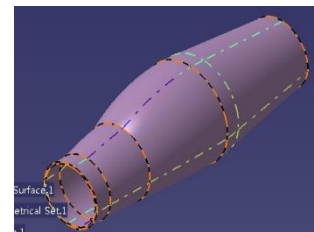
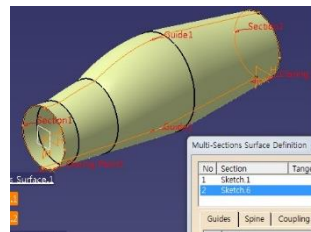
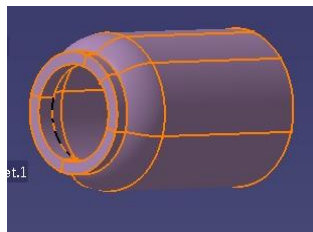
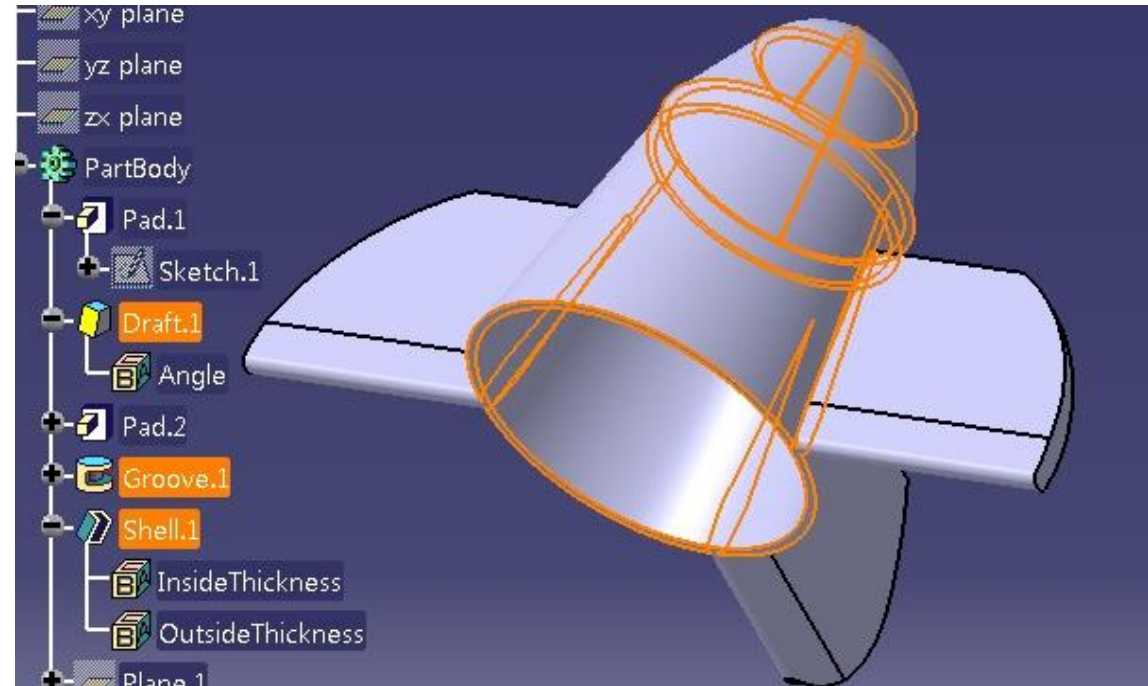
Shell

Pad/Pocket

Circle Pattern

Draft

Edge Fillet



# PART DESIGN

## PROPELLER

Part : Propeller

Function

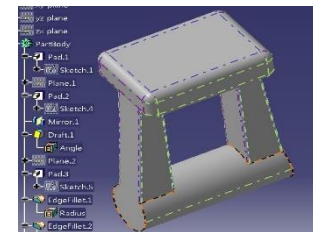
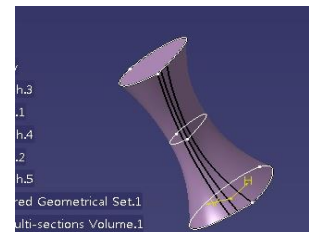
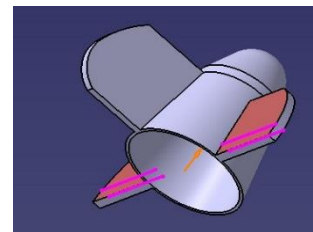
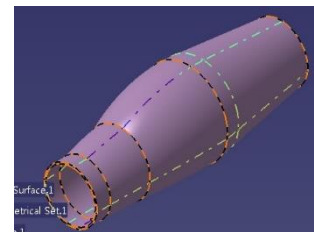
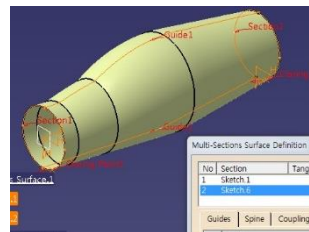
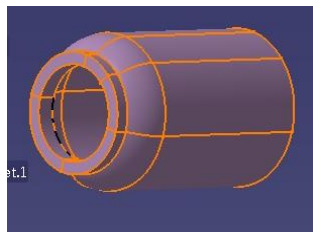
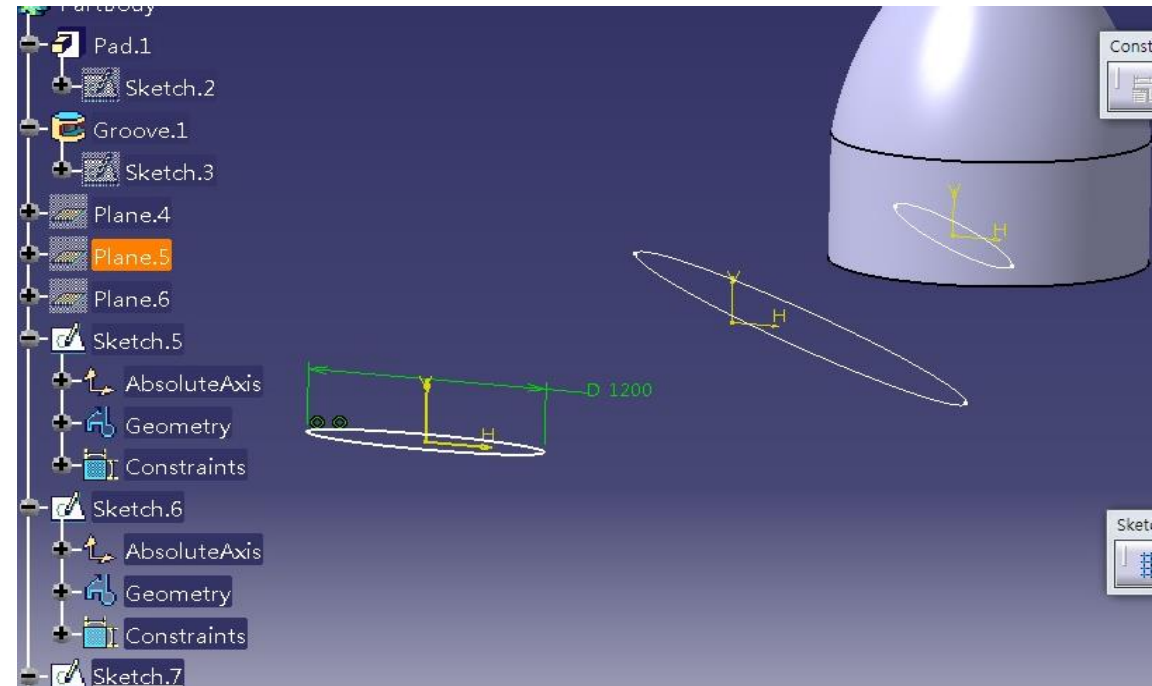
Groove

