





СУПЕРКОМПЬЮТЕРНЫЙ ЦЕНТР
Южно-Уральского государственного университета

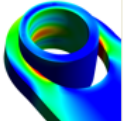
Построение геометрии в ANSYS Workbench

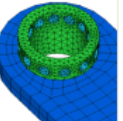
Start

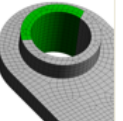
New

 Empty Project


 Geometry

 Simulation

 Advanced Meshing

 Finite Element Model

Open: Simulations



Tools

- Options...
- Addins...

Project Tasks

- Link to ANSYS APDL input...
- Link to a Process Instruction File...
- Link to ANSYS CDWRITE input...
- Link to NASTRAN bulk data...
- Link to ABAQUS input...

Create DesignModeler Geometry

- New geometry

Link to Active CAD Geometry

- Refresh

Link to Geometry File

- Browse...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Name	File	Size	Timestamp	Type
------	------	------	-----------	------

Unsaved Project				Workbench Project
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- New
- Open...
- Close Project
- Save
- Save As...**
- Save All
- Exit

Name	File	Size	Timestamp	Type
Unsaved Project				Workbench Project

Create Design Modeler Geometry

New geometry

Link to Active CAD Geometry

Refresh

Link to Geometry File

Browse...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Project Tasks

- Link to ANSYS APDL input...
- Link to a Process Instruction File...
- Link to ANSYS CDWRITE input...
- Link to NASTRAN bulk data...
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Create DesignModeler Geometry

- New geometry

Link to Active CAD Geometry

- Refresh

Link to Geometry File

- Browse...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Name	File	Size	Timestamp	Type
Unsaved Project				Workbench Project

Сохранить как

Папка: Мои документы

- Недавние документы
- Рабочий стол
- Мои документы
- Мой компьютер
- Сетевое окружение

My Virtual Machines
Мои рисунки
Моя музыка

Имя файла: Project1

Тип файла: Workbench Projects (*.wbdb)

Сохранить Отмена

Project Tasks

- Link to ANSYS APDL input...
- Link to a Process Instruction File...
- Link to ANSYS CDWRITE input...
- Link to NASTRAN bulk data...
- Link to ABAQUS input...

Create DesignModeler Geometry

- New geometry

Link to Active CAD Geometry

- Refresh

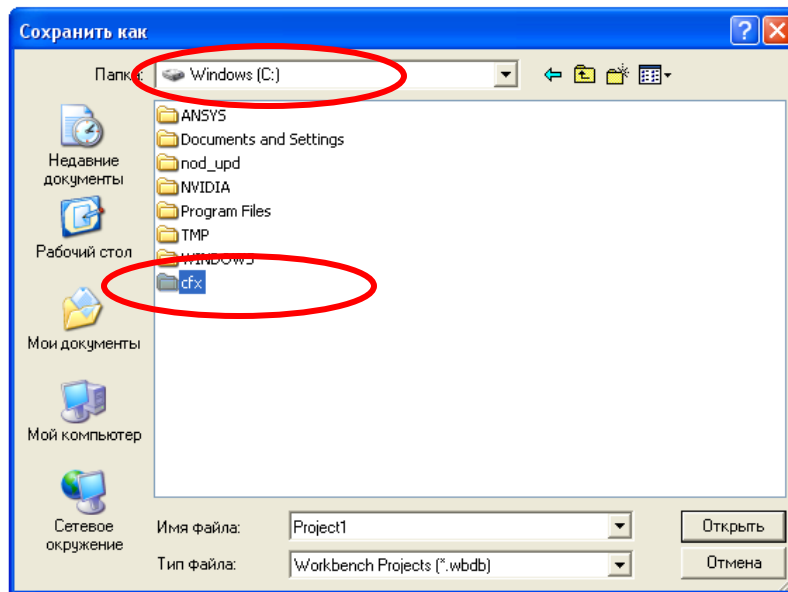
Link to Geometry File

- Browse...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Name	File	Size	Timestamp	Type
Unsaved Project				Workbench Project



Project Tasks

- Link to ANSYS APDL input...
- Link to a Process Instruction File...
- Link to ANSYS CDWRITE input...
- Link to NASTRAN bulk data...
- Link to ABAQUS input...

Create DesignModeler Geometry

- New geometry

Link to Active CAD Geometry

- Refresh

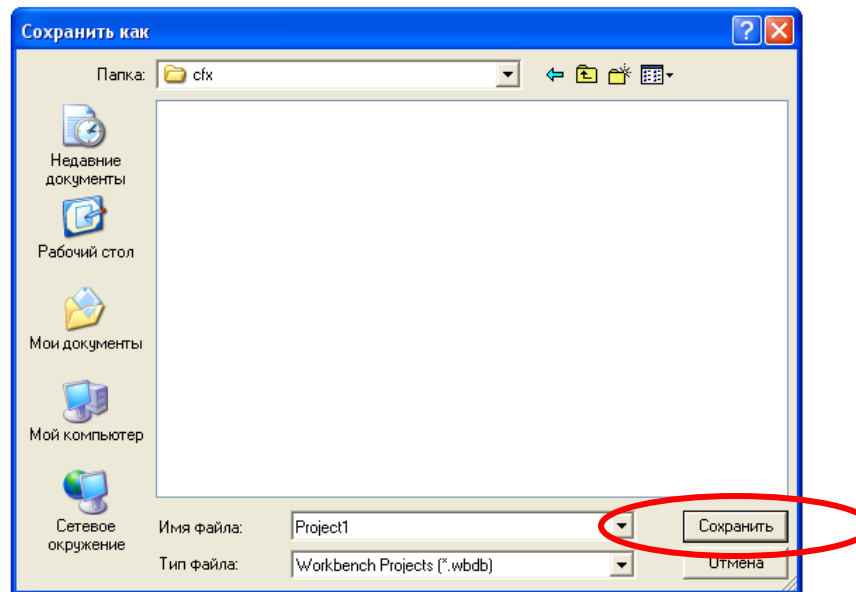
Link to Geometry File

- Browse...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Name	File	Size	Timestamp	Type
Unsaved Project				Workbench Project



Project Tasks

- Link to ANSYS APDL input...
- Link to a Process Instruction File...
- Link to ANSYS CDWRITE input...
- Link to NASTRAN bulk data...
- Link to ABAQUS input...

Create DesignModeler Geometry

- New geometry

Link to Active CAD Geometry

- Refresh

Link to Geometry File

- Browse...

Edit Item






- Open containing folder...

Advanced CFD

- New Simulation
- Start CFX-Pre
- Start CFX-Solver
- Start CFX-Post

Name	File	Size	Timestamp	Type
Project	Project.wbdb	539 B	17.06.2009 18:41:04	Workbench Project

Project Tasks

-  Link to ANSYS APDL input...
-  Link to a Process Instruction File...
-  Link to ANSYS CDWRITE input...
-  Link to NASTRAN bulk data...
-  Link to ABAQUS input...

Create DesignModeler Geometry

-  [New geometry](#)


Link to Active CAD Geometry

-  Refresh

Link to Geometry File



-  Browse...

Edit Item

-  Open containing folder...

Advanced CFD

-  New Simulation
-  Start CFX-Pre
-  Start CFX-Solver
-  Start CFX-Post

Name	File	Size	Timestamp	Type
 Project	 Project.wbdb	539 B	17.06.2009 18:41:04	Workbench Project



Tree Outline

Graphics

Sketching Modeling

Details View

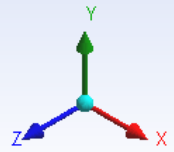
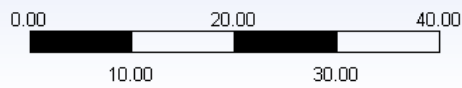
ANSYS Workbench

Select desired length unit:

- Meter
- Centimeter
- Millimeter
- Micrometer
- Inch
- Foot

Always use default

OK





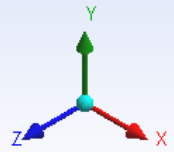
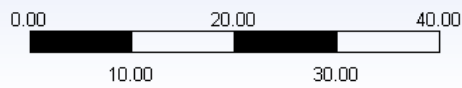
ANSYS Workbench

Select desired length unit:

- Meter
- Centimeter
- Millimeter
- Micrometer
- Inch
- Foot

Always use default

OK



Tree Outline

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] 0 Parts, 0 Bodies

Sketching Modeling

Model View Print Preview

Graphics

0.000 5.000 10.000 15.000 20.000 (m)

Tree Outline

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] 0 Parts, 0 Bodies

Graphics

ANSYS
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0.000 5.000 10.000 15.000 20.000 (m)

Model View Print Preview

Sketching Modeling

Details View

Details of ZXPlane	
Plane	ZXPlane
Sketches	0
Export Coordinate System?	No

Tree Outline

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] 0 Parts, 0 Bodies

Graphics

ANSYS
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0.000 5.000 10.000 15.000 20.000 (m)

Sketching Modeling

Details View

Details of ZXPlane

Plane	ZXPlane
Sketches	0
Export Coordinate System?	No

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

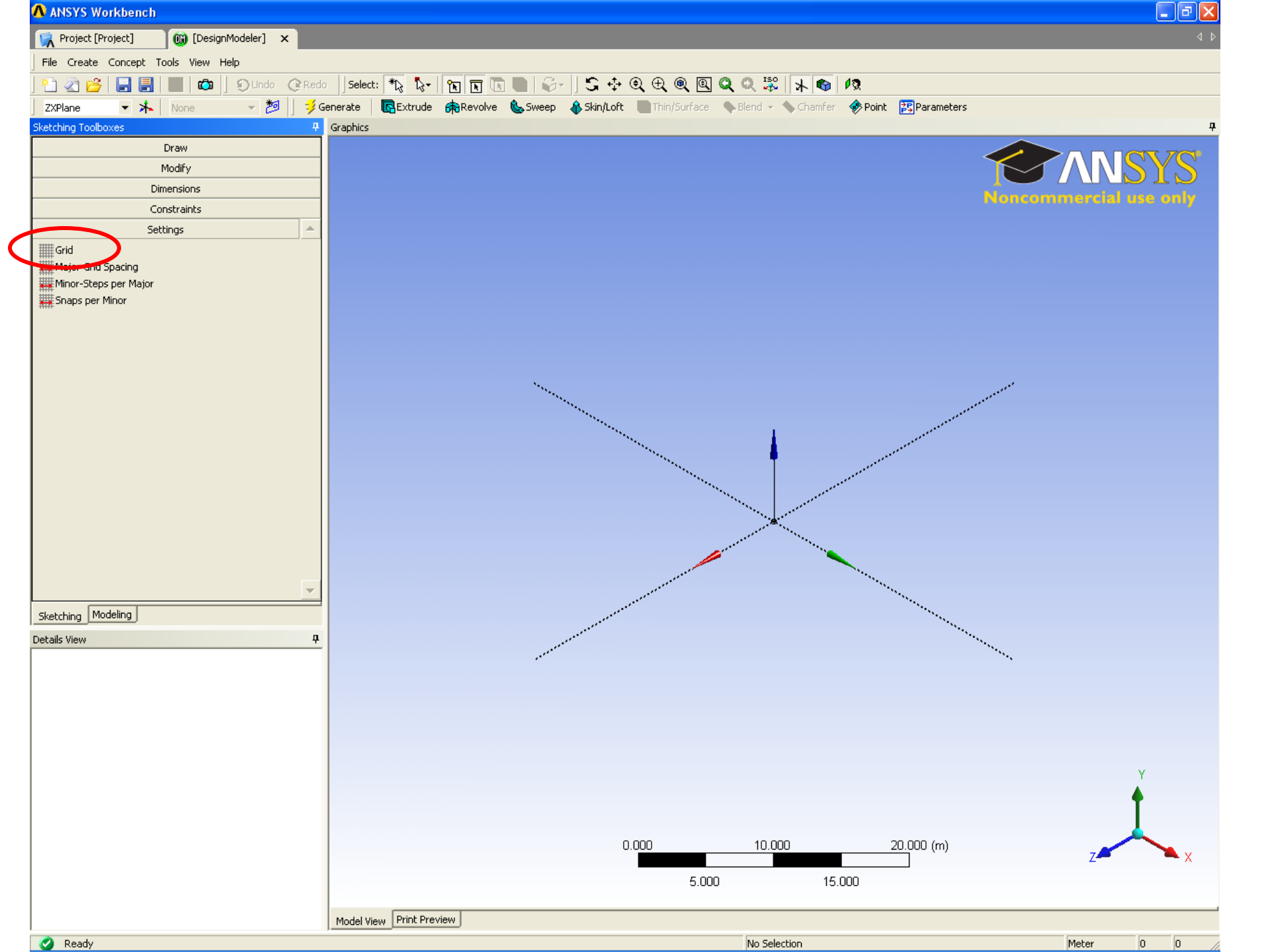
Dimensions

Constraints

Settings

Graphics

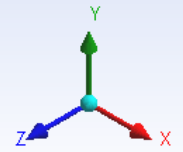
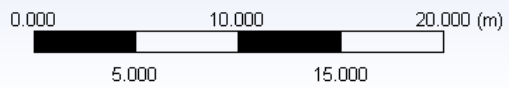
Model View Print Preview



- Draw
- Modify
- Dimensions
- Constraints
- Settings
 - Grid**
 - Major and Spacing
 - Minor-Steps per Major
 - Snaps per Minor