Edge Fillet

Close Surface

Circle Pattern

Multi-sections Surface



# PART DESIGN

## PROPELLER

Part : Propeller

Function

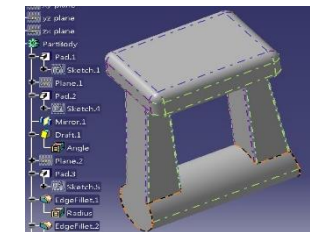
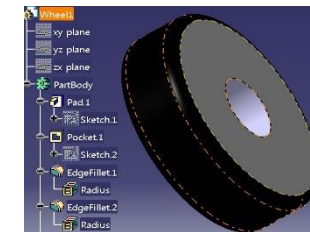
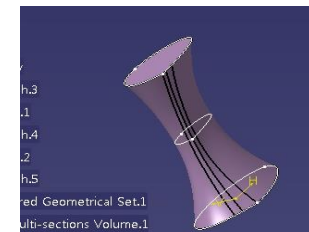
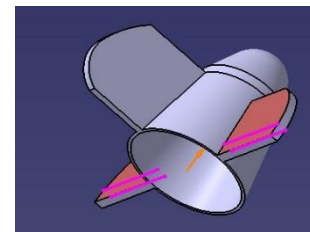
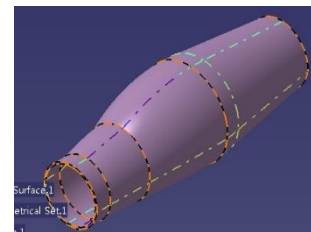
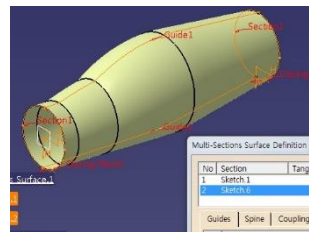
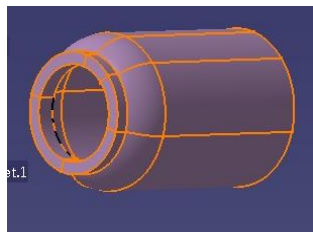
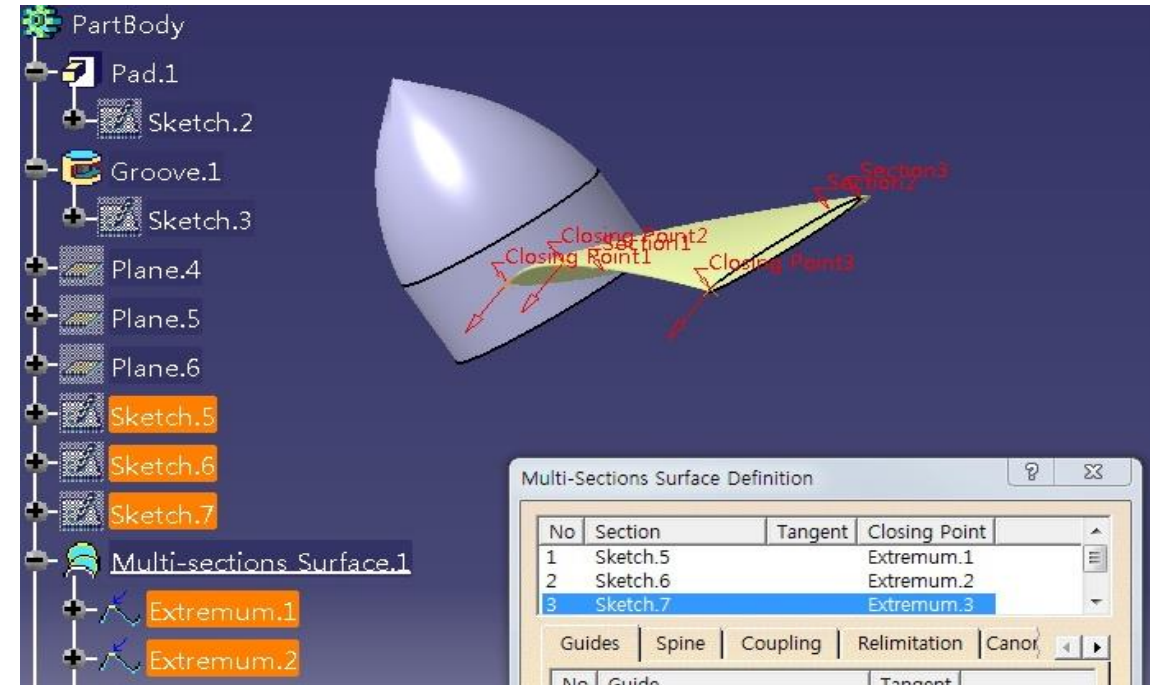
Groove