Sketching Modeling

Details View

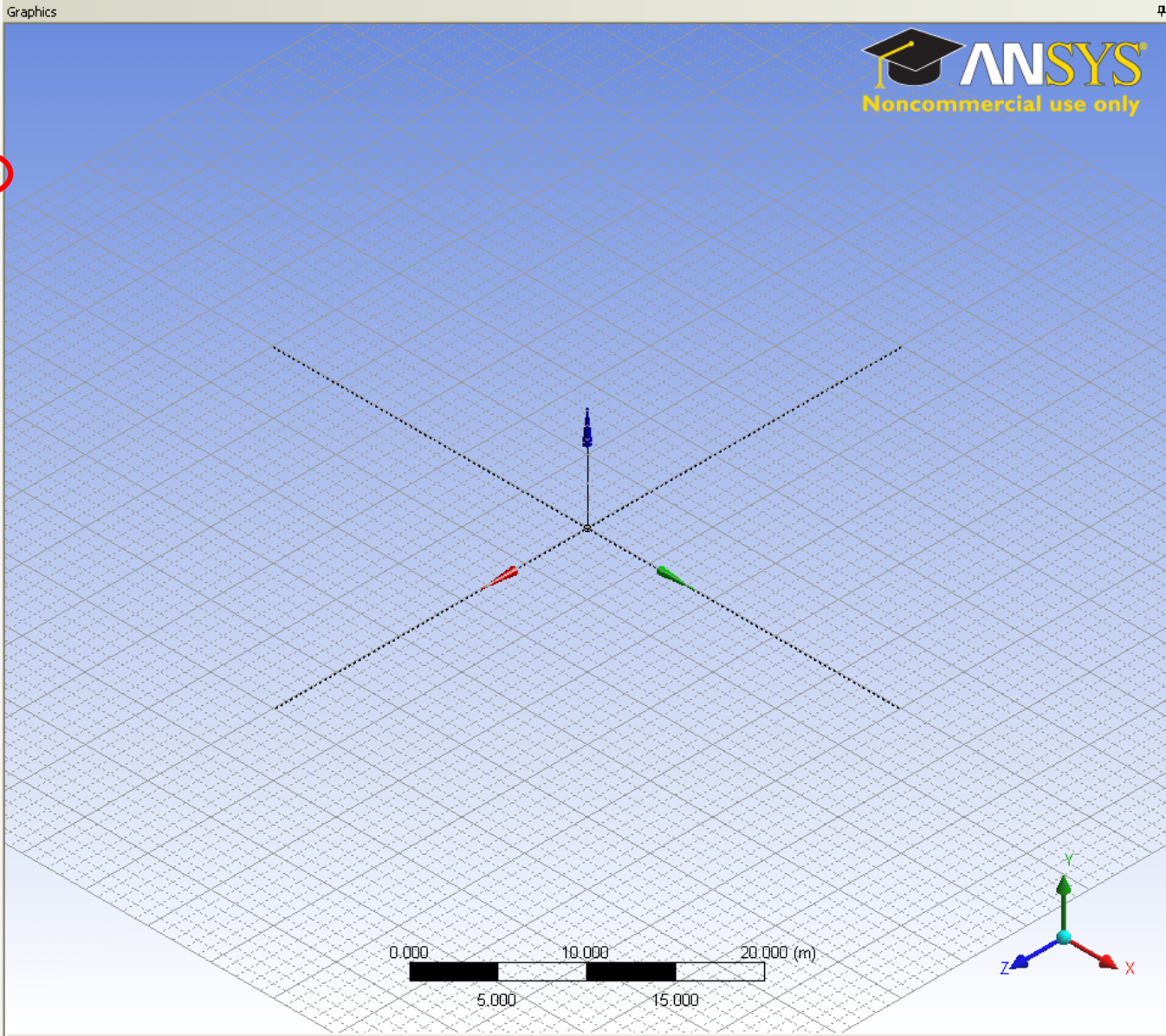


Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid Show in 2D

- Major Grid Spacing
- Minor-Steps per Major
- Snaps per Minor

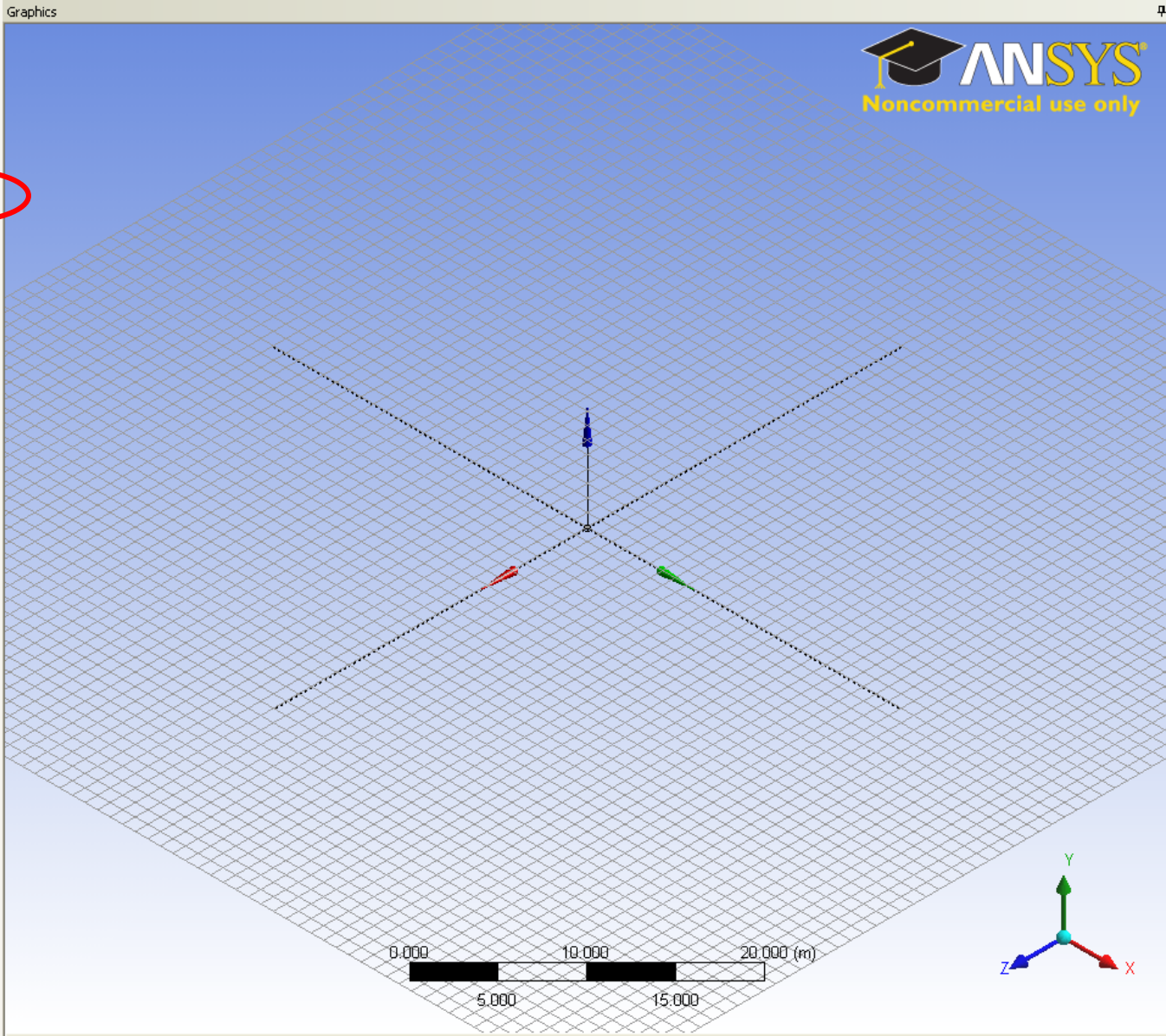


Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid

- Major Grid Spacing: 1, m
- Minor-Steps per Major
- Snaps per Minor

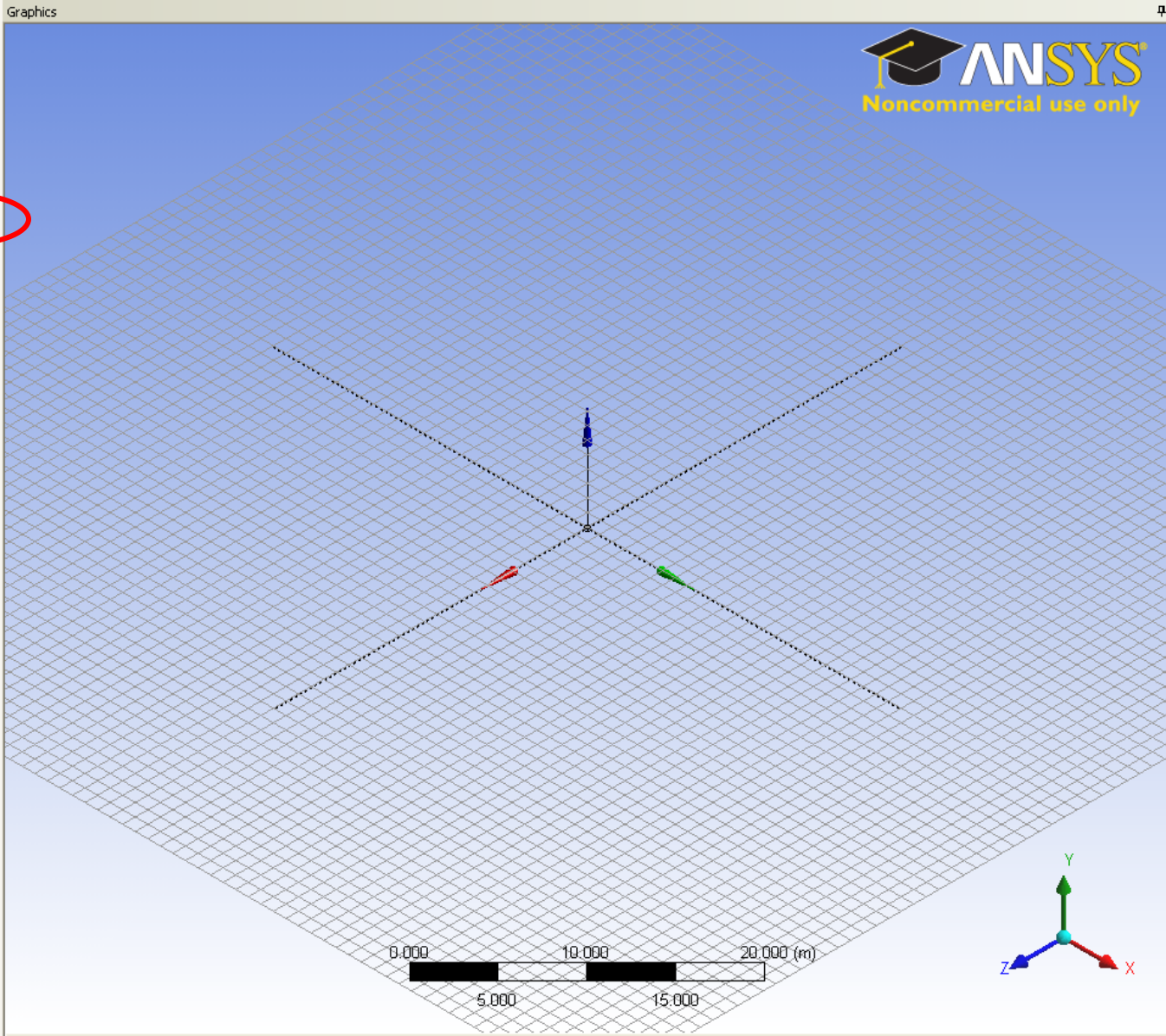


Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid

- Major Grid Spacing
- Minor-Steps per Major
- Snaps per Minor



Sketching Toolboxes

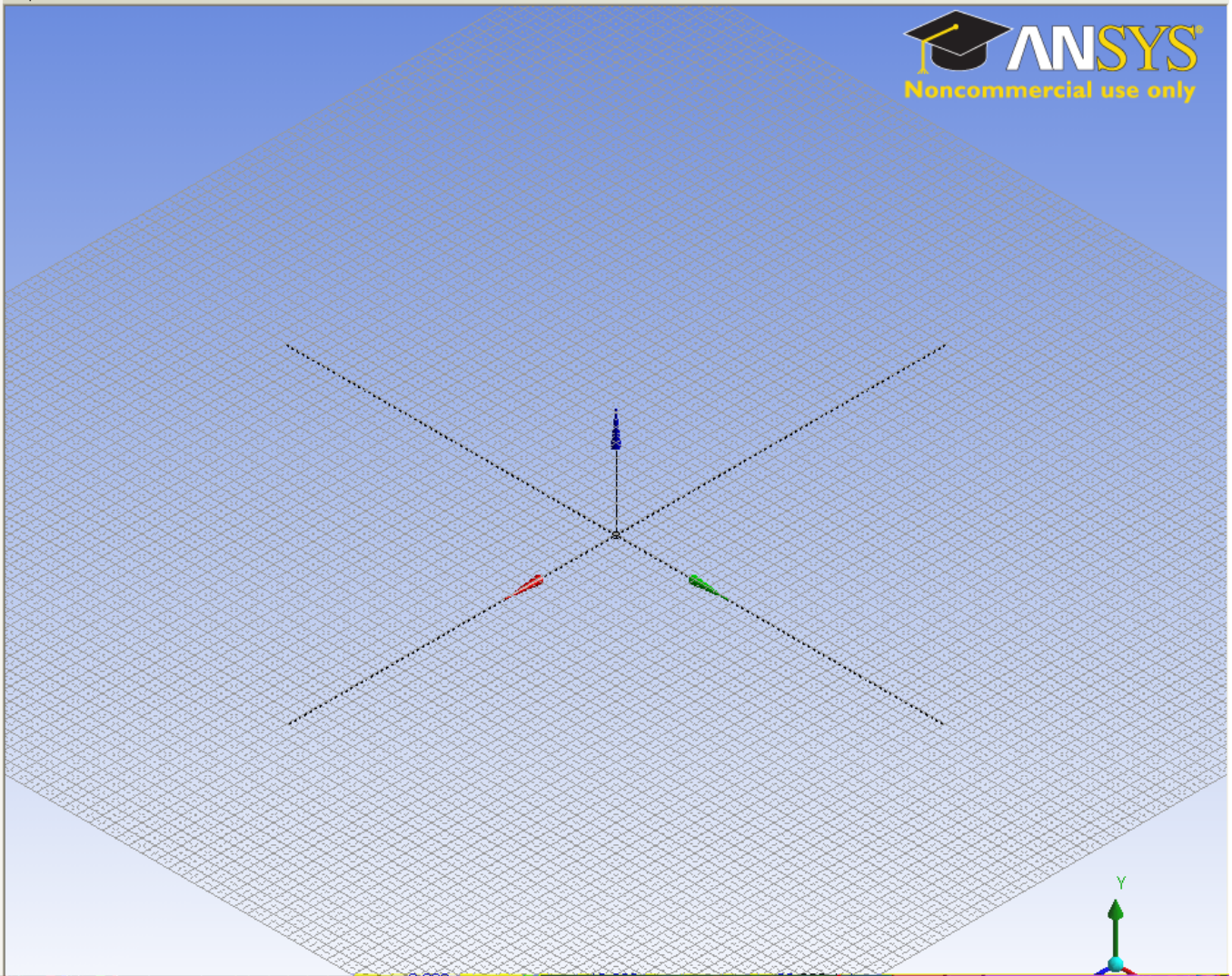
- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid

- Major Grid Spacing
- Minor-Steps per Major: 2
- Snaps per Minor

Sketching Modeling

Details View



ANSYS Workbench interface footer showing various tool icons and status information.

Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

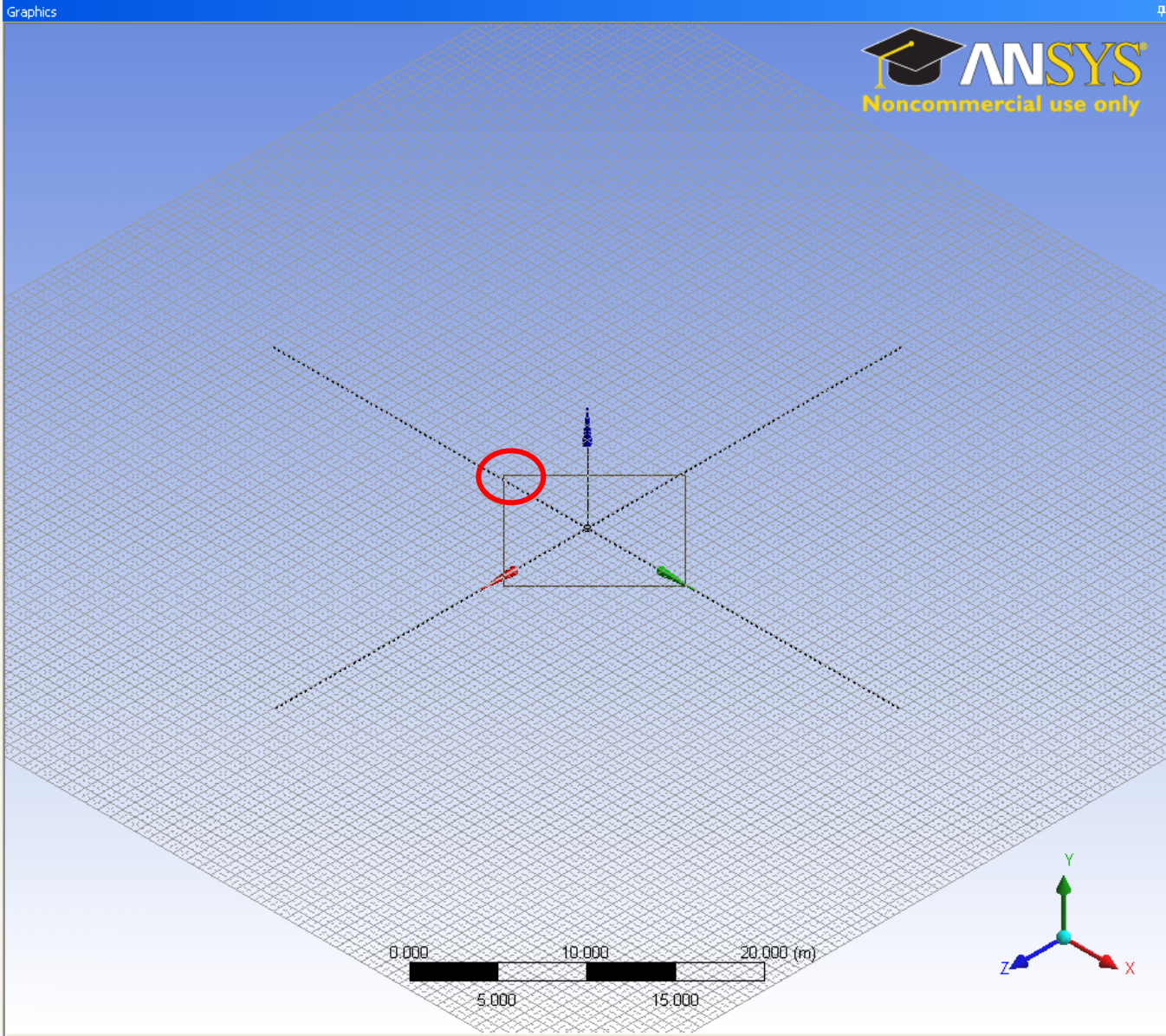
Grid

- Major Grid Spacing
- Minor-Steps per Major: 2
- Snaps per Minor

Sketching Modeling

Details View

Model View Print Preview



Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid

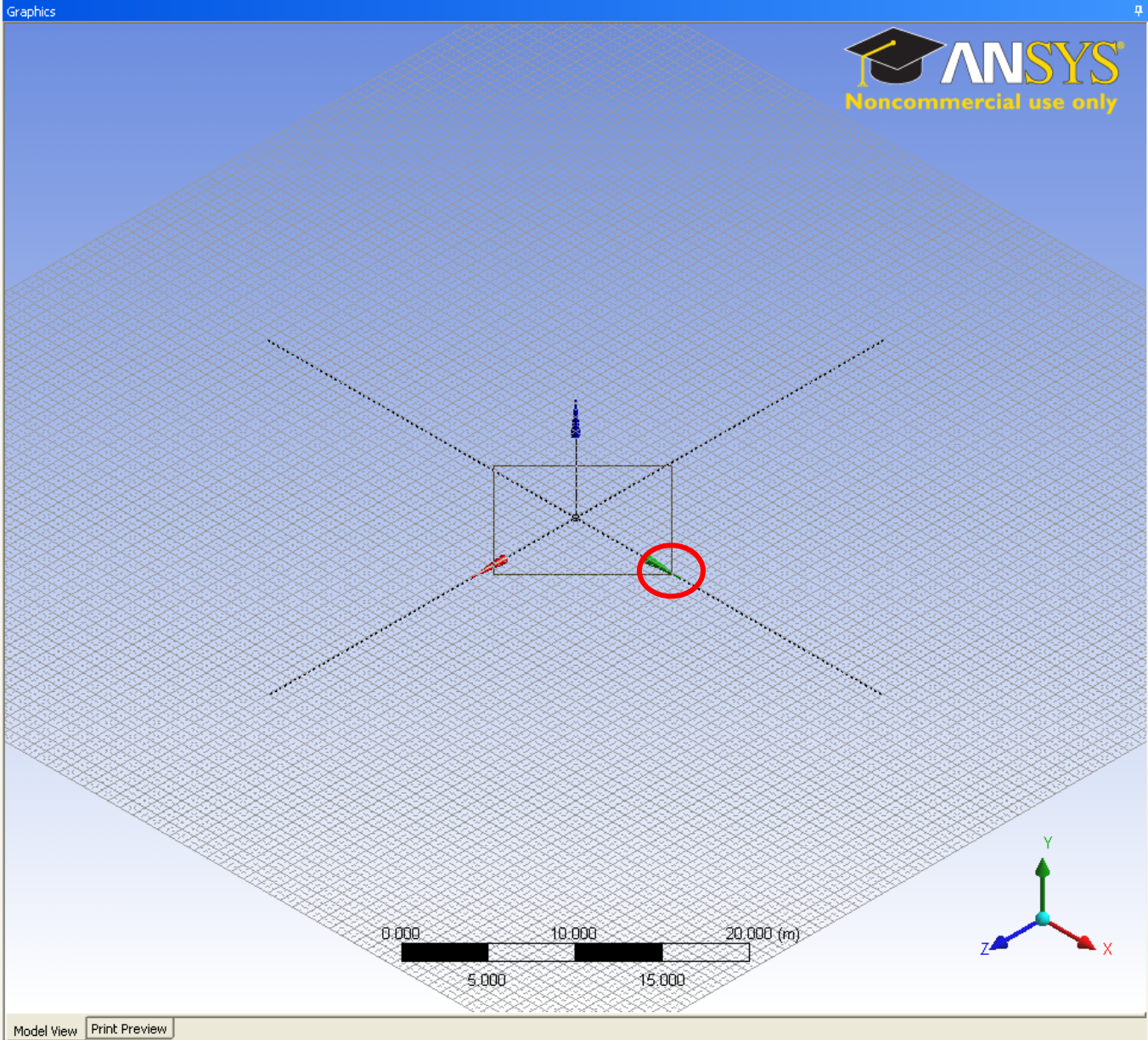

- Major Grid Spacing
- Minor-Steps per Major: 2
- Snaps per Minor

Sketching Modeling

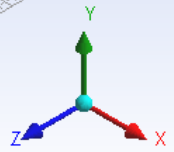
Details View

Model View Print Preview

Graphics



0.000 5.000 10.000 15.000 20.000 (m)



Sketching Toolboxes

- Draw
- Modify
- Dimensions
- Constraints
- Settings

Grid

- Major Grid Spacing
- Minor-Steps per Major: 2
- Snaps per Minor

Graphics

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0.000 0.750 1.500 2.250 3.000 (m)

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions


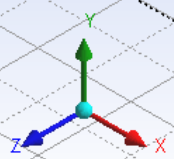

Constraints

Settings

Sketching Modeling

Details View

Graphics



The main workspace shows a blue grid with two dashed black lines forming a V-shape. A vertical blue line is drawn from the intersection of the dashed lines upwards. A red line segment is drawn along the left dashed line, and a green line segment is drawn along the right dashed line.

Model View Print Preview

Draw [arrow icon]

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline**
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify [arrow icon]

Dimensions

Constraints

Settings

[Empty area for details view]

Graphics

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

Details View

Graphics

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

Details View

Graphics

Open End

Closed End

Back

Selection Filter

Isometric View

ISO Set

ISO Restore Default

Zoom to Fit

Cursor Mode

View

Look At

Generate

0.750 1.500 2.250 3.000 (m)

Model View Print Preview

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

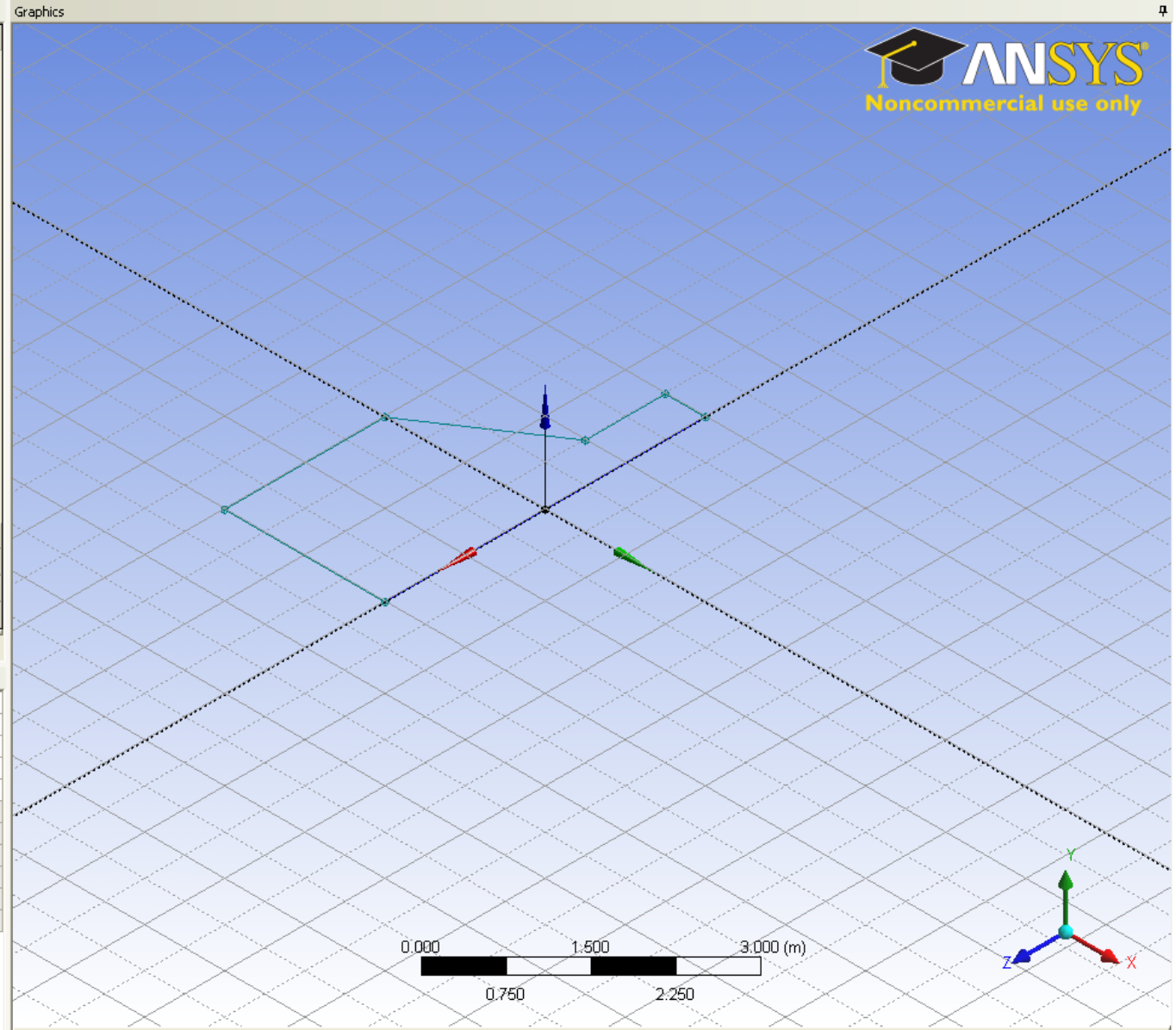
Details View

Details of Sketch1

Sketch	Sketch1
Sketch Visibility	Show Sketch
Show Constraints?	No

Edges: 6

Line	Ln7
Line	Ln8
Line	Ln9
Line	Ln10
Line	Ln11
Line	Ln12



Model View Print Preview

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

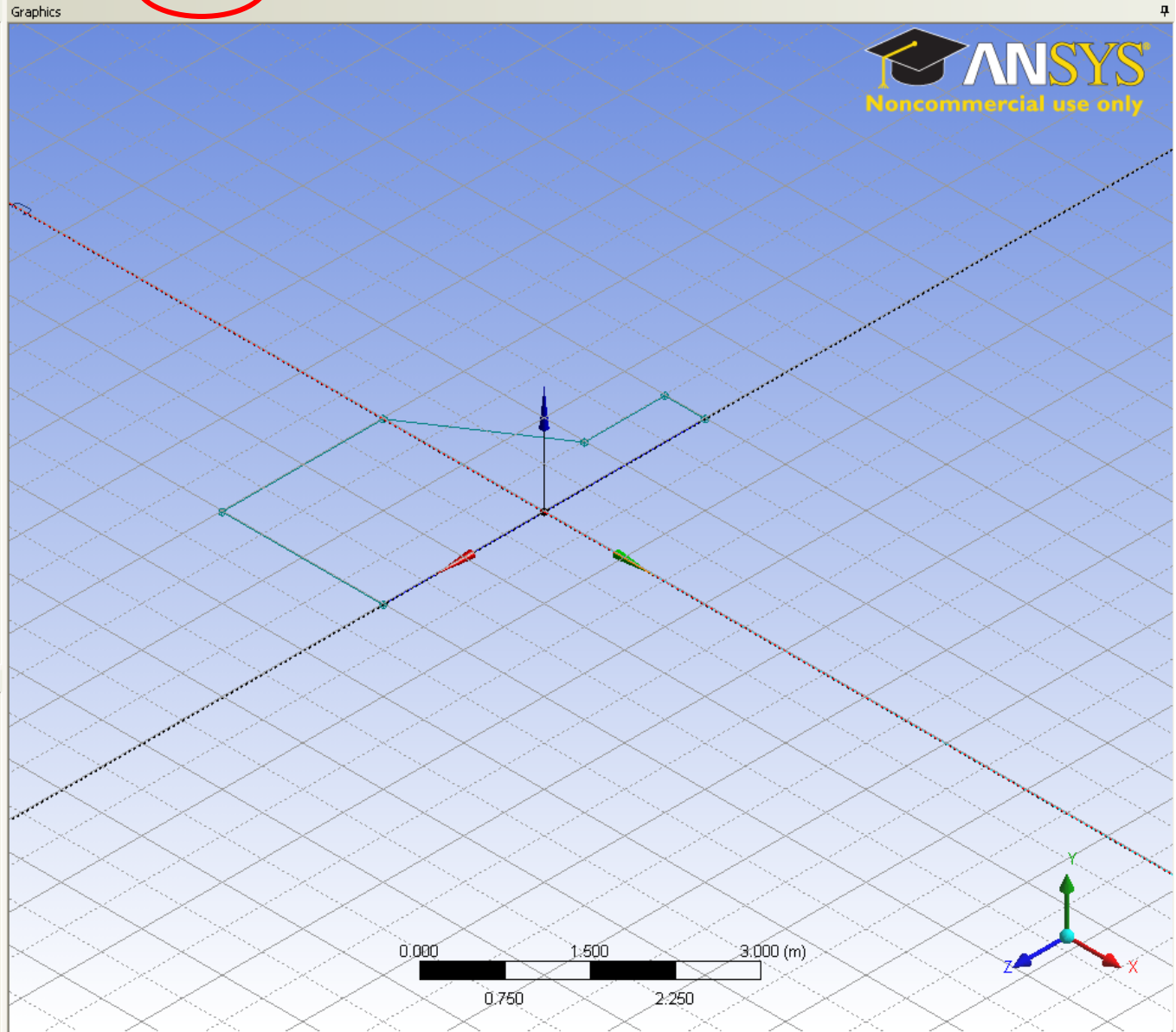
Sketching Modeling

Details of Sketch1

Sketch	Sketch1
Sketch Visibility	Show Sketch
Show Constraints?	No

Edges: 6

Line	Ln7
Line	Ln8
Line	Ln9
Line	Ln10
Line	Ln11
Line	Ln12



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 0 Parts, 0 Bodies

Graphics

0.000 1.500 3.000 (m)

0.750 2.250

Details of Revolve1

Revolve	Revolve1	
Base Object	Sketch1	
Axis	Apply	Cancel
Operation	Add Material	
Direction	Normal	
<input type="checkbox"/> FD1, Angle (>0)	360 °	
As Thin/Surface?	No	
Merge Topology?	Yes	

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 0 Parts, 0 Bodies

Graphics

ANSYS
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Sketching Modeling

Details View

Details of Revolve1

Revolve	Revolve1
Base Object	Sketch1
Axis	Apply Cancel
Operation	Add Material
Direction	Normal
<input type="checkbox"/> FD1, Angle (>0)	360 °
As Thin/Surface?	No
Merge Topology?	Yes