Edge Fillet

Close Surface

Circle Pattern

Multi-sections Surface



# PART DESIGN

## PROPELLER

Part : Propeller

Function

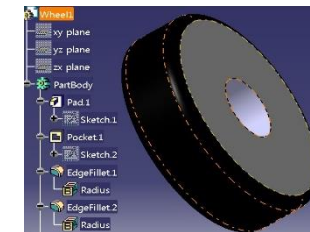
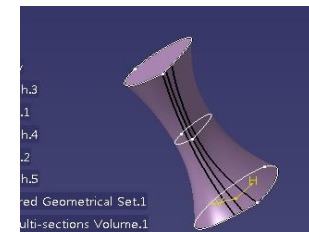
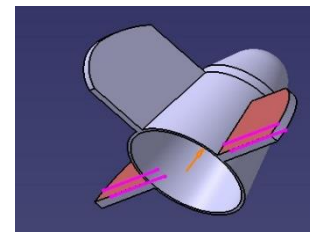
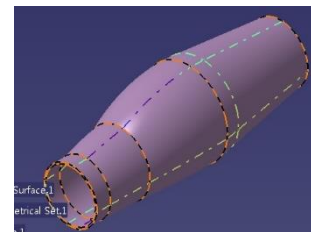
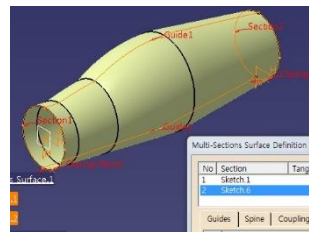
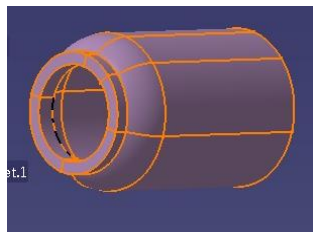
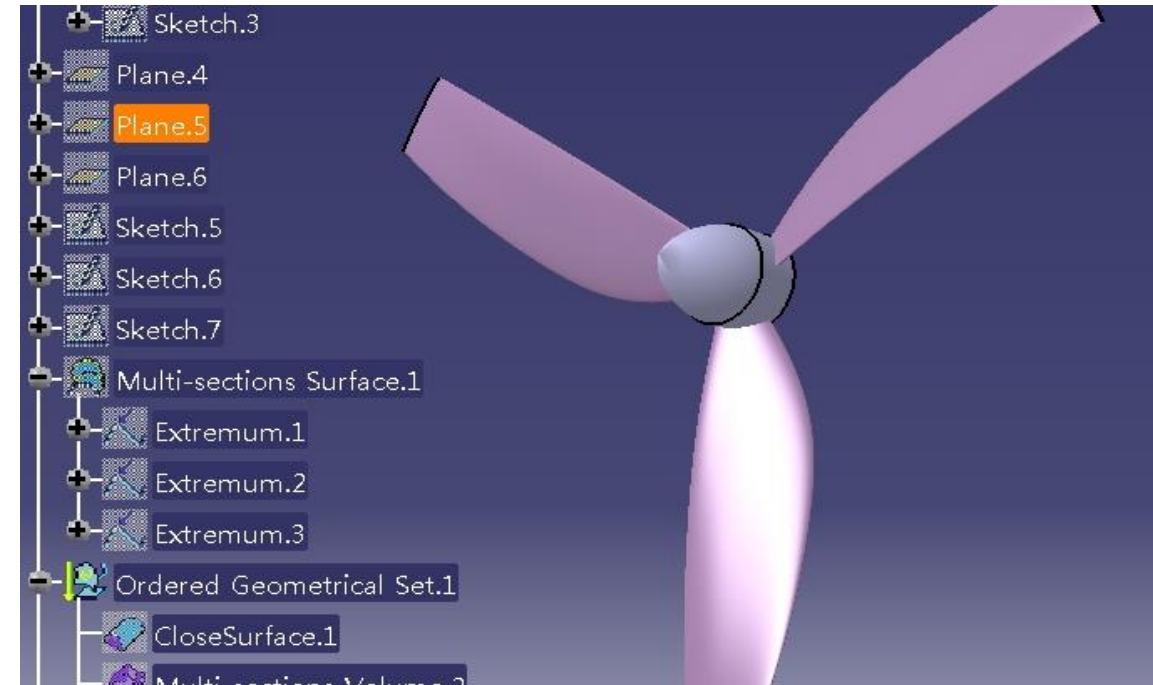
Groove

Edge Fillet

Close Surface

Circle Pattern

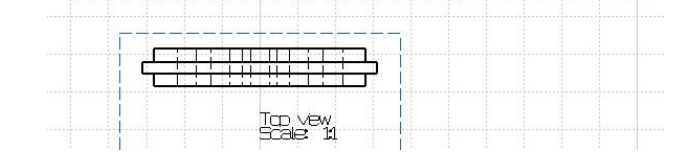
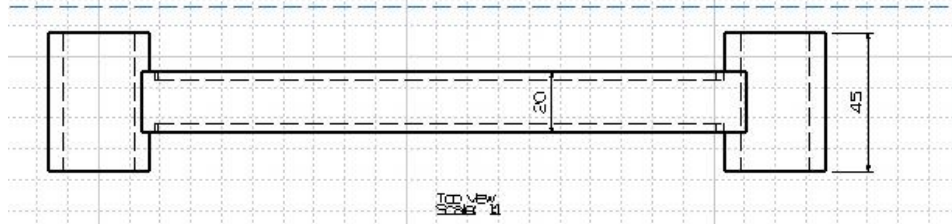
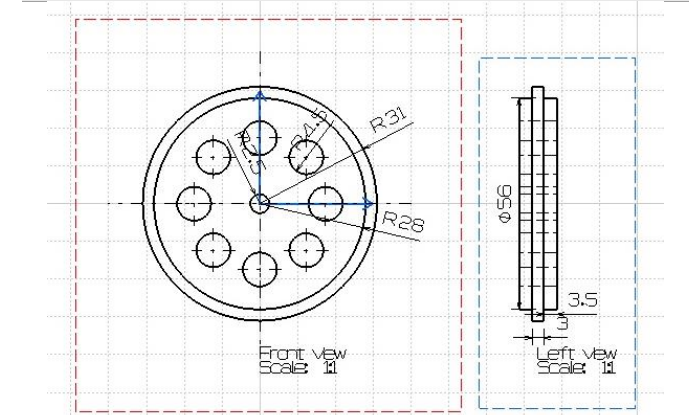
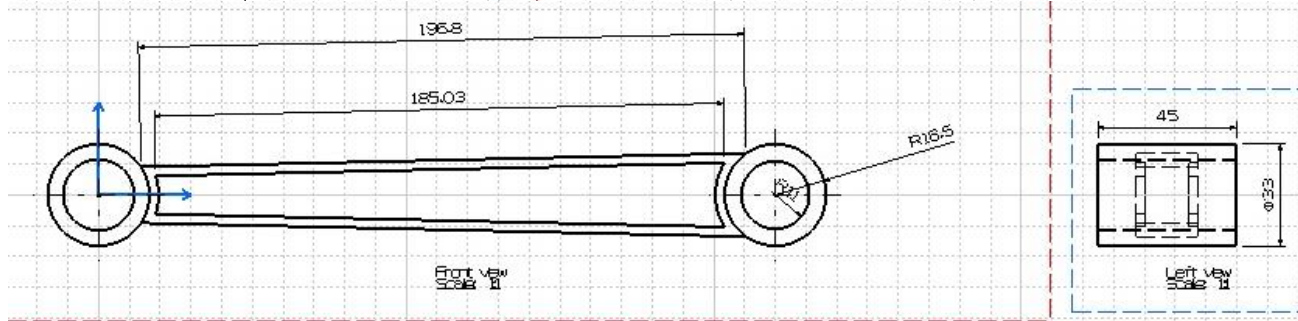
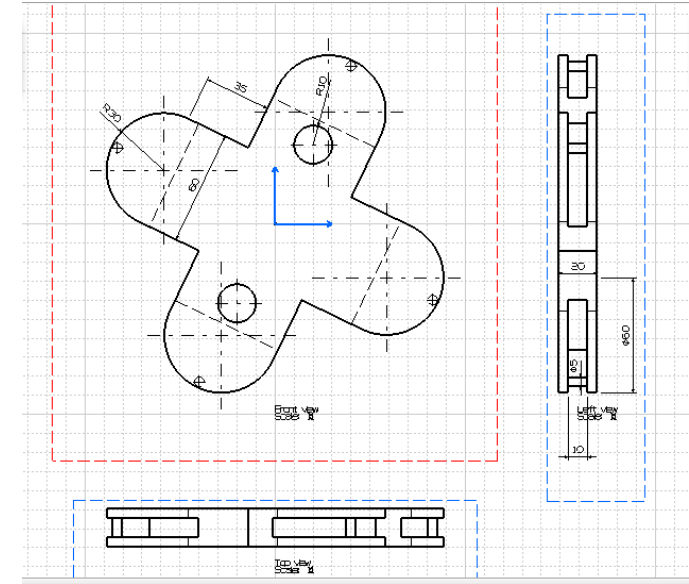
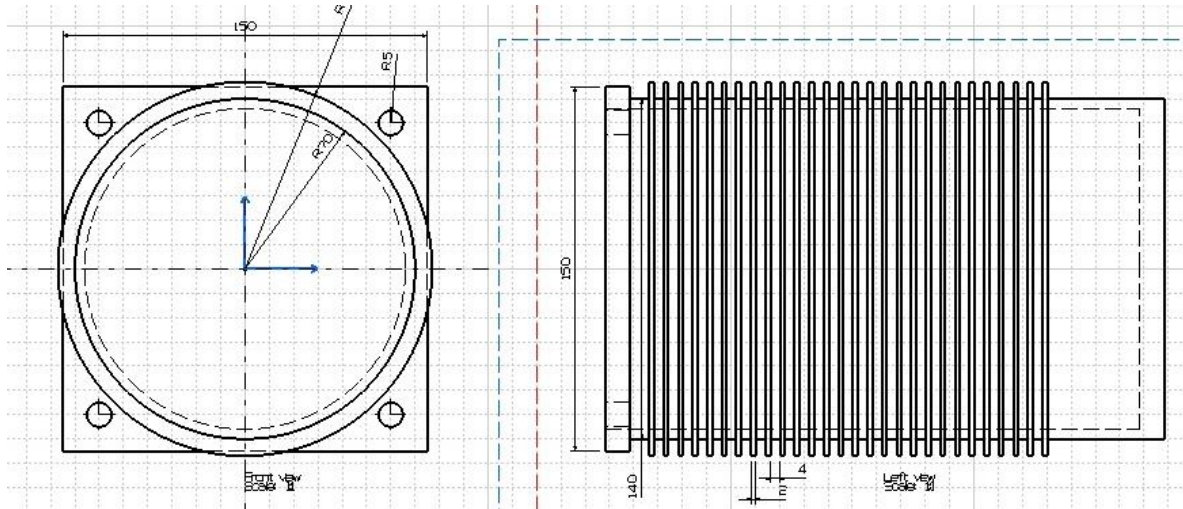
Multi-sections Surface





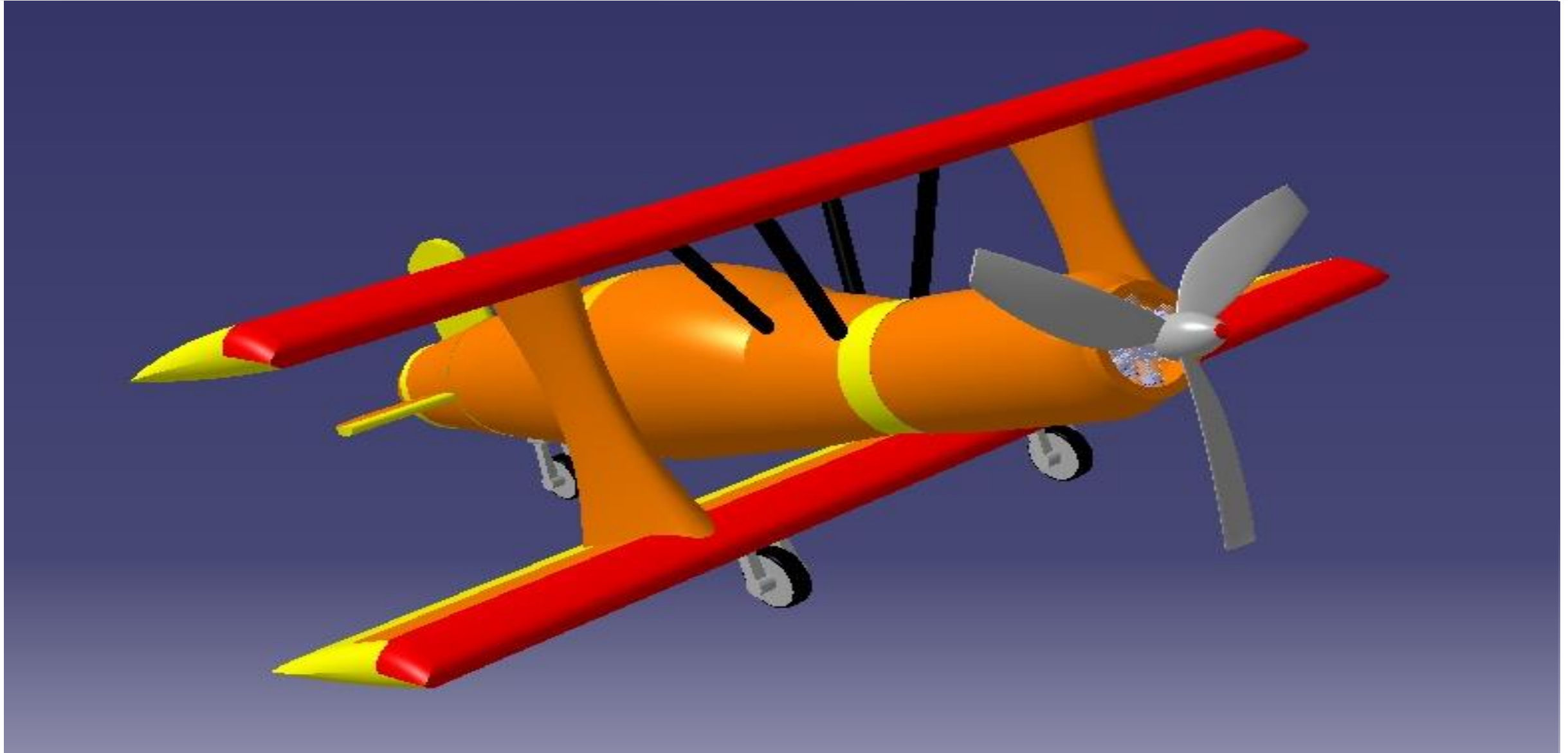
# DRAFTING

## ENGINE



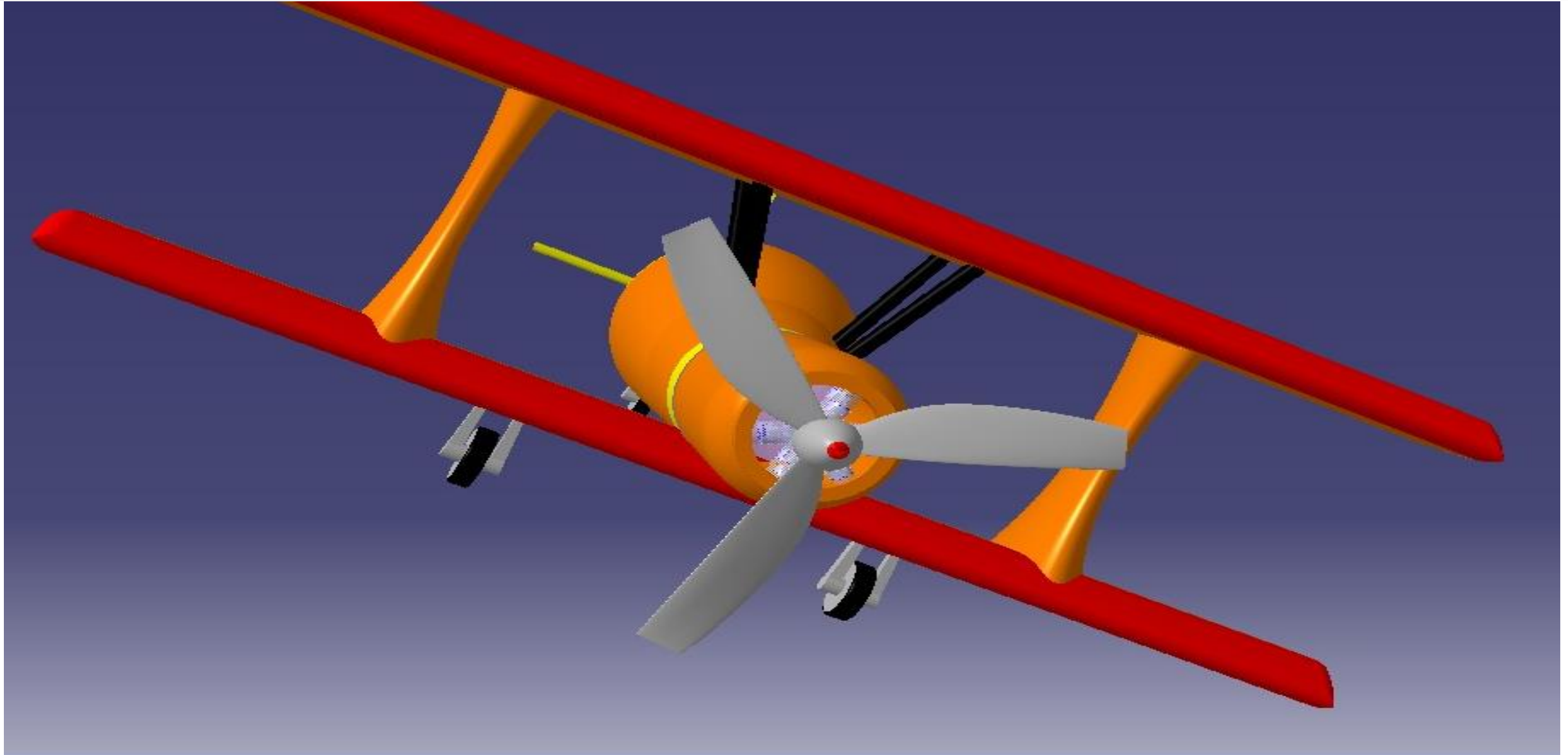
# PRODUCT

AIRPLANE