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 0 Parts, 0 Bodies

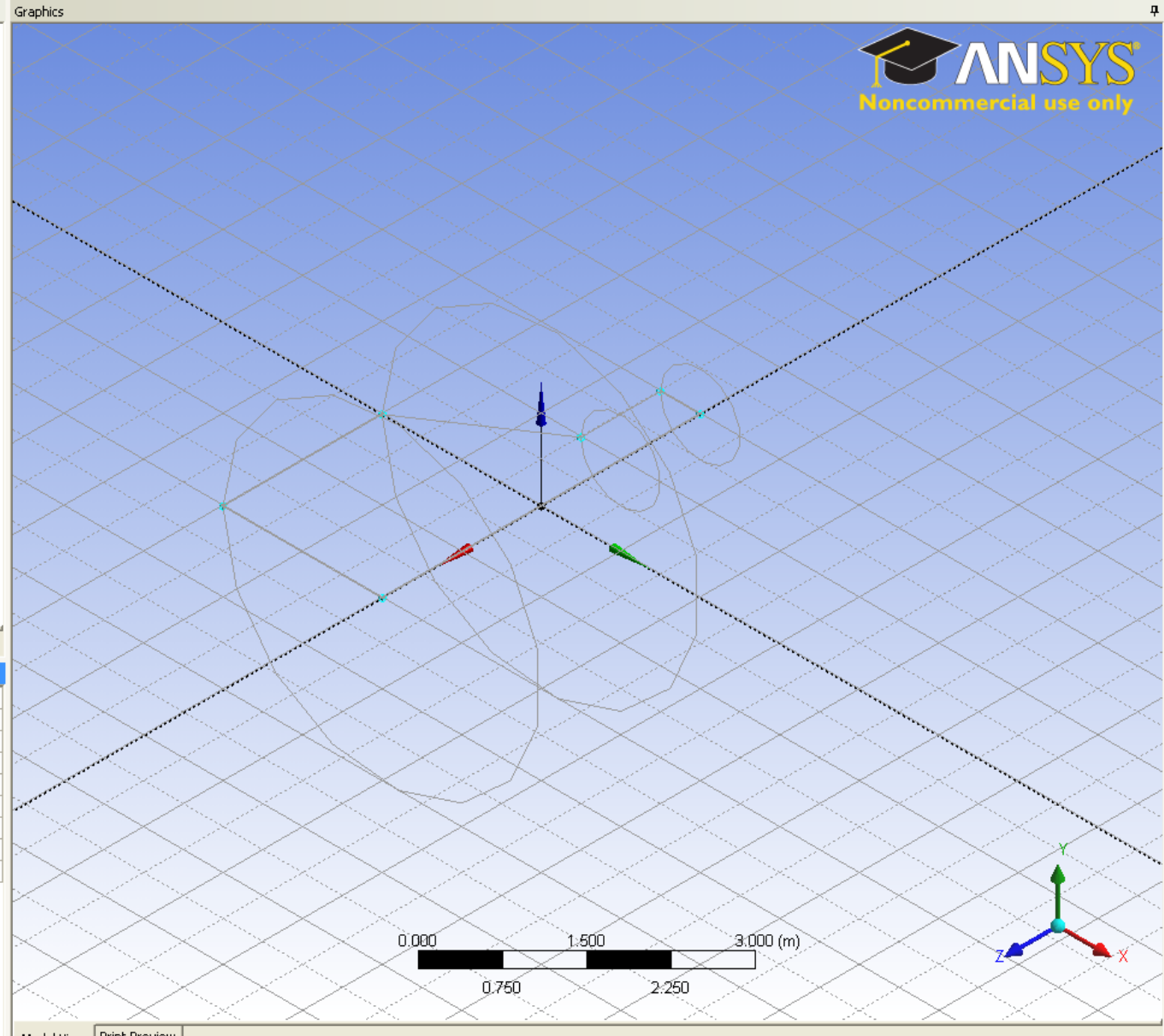
Graphics

Details of Revolve1

Revolve	Revolve1
Base Object	Sketch1
Axis	Apply Cancel
Operation	Add Material
Direction	Normal
<input type="checkbox"/> FD1, Angle (>0)	360 °
As Thin/Surface?	No
Merge Topology?	Yes

Tree Outline

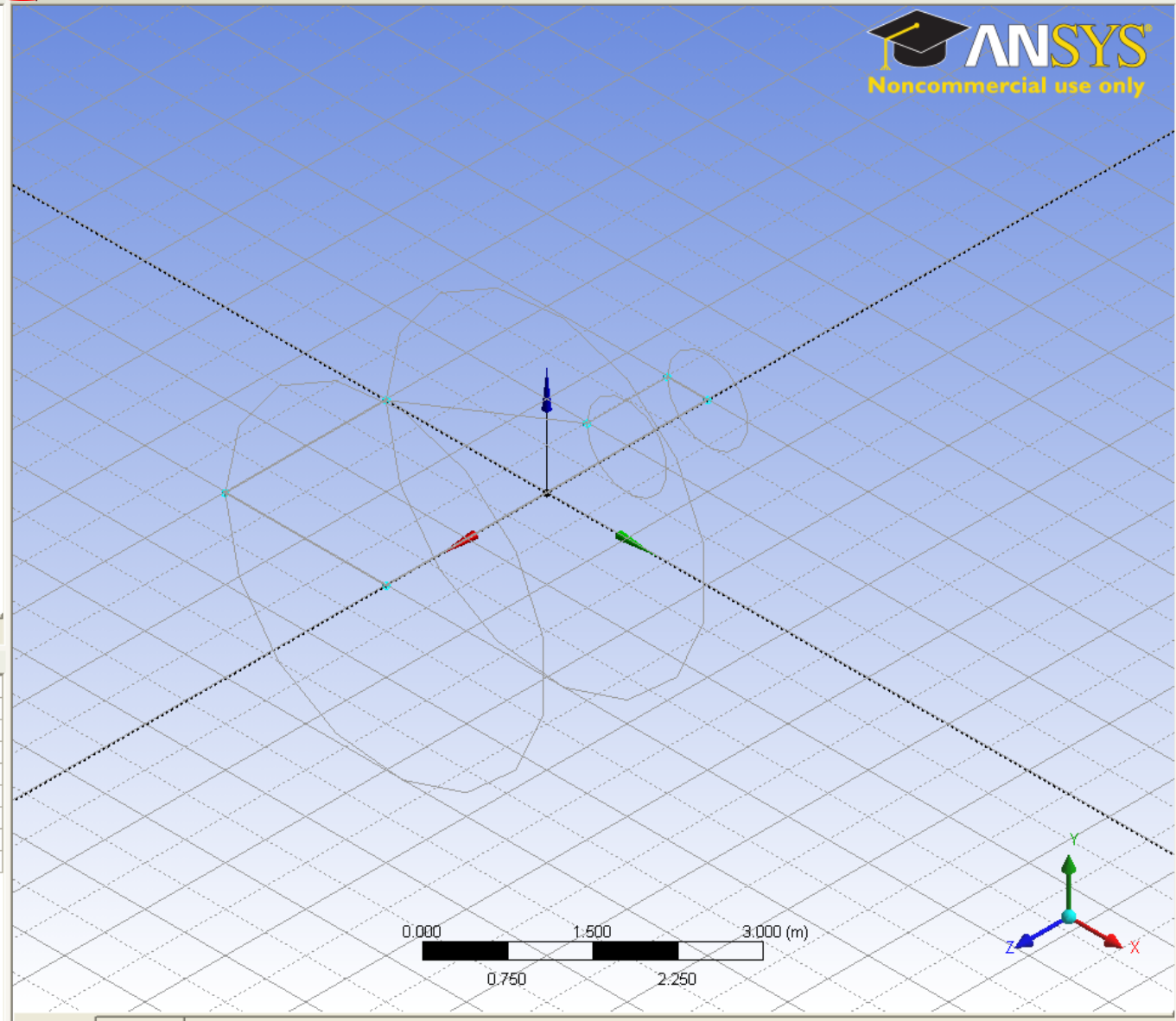
- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 0 Parts, 0 Bodies



Details of Revolve1	
Revolve	Revolve1
Base Object	Sketch1
Axis	Selected
Operation	Add Material
Direction	Normal
<input type="checkbox"/> FD1, Angle (>0)	360 °
As Thin/Surface?	No
Merge Topology?	Yes



- Tree Outline
- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 0 Parts, 0 Bodies

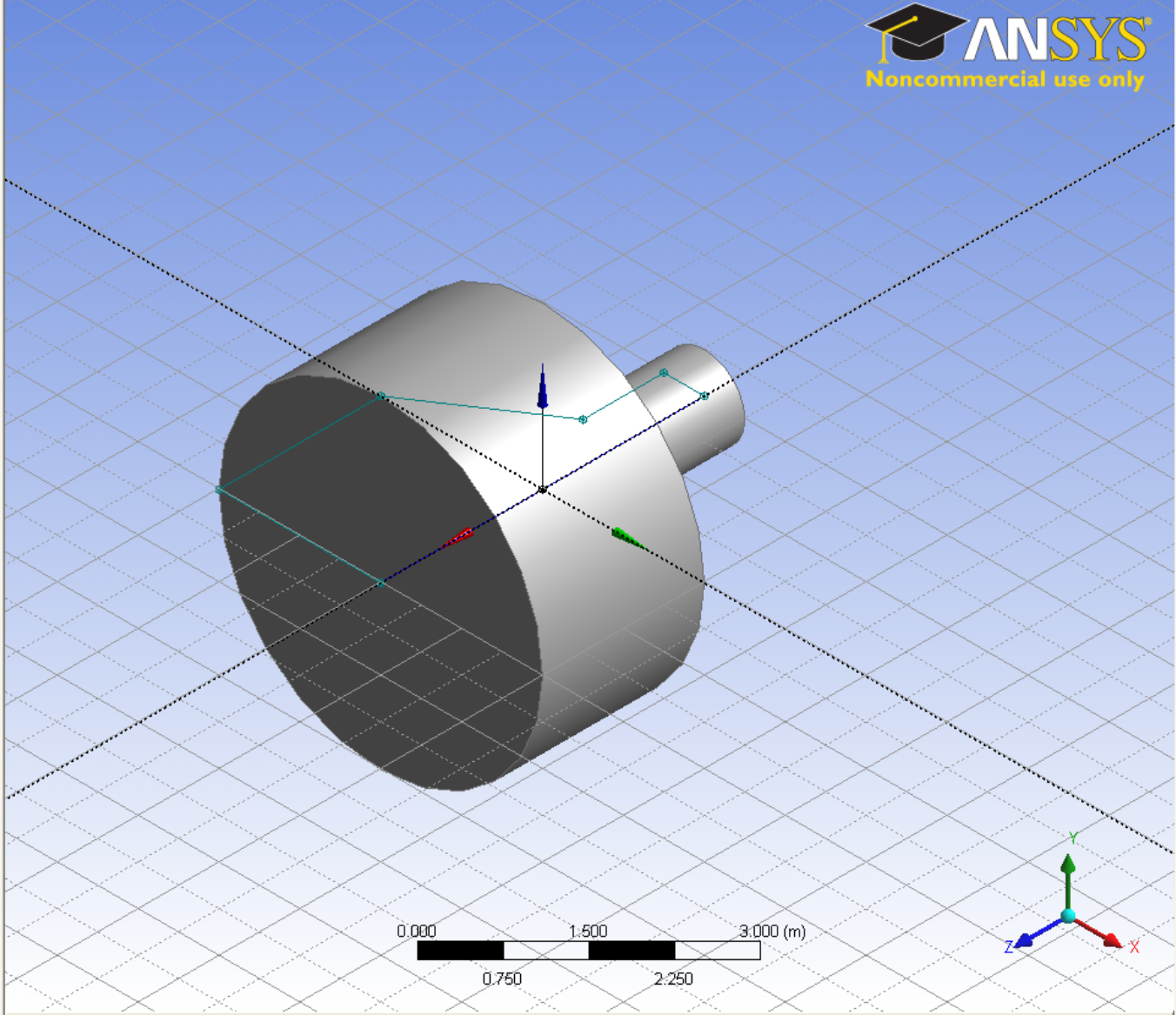


Sketching Modeling

Details View

Details of Revolve1	
Revolve	Revolve1
Base Object	Sketch1
Axis	Selected
Operation	Add Material
Direction	Normal
<input type="checkbox"/> FD1, Angle (>0)	360 °
As Thin/Surface?	No
Merge Topology?	Yes

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] Revolve1
 - [+] 1 Part, 1 Body



Sketching Modeling

Details View

Details of Revolve1	
Revolve	Revolve1
Base Object	Sketch1
Axis	Selected
Operation	Add Material
Direction	Normal
<input type="checkbox"/> FD1, Angle (>0)	360 °
As Thin/Surface?	No
Merge Topology?	Yes



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - YZPlane
 - Revolve1
 - 1 Part, 1 Body
 - Hide Body
 - Suppress Body
 - Generate
 - Rename

Graphics

ANSYS Noncommercial use only

0.000 1.500 3.000 (m)
0.750 2.250

Details View

Details of Body	
Body	Solid
Volume	31,416 m ³
Surface Area	55,785 m ²
Faces	5
Edges	4
Vertices	0

Tree Outline

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] Revolve1
 - [+] 1 Part, 1 Body
 - [+] Solid

Graphics

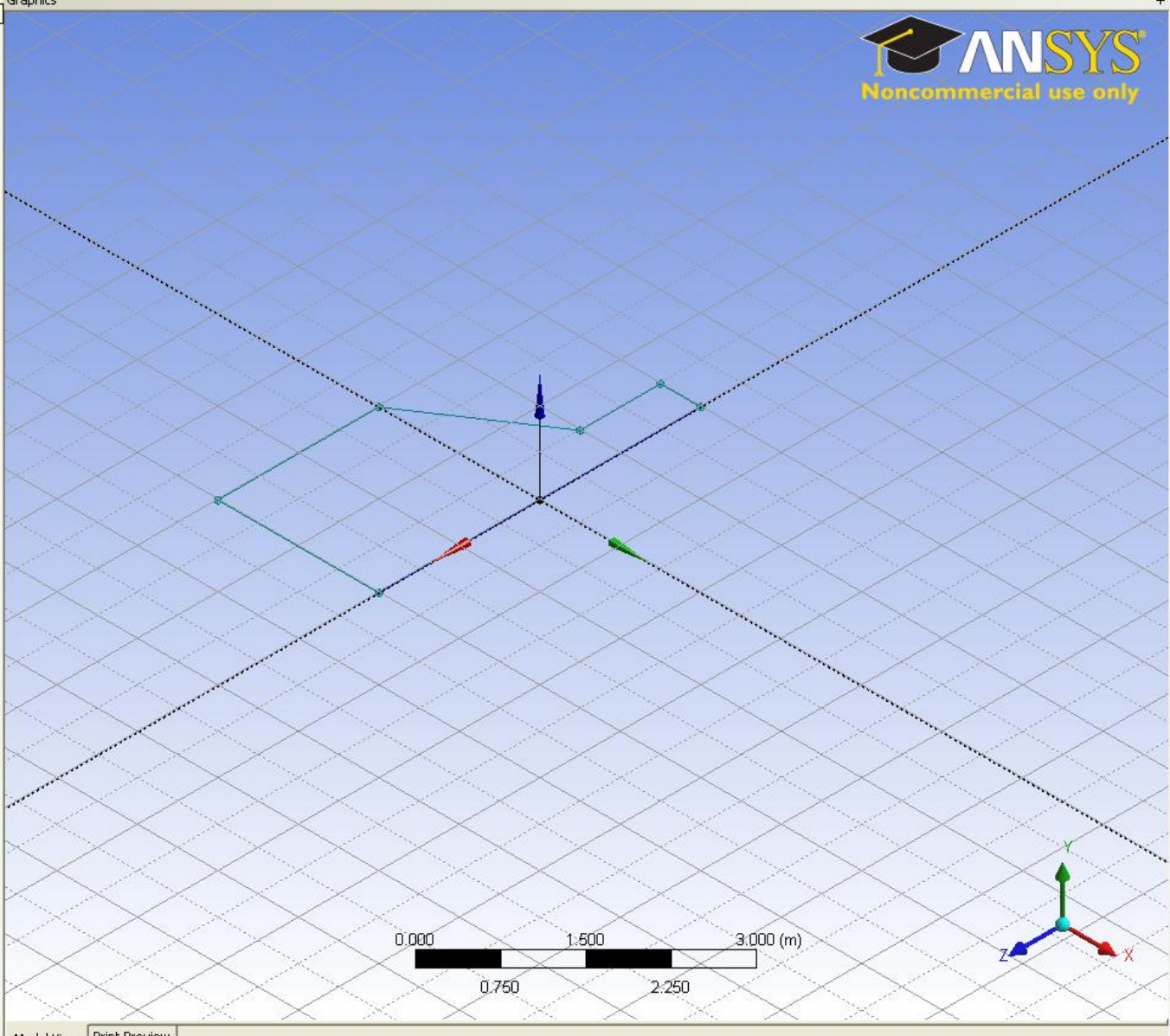
ANSYS
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Details of ZXPlane

Plane	ZXPlane
Sketches	1
Export Coordinate System?	No

Tree Outline

- [-] Unnamed
 - [+] XYPlane
 - [+] ZXPlane
 - [+] YZPlane
 - [+] Revolve1
 - [+] 1 Part, 1 Body
 - [+] Solid



Details of ZXPlane	
Plane	ZXPlane
Sketches	1
Export Coordinate System?	No

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YPlane
 - Revolve1
 - 1 Part, 1 Body
 - Solid

Details of Sketch2	
Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No

Graphics

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - 1 Part, 1 Body
 - Solid

Graphics

0.000 1.500 3.000 (m)
0.750 2.250

Sketching Modeling

Details view

Details of Sketch2

Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

Details View

Details of Sketch2

Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No

0.000 0.750 1.500 2.250 3.000 (m)

The main workspace shows a 2D sketch on a grid. A blue dashed line represents a V-shaped profile. A green solid line is drawn across the top of the V. A blue vertical line with a circular arrow indicates a rotation constraint. A red arrow points to a dimension line on the horizontal part of the sketch. A green arrow points to another dimension line. A 3D coordinate system is visible in the bottom right corner, and a scale bar is at the bottom center.

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval**
- Circle**
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Graphics

Model View Print Preview

Sketching Modeling

Details View

Details of Sketch2

Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

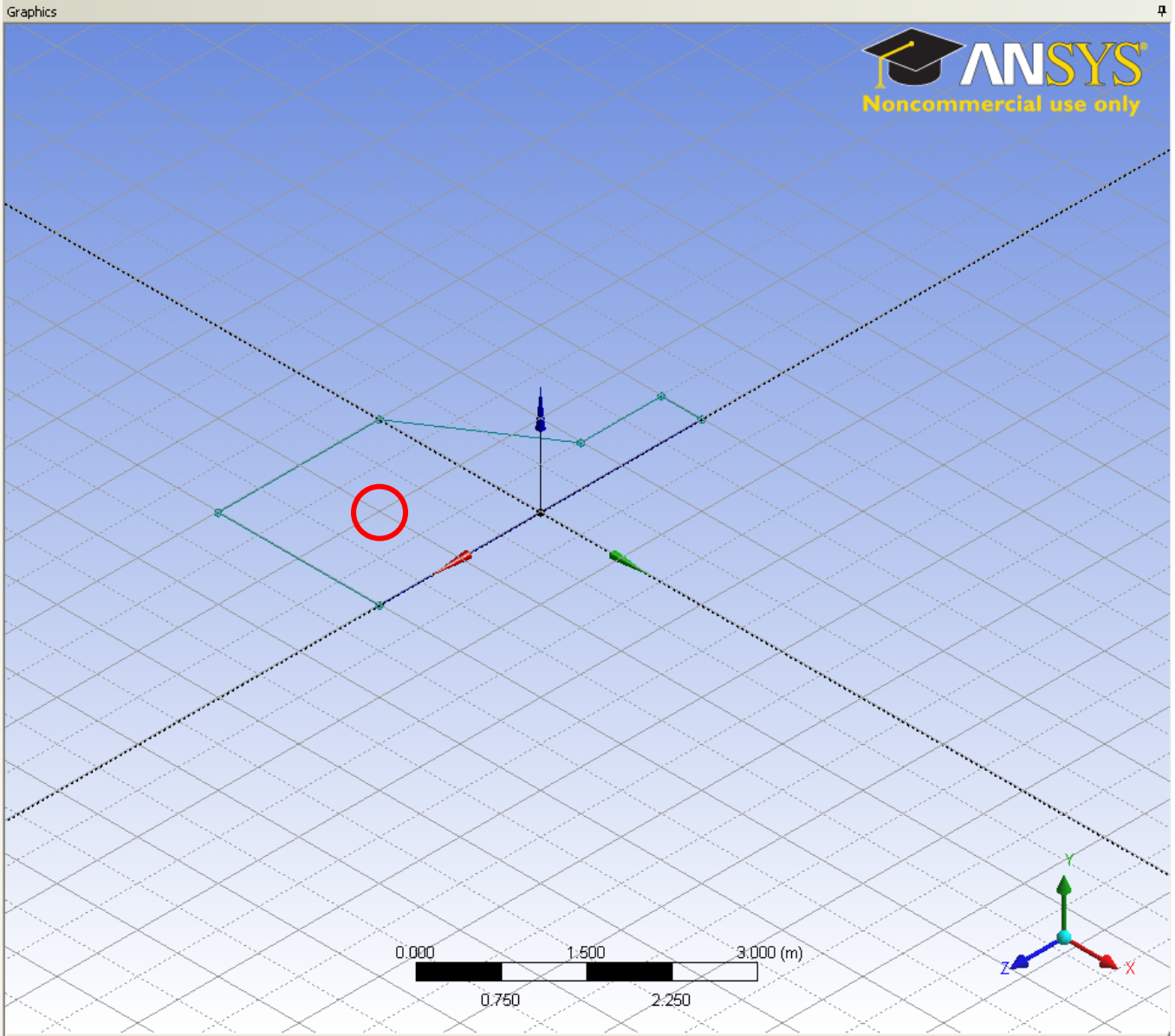
Constraints

Settings

Sketching Modeling

Details View

Details of Sketch2	
Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No



Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

Details View

Details of Sketch2	
Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No

Graphics

0.000 1.500 3.000 (m)

0.750 2.250

Model View Print Preview

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

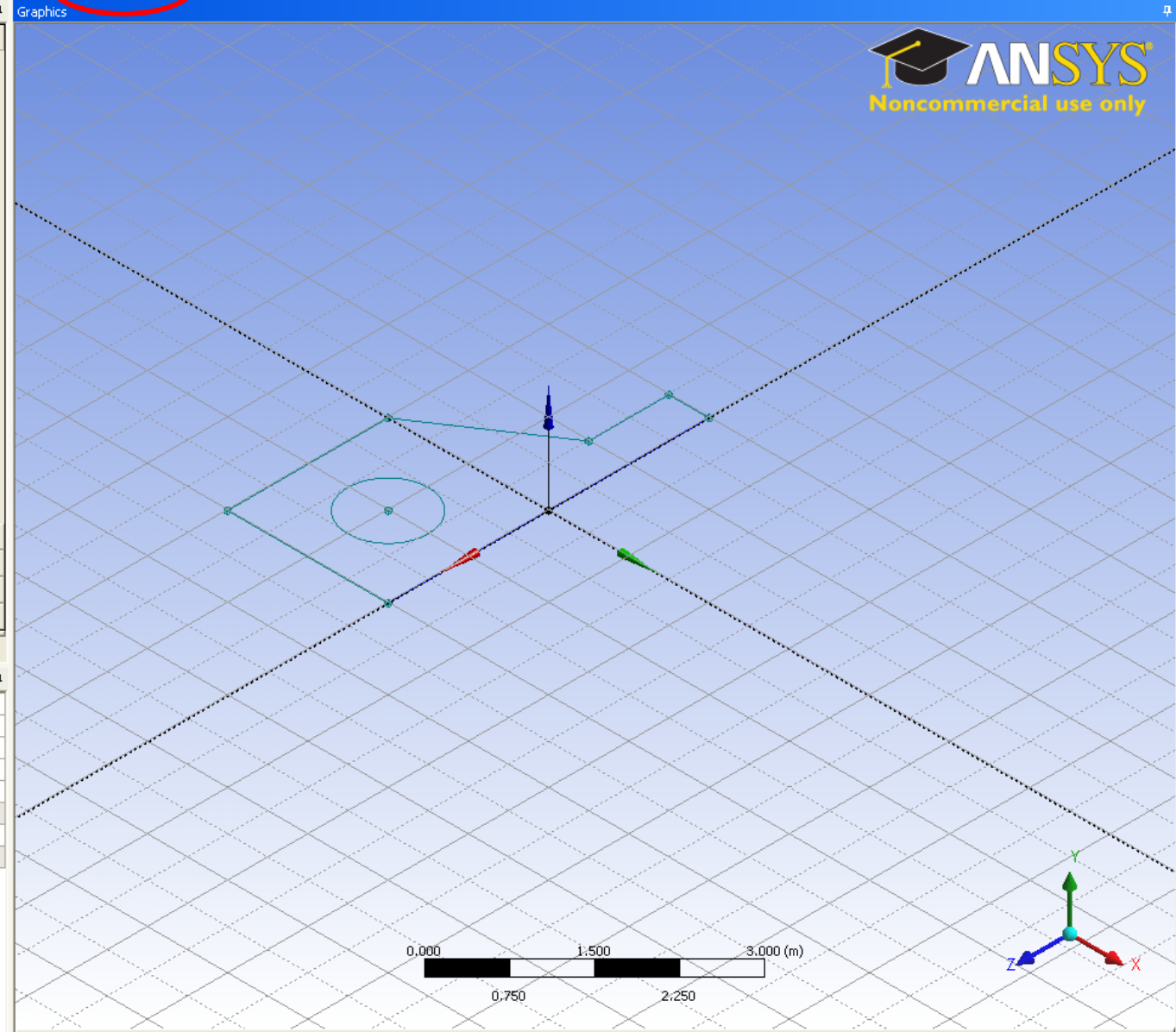
Constraints

Settings

Sketching Modeling

Details View

Details of Sketch2	
Sketch	Sketch2
Sketch Visibility	Show Sketch
Show Constraints?	No
Edges: 1	
Full Circle	Cr13
References: 1	
Ln10	Sketch1



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Graphics

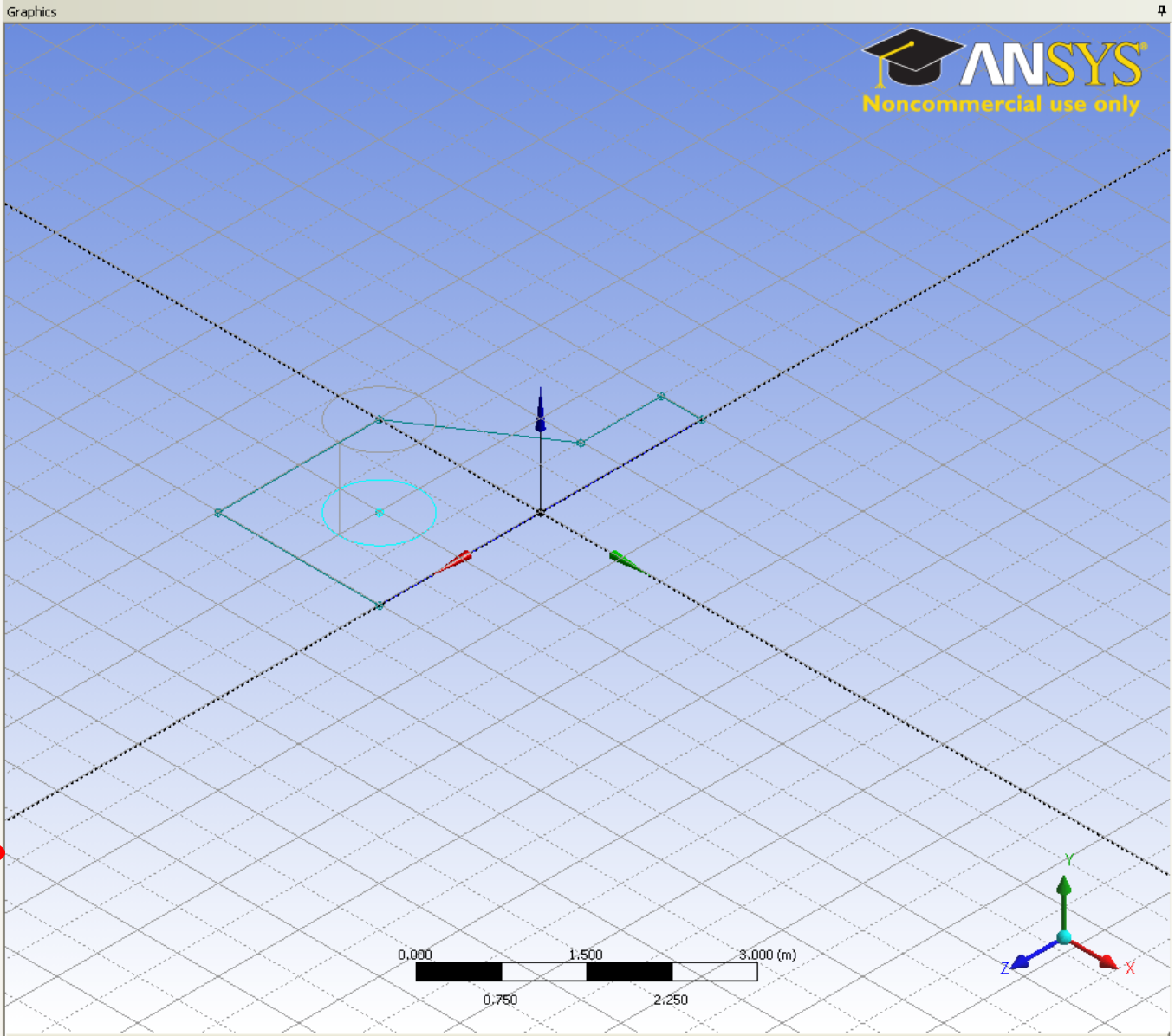
ANSYS
Noncommercial use only

Details of Extrude1

Extrude	Extrude1
Base Object	Sketch2
Operation	Add Material
Direction Vector	None (Normal)
Direction	Normal
Extent Type	Fixed
<input type="checkbox"/> FD1, Depth (>0)	1 m
As Thin/Surface?	No
Merge Topology?	Yes

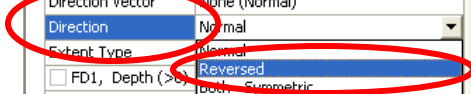
Tree Outline

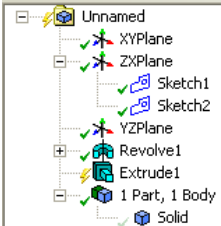
- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid



Details of Extrude1

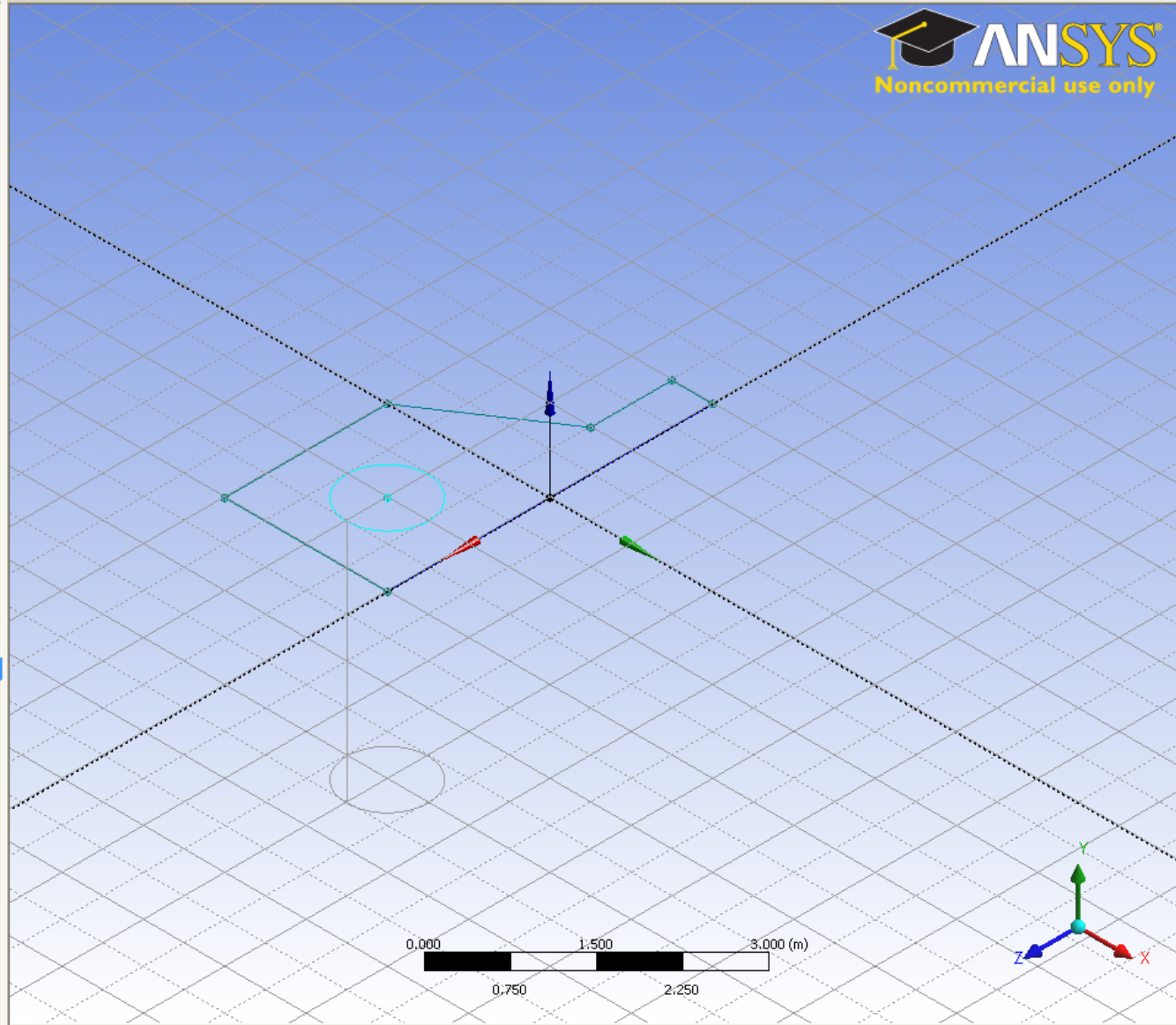
Extrude	Extrude1
Base Object	Sketch2
Operation	Add Material
Direction Vector	None (Normal)
Direction	Normal
Extent Type	Reversed
<input type="checkbox"/> FD1, Depth (>0)	Both - Symmetric
As Thin/Surface?	Both - Asymmetric
Merge Topology?	Yes