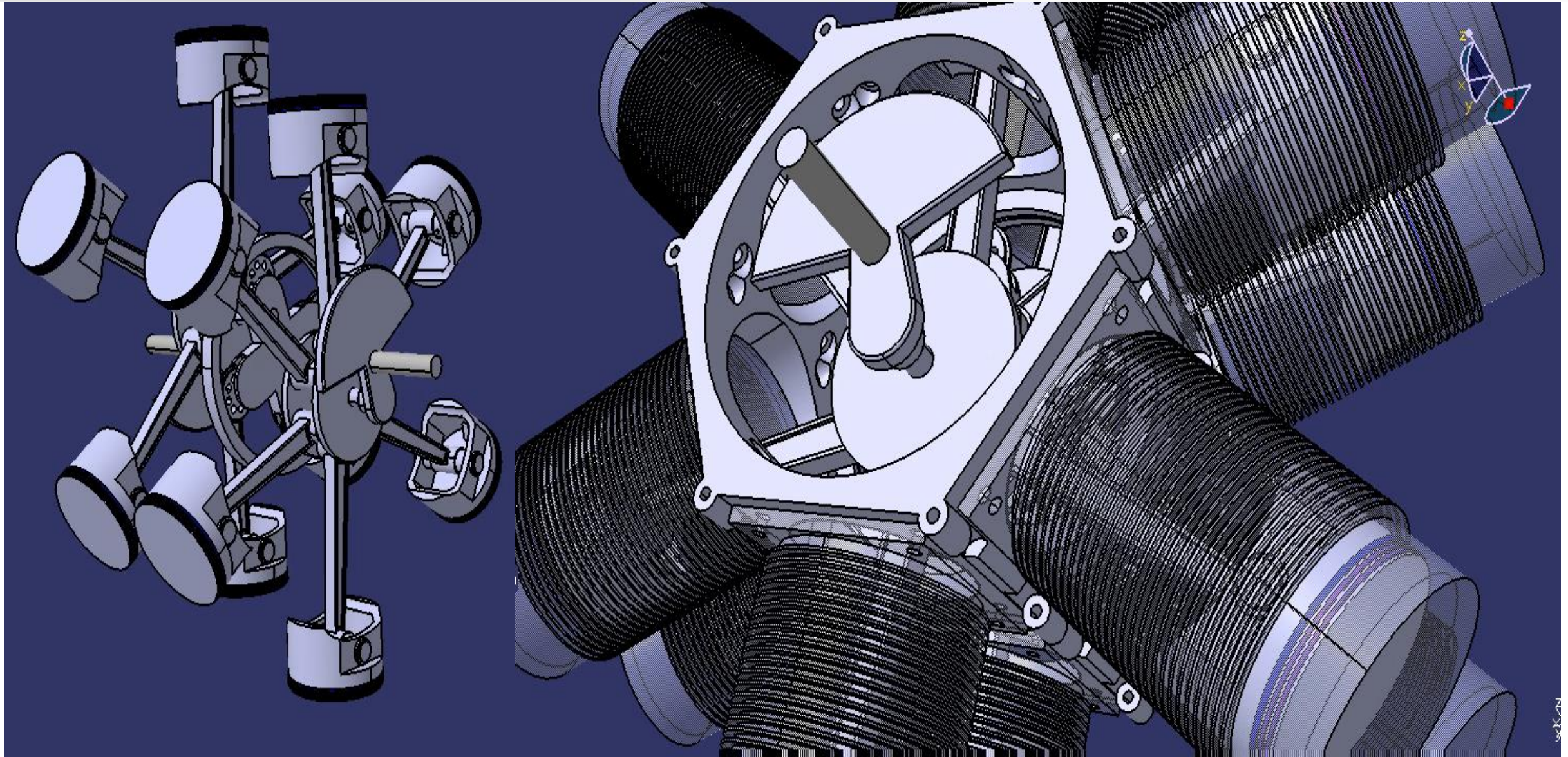
# PRODUCT

AIRPLANE



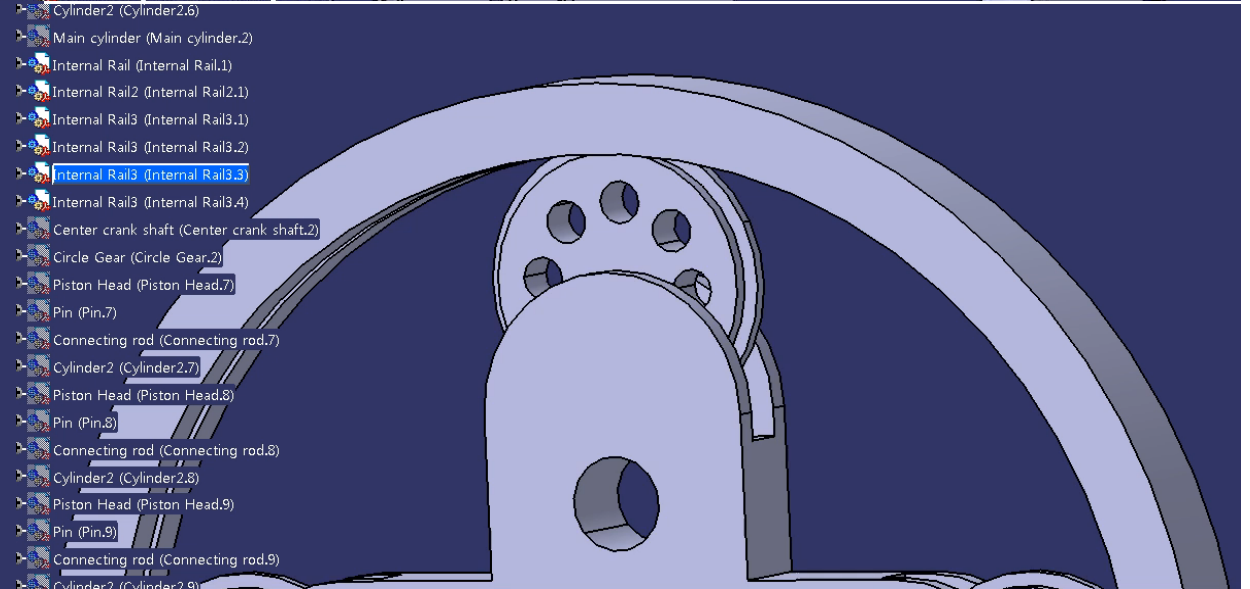