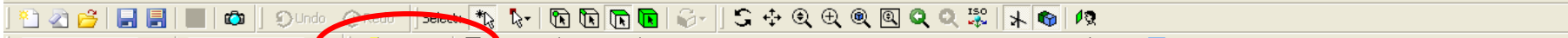




Details of Extrude1

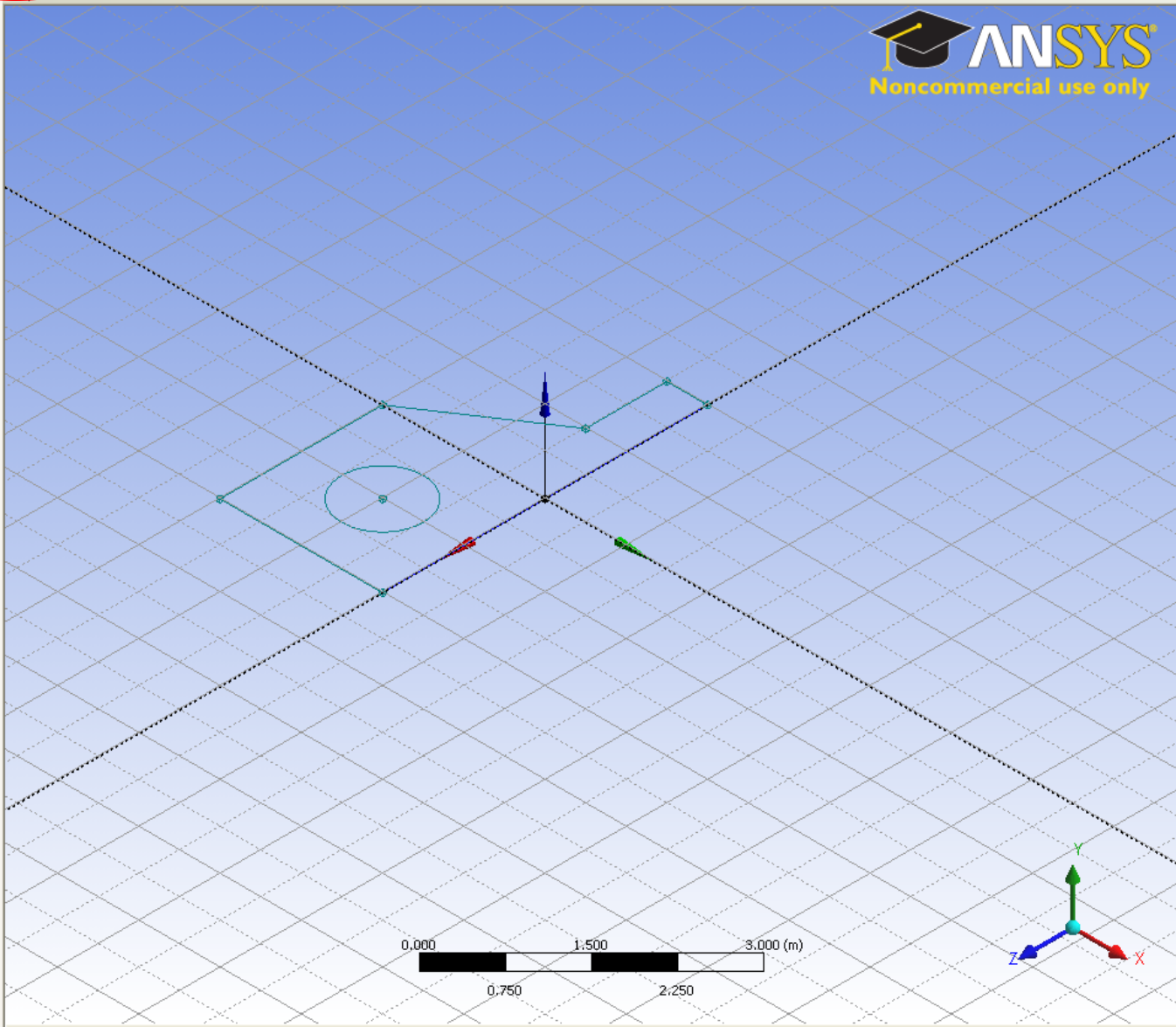
Extrude	Extrude1
Base Object	Sketch2
Operation	Add Material
Direction Vector	None (Normal)
Direction	Reversed
Extent Type	Fixed
FD1, Depth (>0)	3 m
As Thin/Surface	No
Merge Topology?	Yes



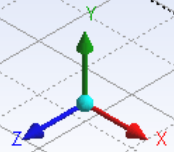


Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid



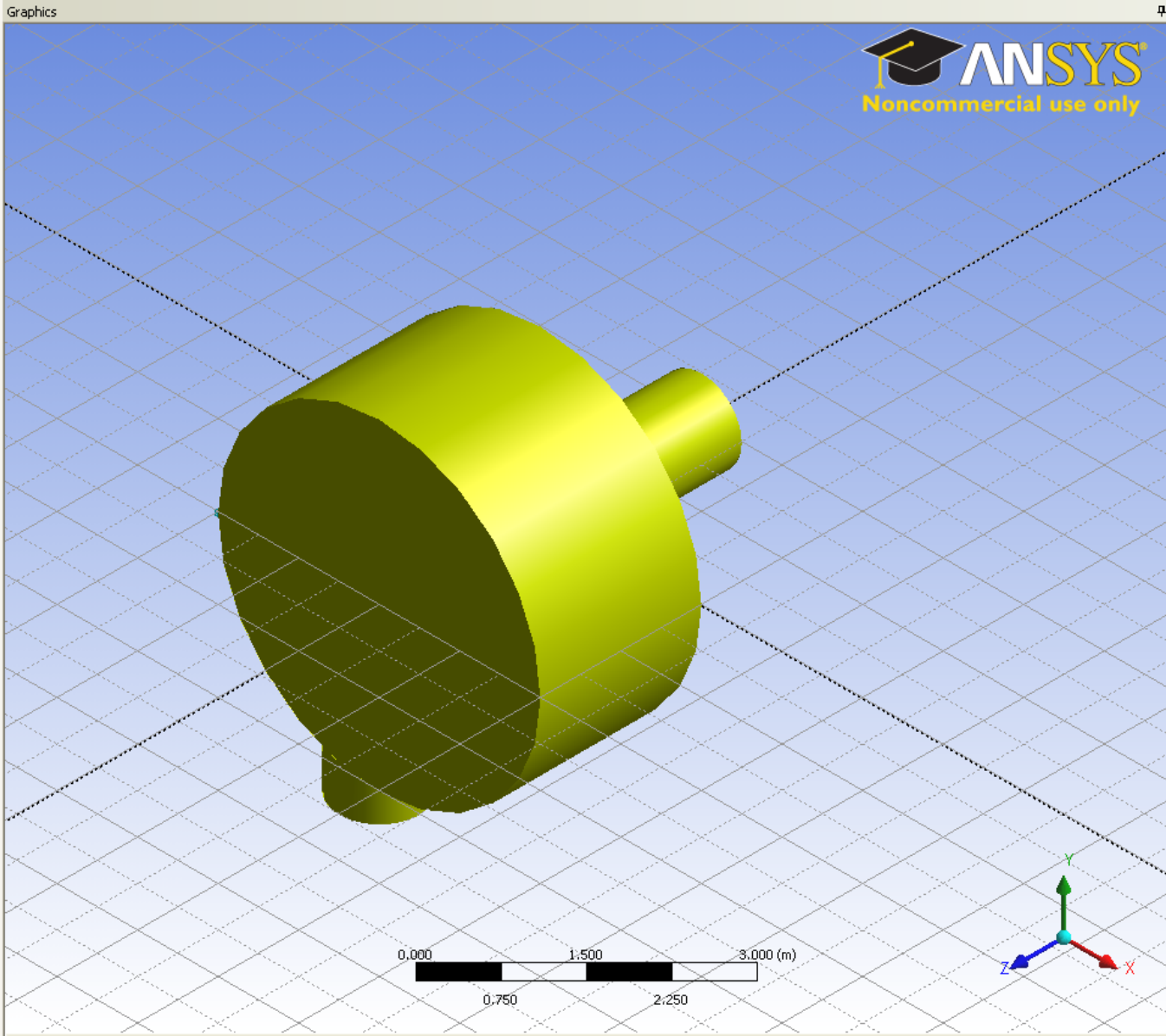
Details of Extrude1	
Extrude	Extrude1
Base Object	Sketch2
Operation	Add Material
Direction Vector	None (Normal)
Direction	Reversed
Extent Type	Fixed
<input type="checkbox"/> FD1, Depth (>0)	3 m
As Thin/Surface?	No
Merge Topology?	Yes



Tree Outline

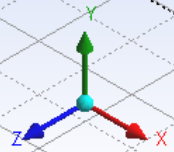
- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid1

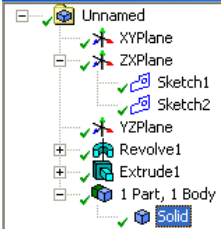
[Context Menu for Solid1]
Show Body
Suppress Body
Generate
Rename



Details of Body

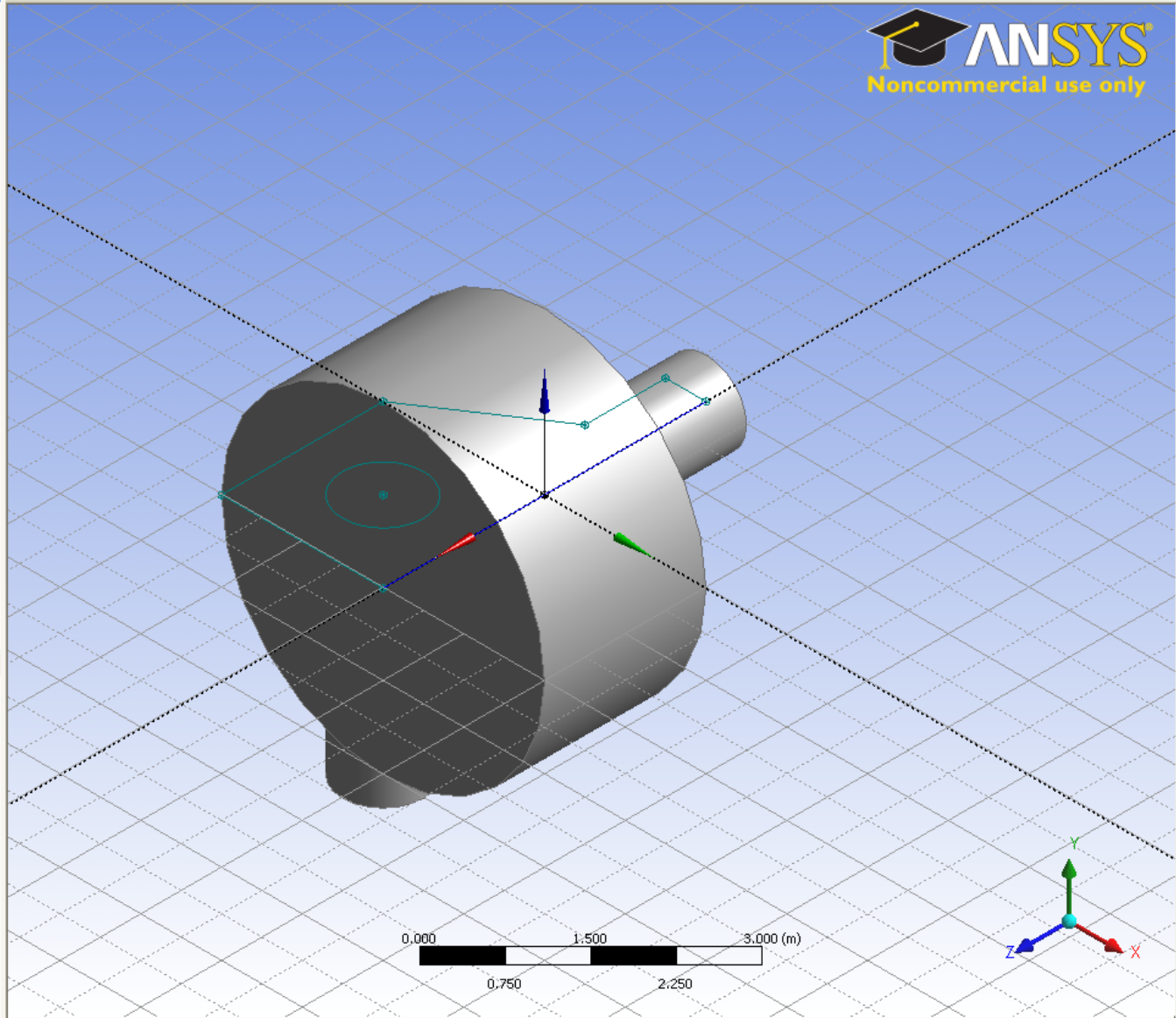
Body	Solid
Volume	32,431 m ³
Surface Area	59,784 m ²
Faces	7
Edges	6
Vertices	0





Details of Body

Body	Solid
Volume	32,431 m ³
Surface Area	59,784 m ²
Faces	7
Edges	6
Vertices	0

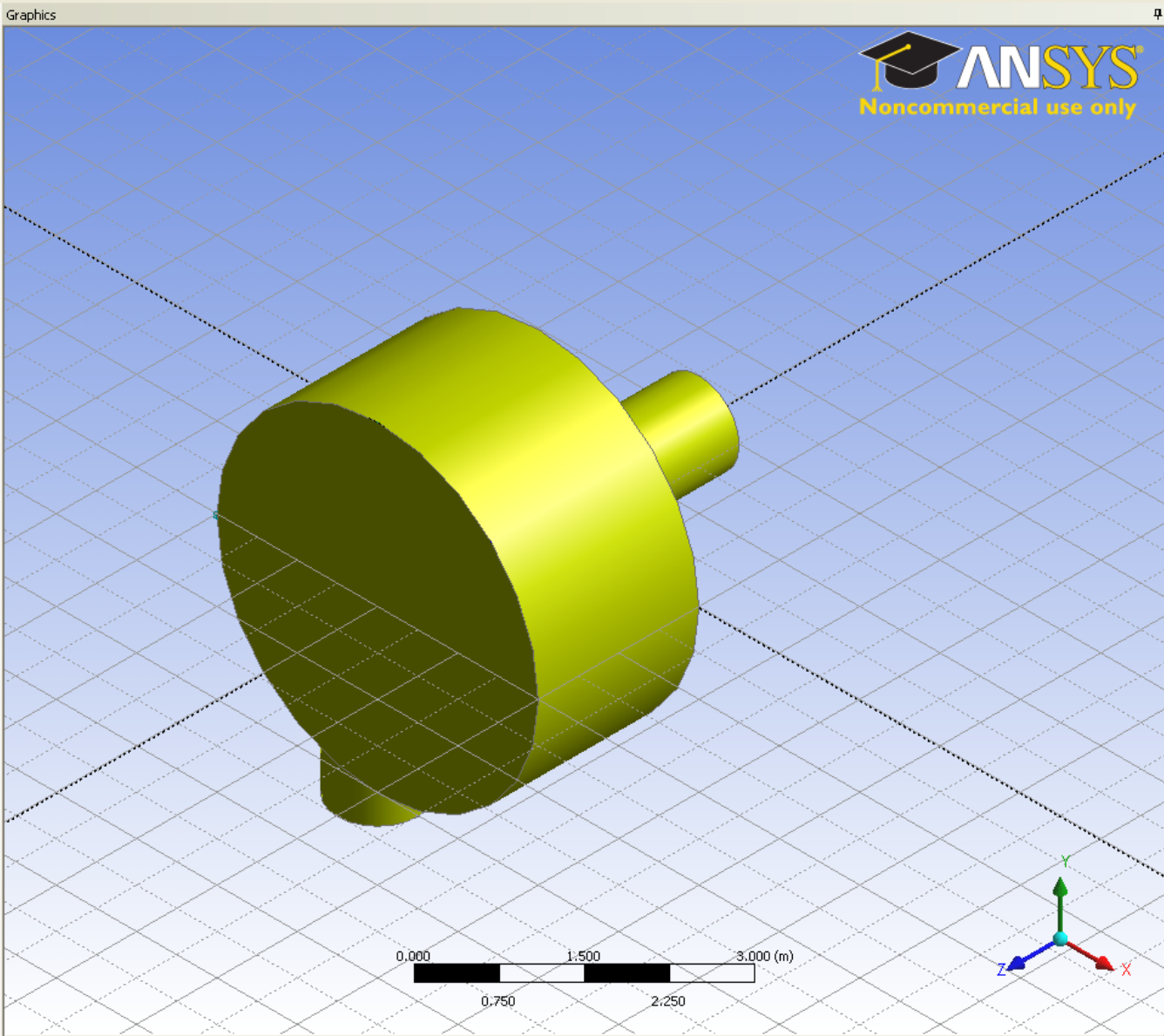


Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Context menu for Solid:

- Hide Body
- Suppress Body
- Generate
- Rename



Sketching Modeling

Details View

Details of Body

Body	Solid
Volume	32,431 m ³
Surface Area	59,784 m ²
Faces	7
Edges	6
Vertices	0

Model View Print Preview

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Details of Body

Body	Solid
Volume	32,431 m ³
Surface Area	59,784 m ²
Faces	7
Edges	6
Vertices	0

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0.000 0.750 1.500 2.250 3.000 (m)

X Y Z

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Sketching Modeling

Graphics

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- Select Loops / Chains
- Select Smooth Chains
- Selection Filter
- Isometric View**
- Restore Default
- Zoom to Fit
- Cursor Mode
- View
- Look At
- Show All Bodies
- Generate

0.000 0.750 1.500 2.250 3.000 (m)

Tree Outline

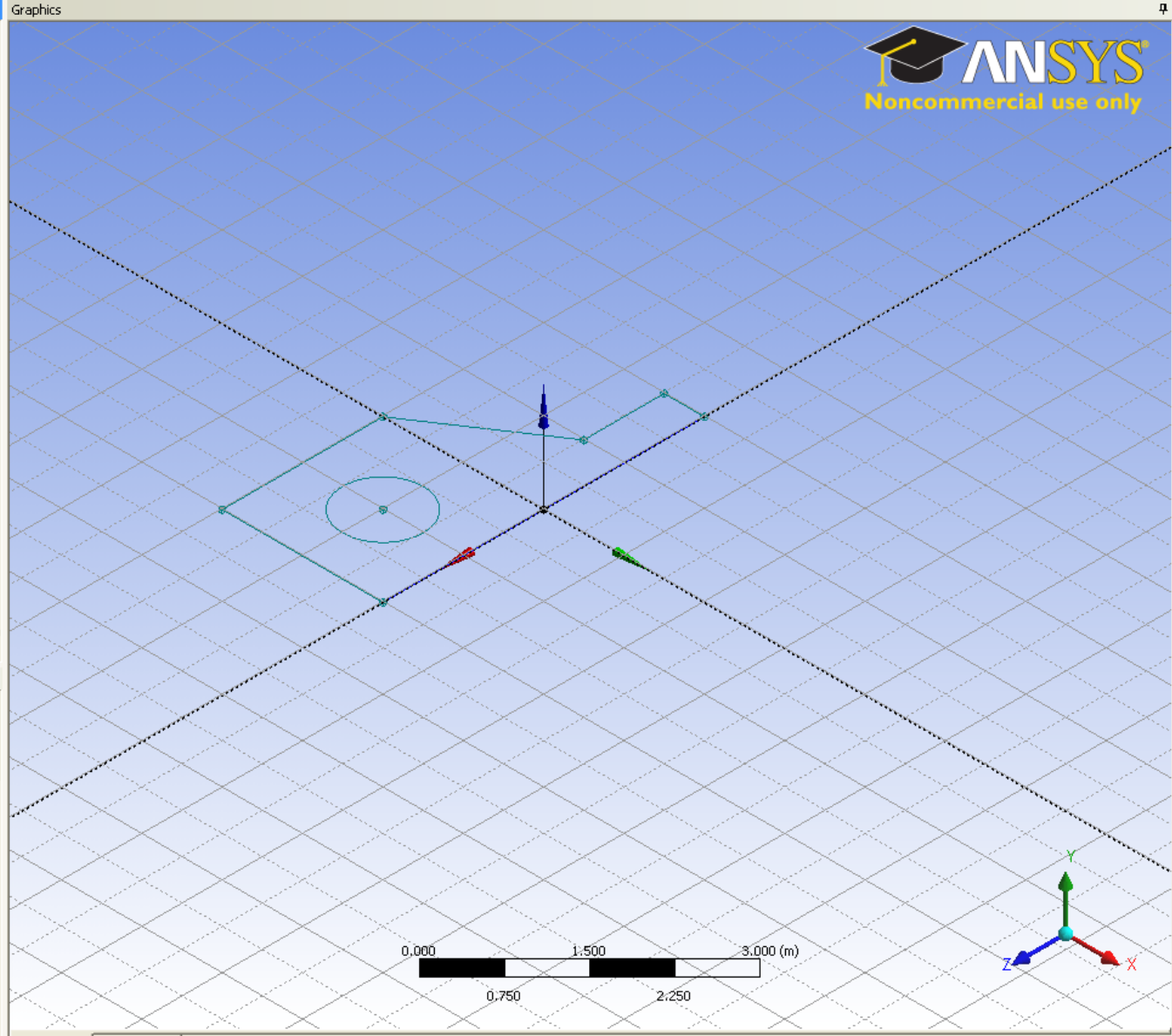
- Unnamed
 - XYPlane
 - ZXPlane**
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Sketching Modeling

Details View

Details of ZXPlane

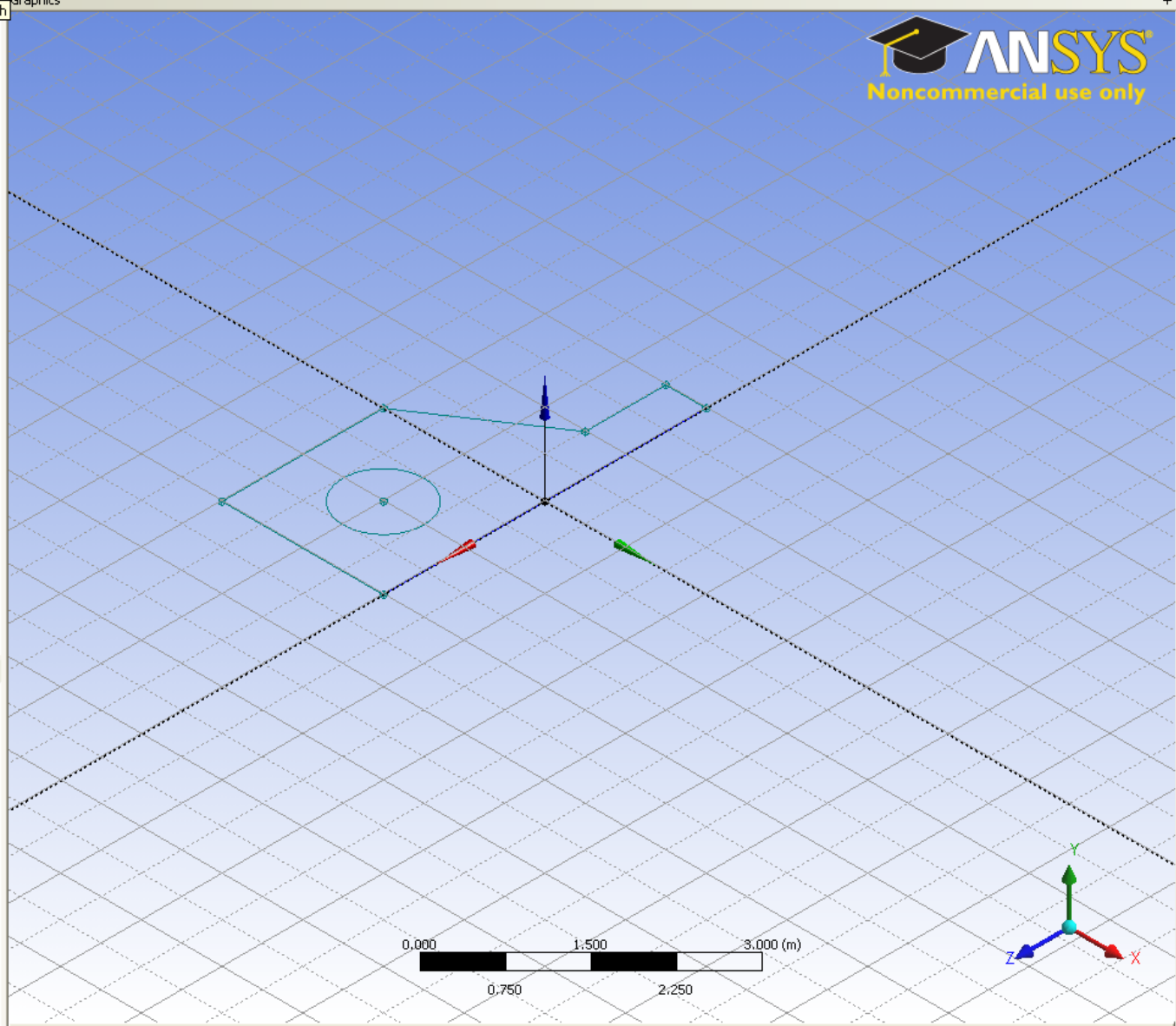
Plane	ZXPlane
Sketches	2
Export Coordinate System?	No



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid

Details of ZXPlane	
Plane	ZXPlane
Sketches	2
Export Coordinate System?	No



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3**
 - YZPlane
- Revolve1
- Extrude1
- Extrude2
- 1 Part, 1 Body
 - Solid

Graphics

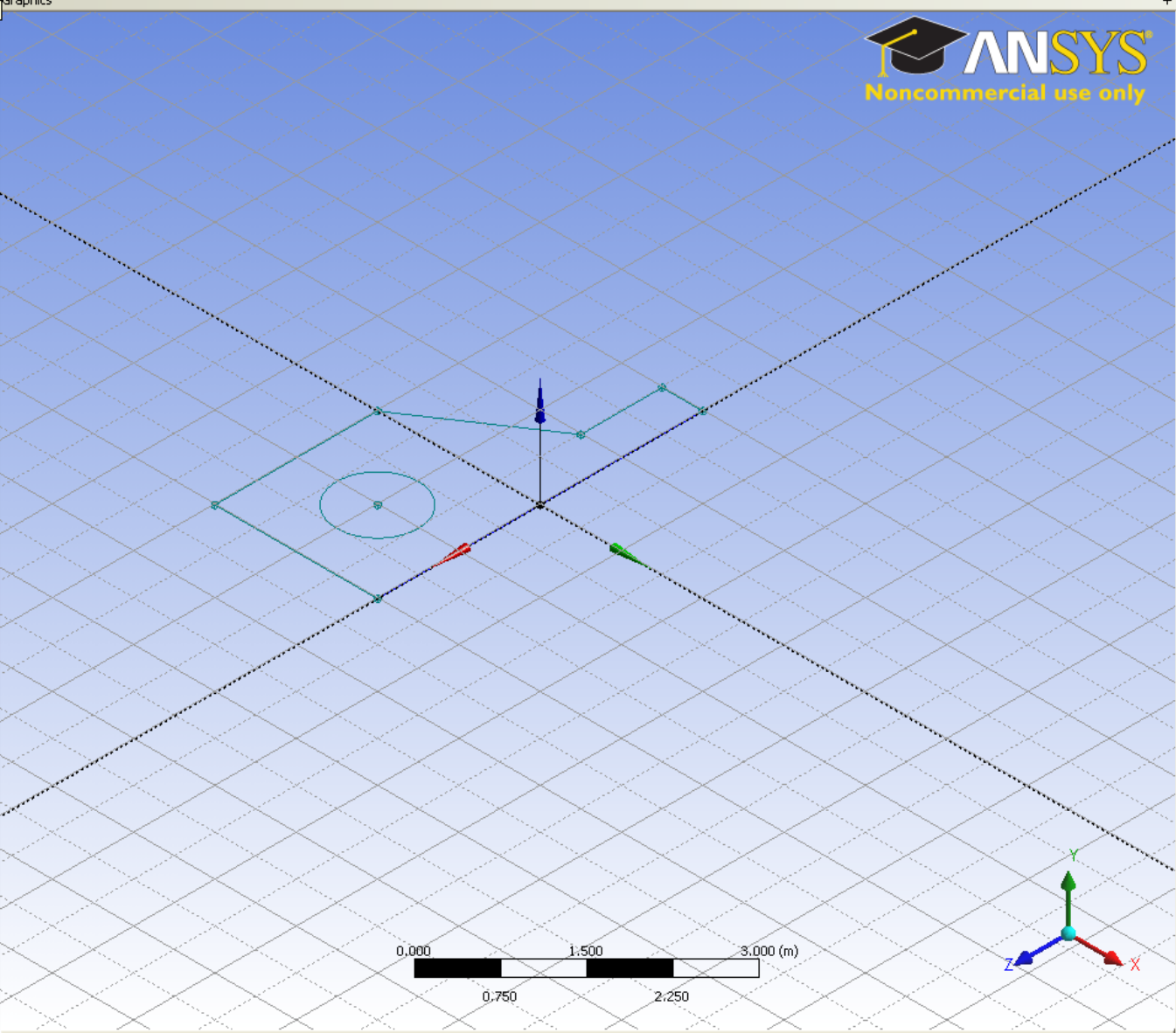
ANSYS
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Details of Extrude2

Extrude	Extrude2
Base Object	Sketch3
Operation	Add Material
Direction Vector	None (Normal)
Direction	Normal
Extent Type	Fixed
<input type="checkbox"/> FD1, Depth (>0)	3 m
As Thin/Surface?	No
Merge Topology?	Yes

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - YZPlane
 - Revolve1
 - Extrude1
 - 1 Part, 1 Body
 - Solid



Sketching Modeling

Details view

Details of ZXPlane	
Plane	ZXPlane
Sketches	2
Export Coordinate System?	No



Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle**
- Circle by 2 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Graphics

0.000 1.500 3.000 (m)

0.750 2.250

Sketching Modeling

Details View

Details of Sketch3	
Sketch	Sketch3
Sketch Visibility	Show Sketch
Show Constraints?	No

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection


Modify

Dimensions

Constraints

Settings

Graphics



0.000 1.500 3.000 (m)
0.750 2.250

Sketching Modeling

Details View

Details of Sketch3	
Sketch	Sketch3
Sketch Visibility	Show Sketch
Show Constraints?	No
Edges: 1	
Full Circle	Cr14
References: 1	
Cr13	Sketch2

Sketching Toolboxes

Draw

- Line
- Tangent Line
- Line by 2 Tangents
- Polyline
- Polygon
- Rectangle
- Rectangle by 3 Points
- Oval
- Circle
- Circle by 3 Tangents
- Arc by Tangent
- Arc by 3 Points
- Arc by Center
- Ellipse
- Spline
- Construction Point
- Construction Point at Intersection