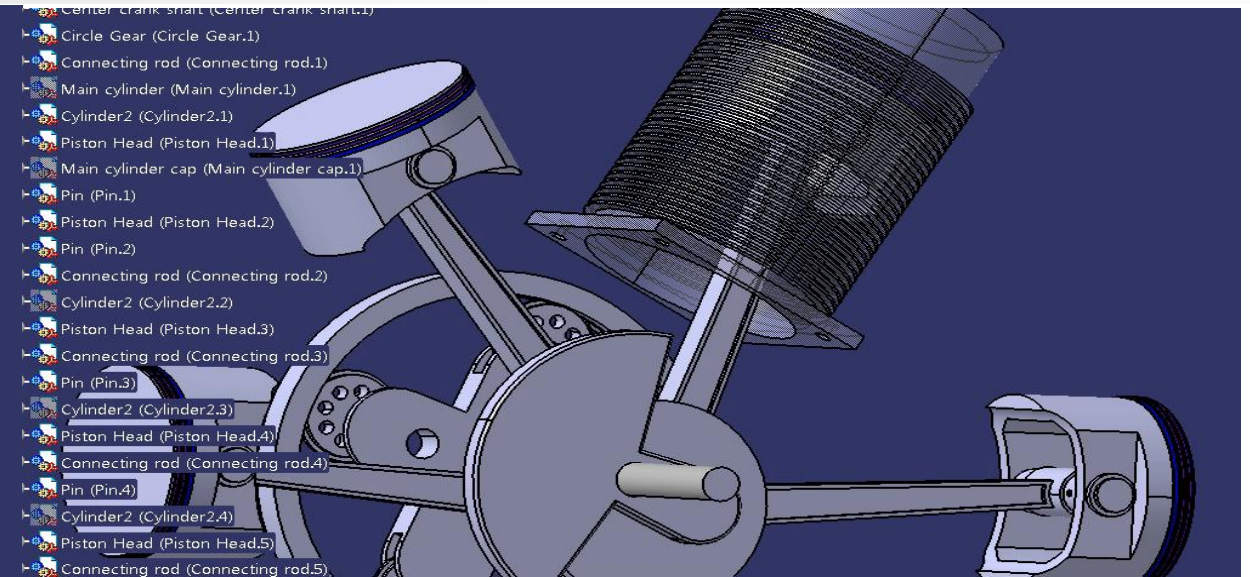
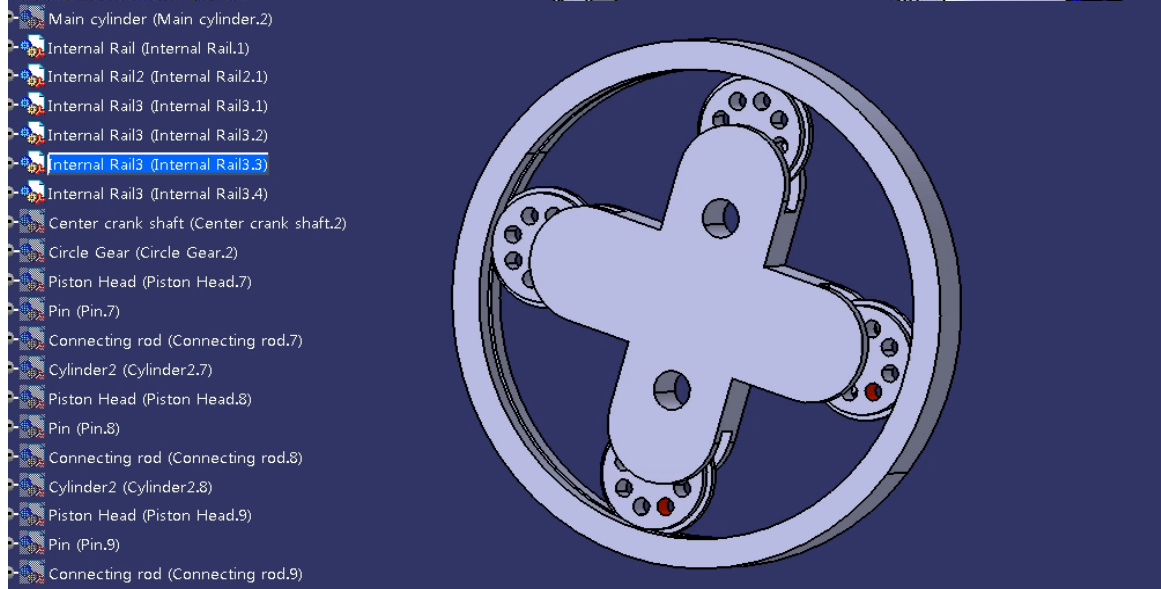
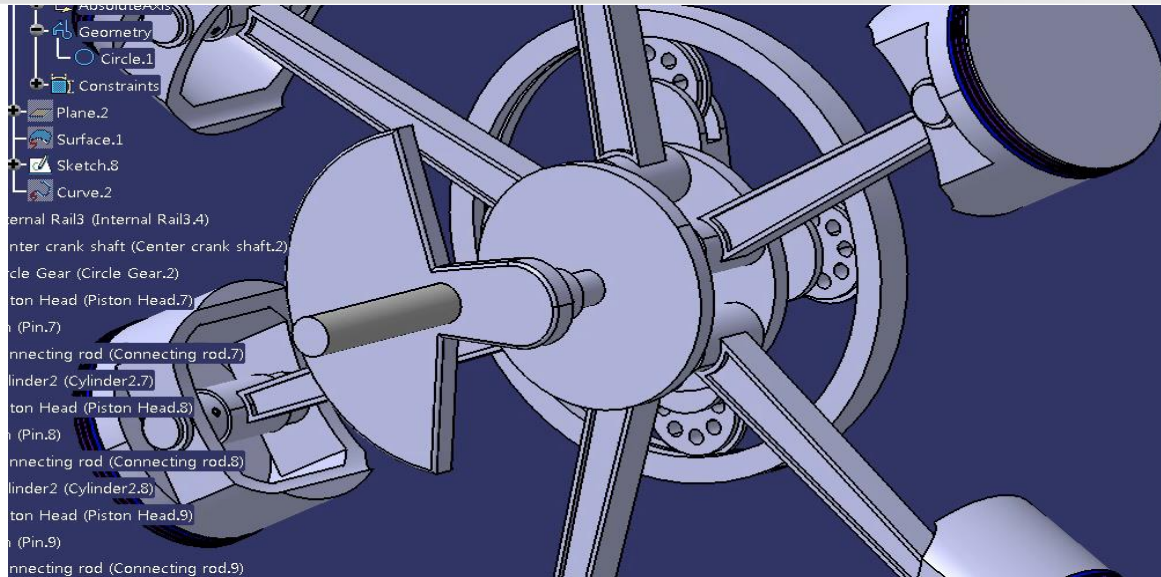
# KINEMATICS

## RADIAL ENGINE



# KINEMATICS

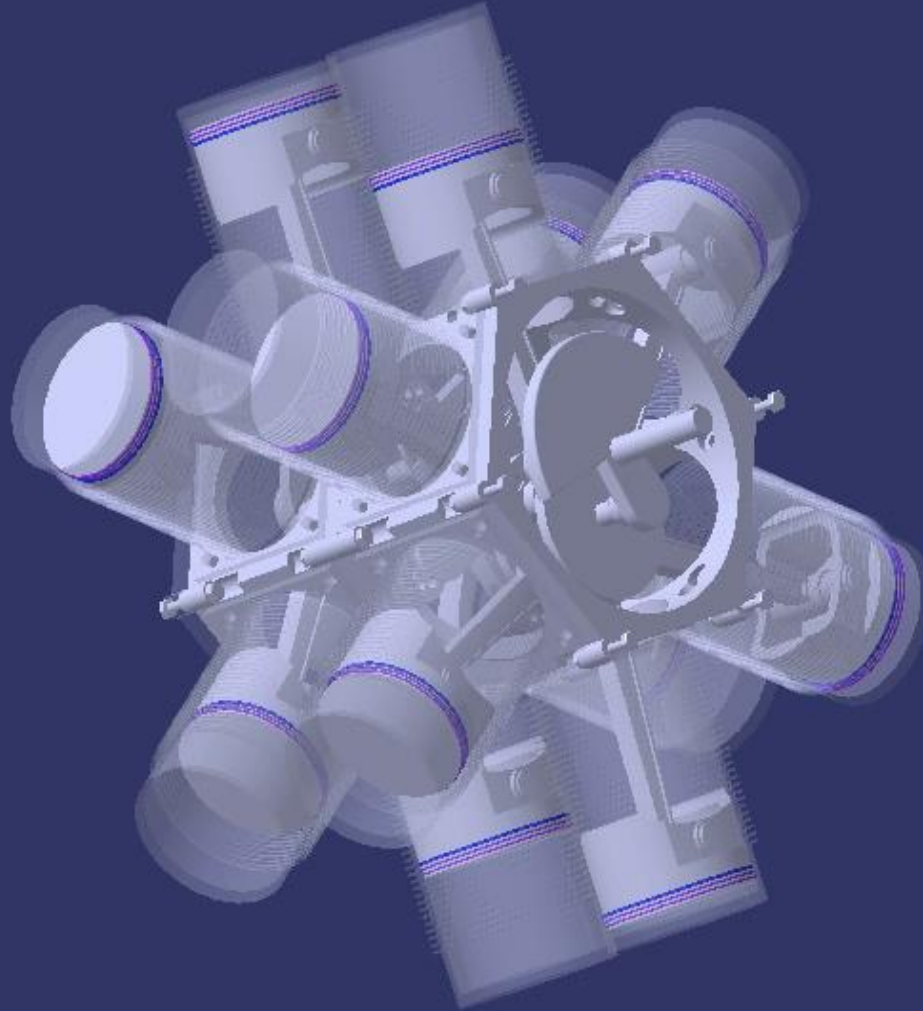
## RADIAL ENGINE



# KINEMATICS

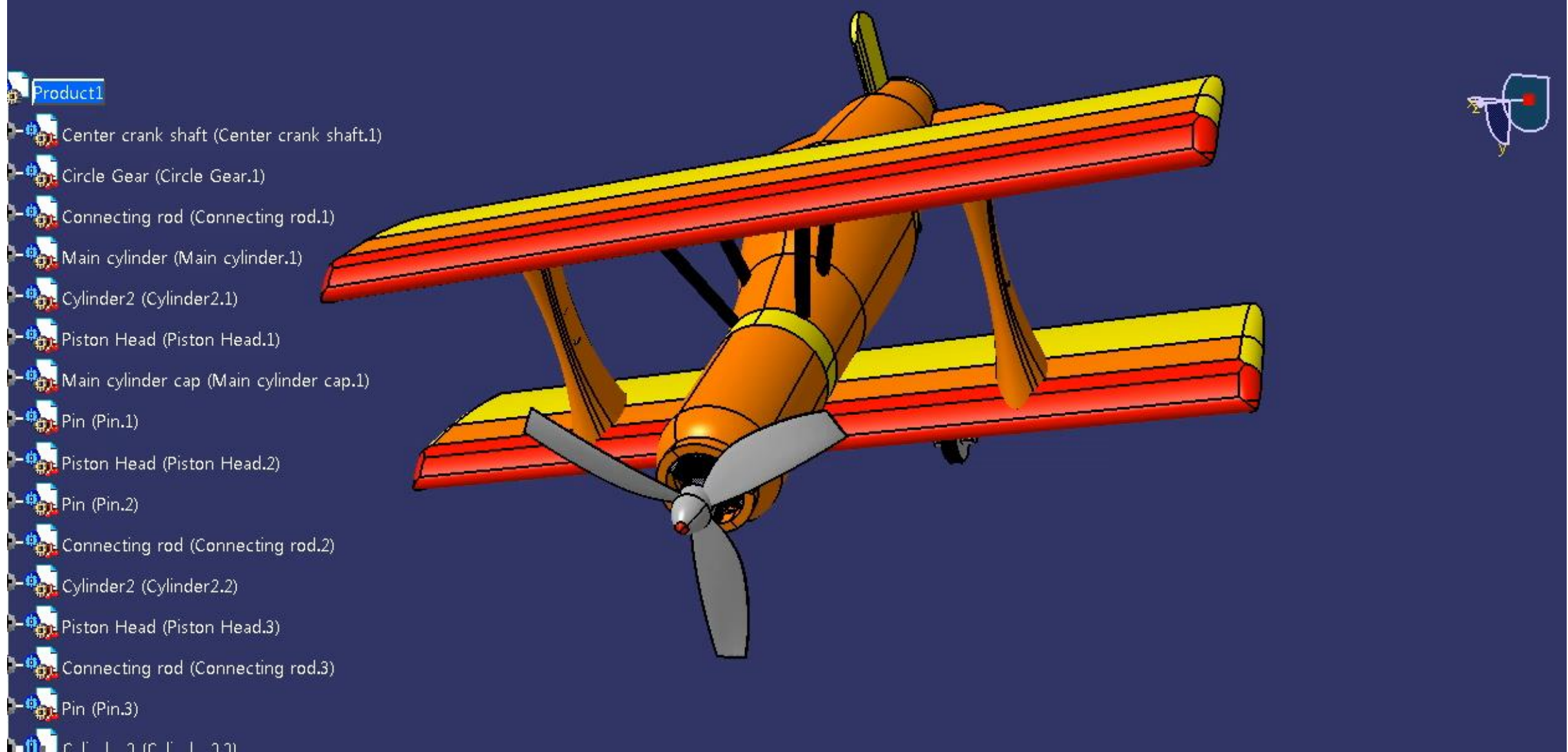
## RADIAL ENGINE

- Piston Head (Piston Head.10)
- Pin (Pin.10)
- Connecting rod (Connecting rod.10)
- Cylinder2 (Cylinder2.10)
- Piston Head (Piston Head.11)
- Pin (Pin.11)
- Connecting rod (Connecting rod.11)
- Cylinder2 (Cylinder2.11)
- Piston Head (Piston Head.12)
- Pin (Pin.12)
- Connecting rod (Connecting rod.12)
- Cylinder2 (Cylinder2.12)
- Main cylinder cap (Main cylinder cap.2)
- Bolt1 (Bolt1.3)
- Bolt cap1 (Bolt cap1.1)
- Bolt1 (Bolt1.1)
- Bolt1 (Bolt1.2)
- Bolt1 (Bolt1.4)
- Bolt1 (Bolt1.5)
- Bolt1 (Bolt1.6)
- Bolt cap1 (Bolt cap1.2)
- Bolt cap1 (Bolt cap1.3)



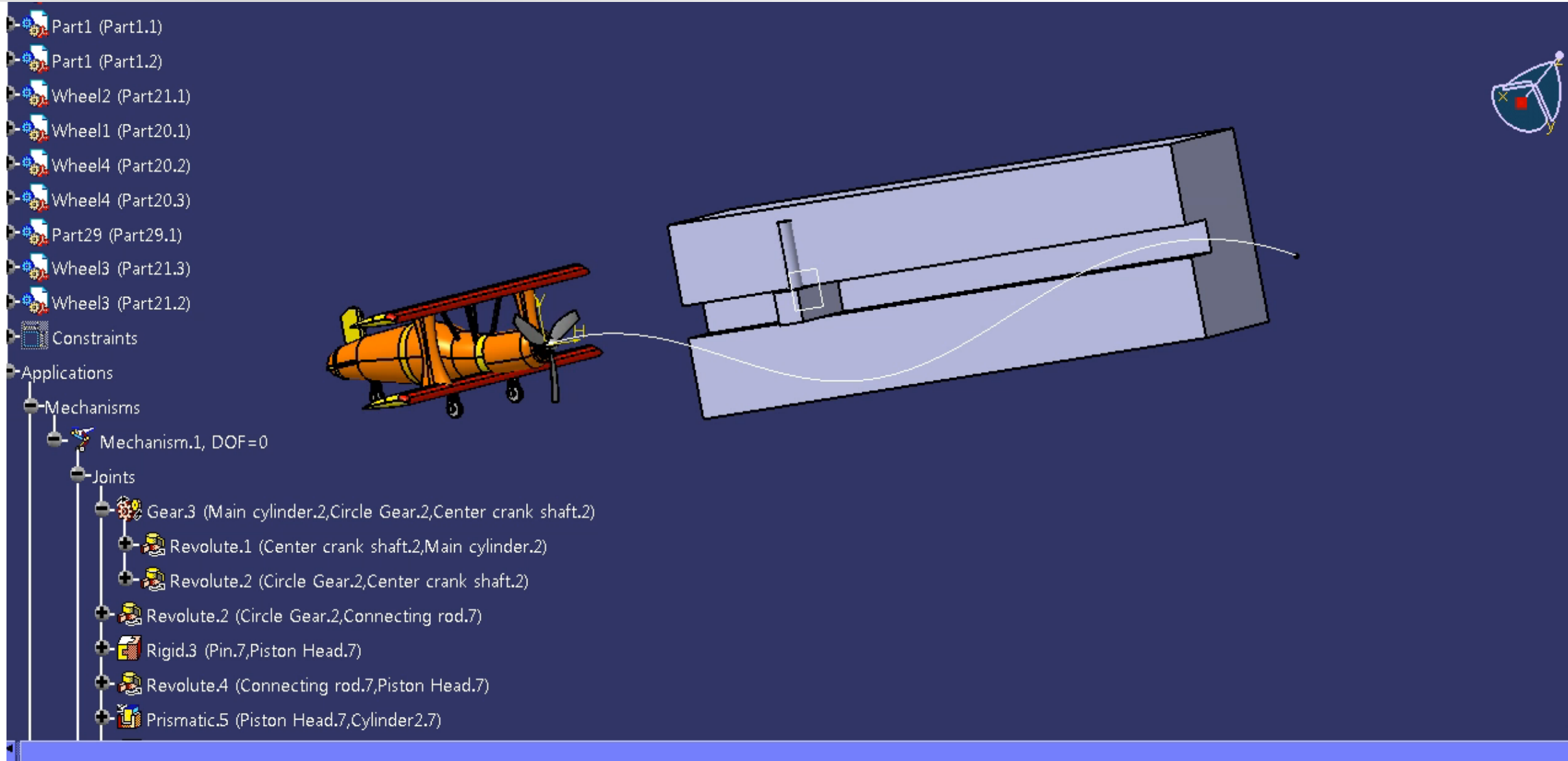
# KINEMATICS

## PROPELLER



# KINEMATICS

## AIRPLANE





# KINEMATICS

## AIRPLANE

The image displays a CAD software interface for a kinematic simulation of a biplane. The left sidebar shows a hierarchical tree of components and simulation settings:

- Rigid.98 (Part21.2,Wing2.1)
- Rigid.99 (Part29.1,Wing1.1)
- Point Curve.99 (Center crank shaft.2,Road1.1)
- Commands
- Fix Part ( Road1.1 )
- Laws
- Speeds-Accelerations
- Simulation
  - Simulation.8
  - Simulation.1

The main workspace features a 3D model of a yellow biplane with red wings and a white propeller. A small 2D schematic diagram of the mechanism is visible in the top right corner of the workspace.



**THE END**

**ANY QUESTION?**