Modify

Dimensions

Constraints

Settings

Sketching Modeling

Details View

Details of Sketch3

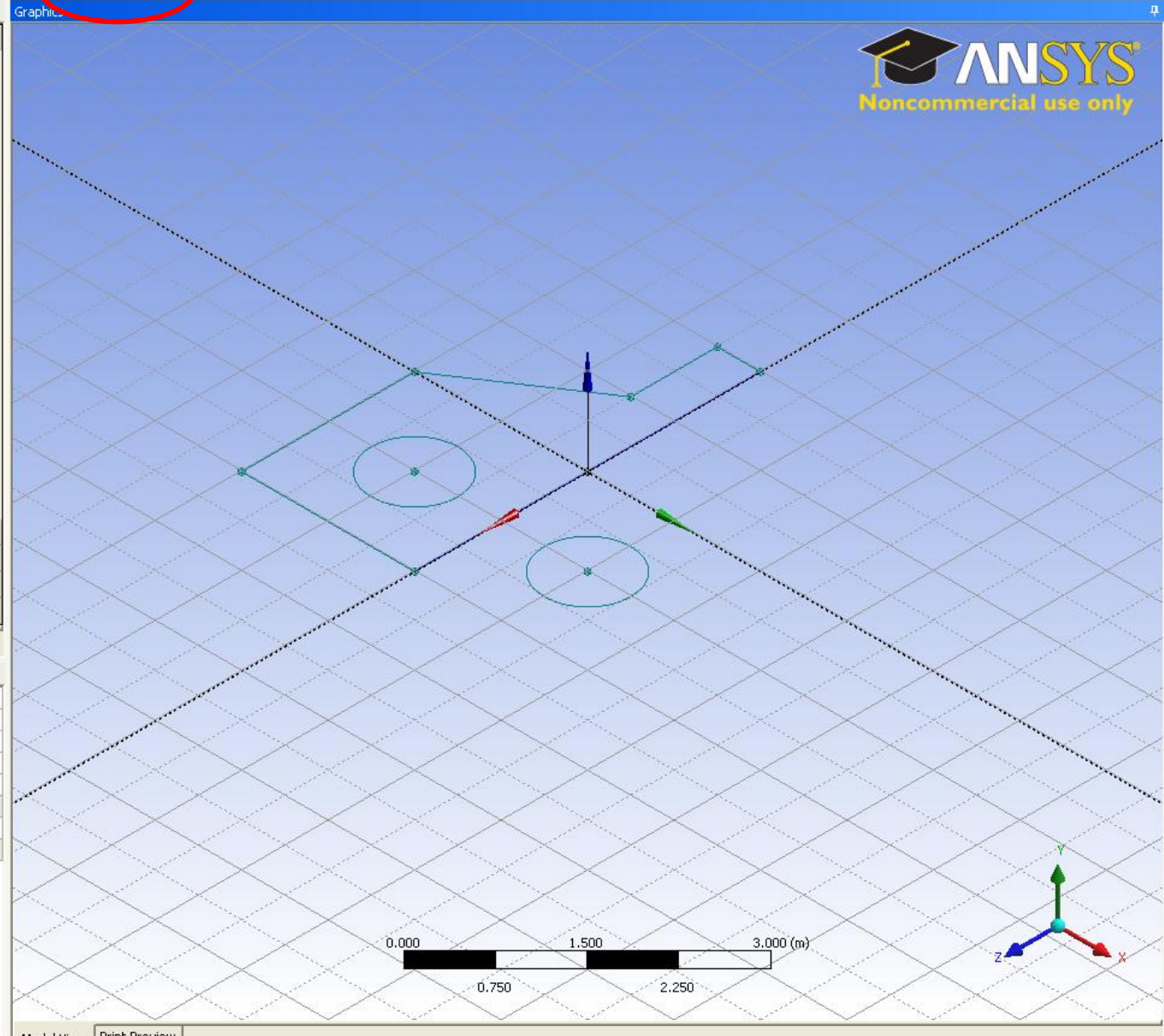
Sketch	Sketch3
Sketch Visibility	Show Sketch
Show Constraints?	No

Edges: 1

Full Circle	Cr14
-------------	------

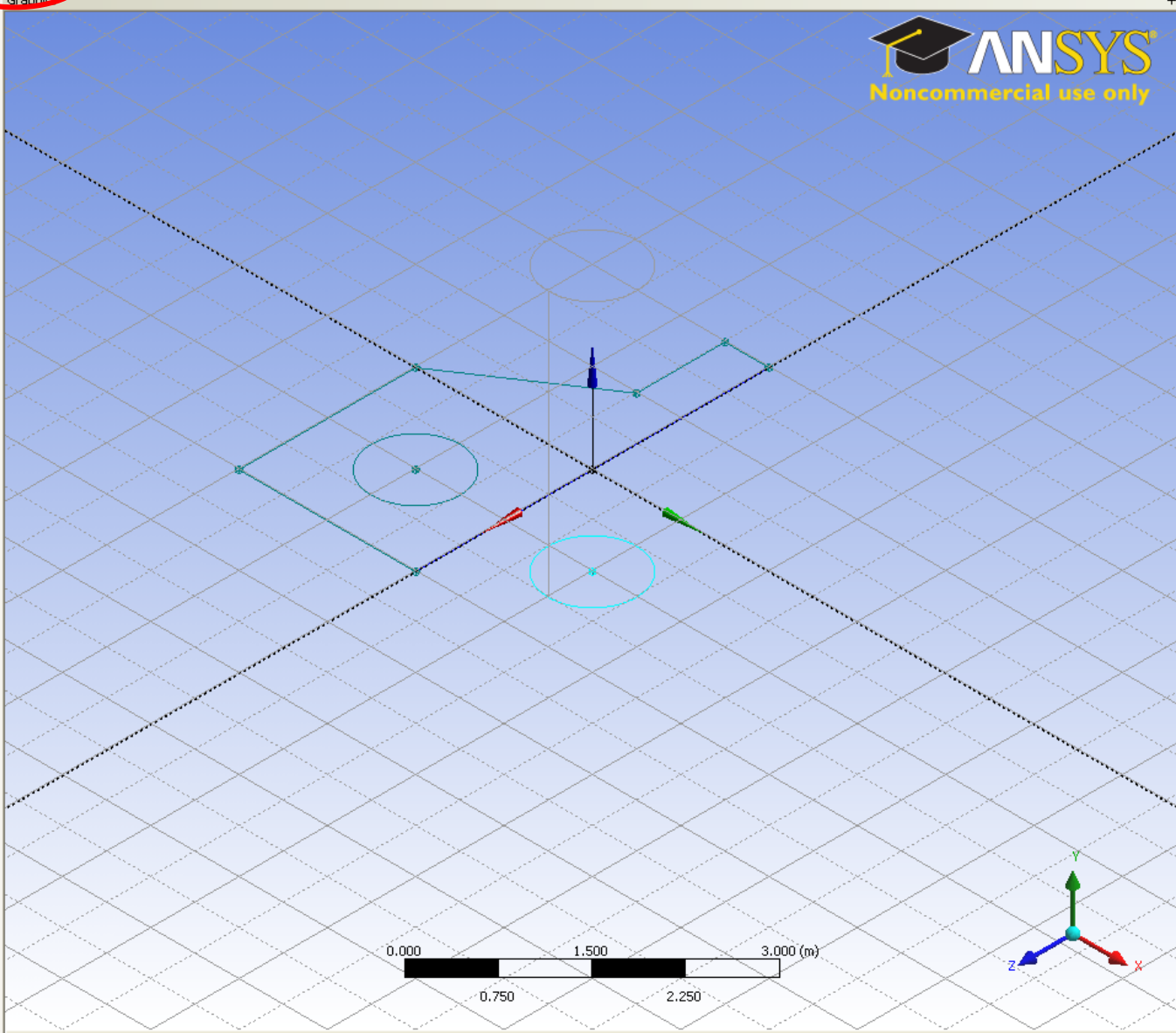
References: 1

Cr13	Sketch2
------	---------



Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - Extrude3
 - 1 Part, 1 Body
 - Solid

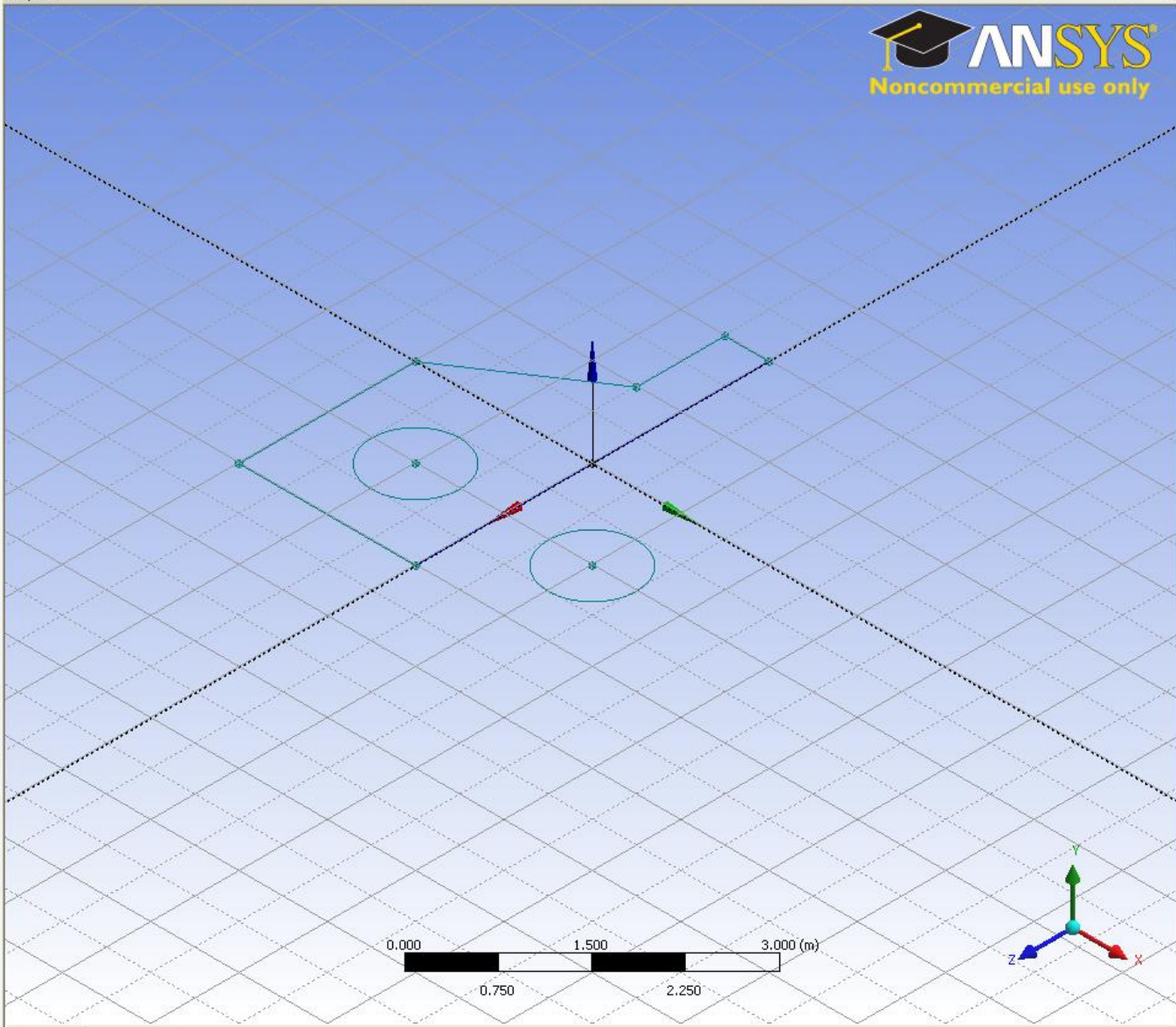


Details of Extrude3

Extrude	Extrude3
Base Object	Sketch3
Operation	Add Material
Direction Vector	None (Normal)
Direction	Normal
Extent Type	Fixed
<input type="checkbox"/> FD1, Depth (>0)	3 m
As Thin/Surface?	No
Merge Topology?	Yes

Tree Outline

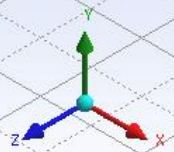
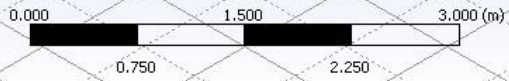
- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - Extrude3
 - 1 Part, 1 Body
 - Solid



Sketching Modeling

Details View

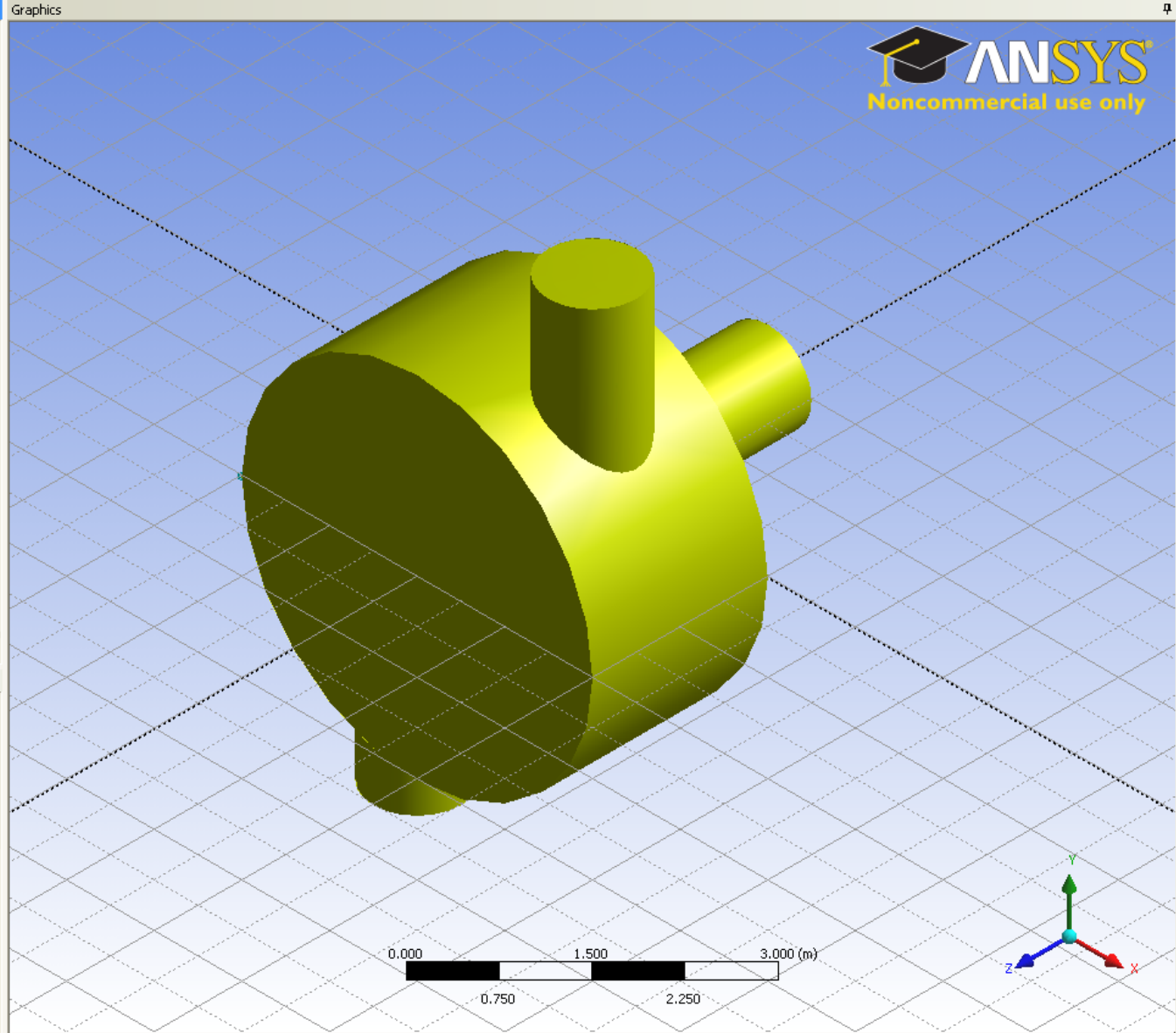
Details of Extrude3	
Extrude	Extrude3
Base Object	Sketch3
Operation	Add Material
Direction Vector	None (Normal)
Direction	Normal
Extent Type	Fixed
<input type="checkbox"/> FD1, Depth (>0)	3 m
As Thin/Surface?	No
Merge Topology?	Yes



Tree Outline

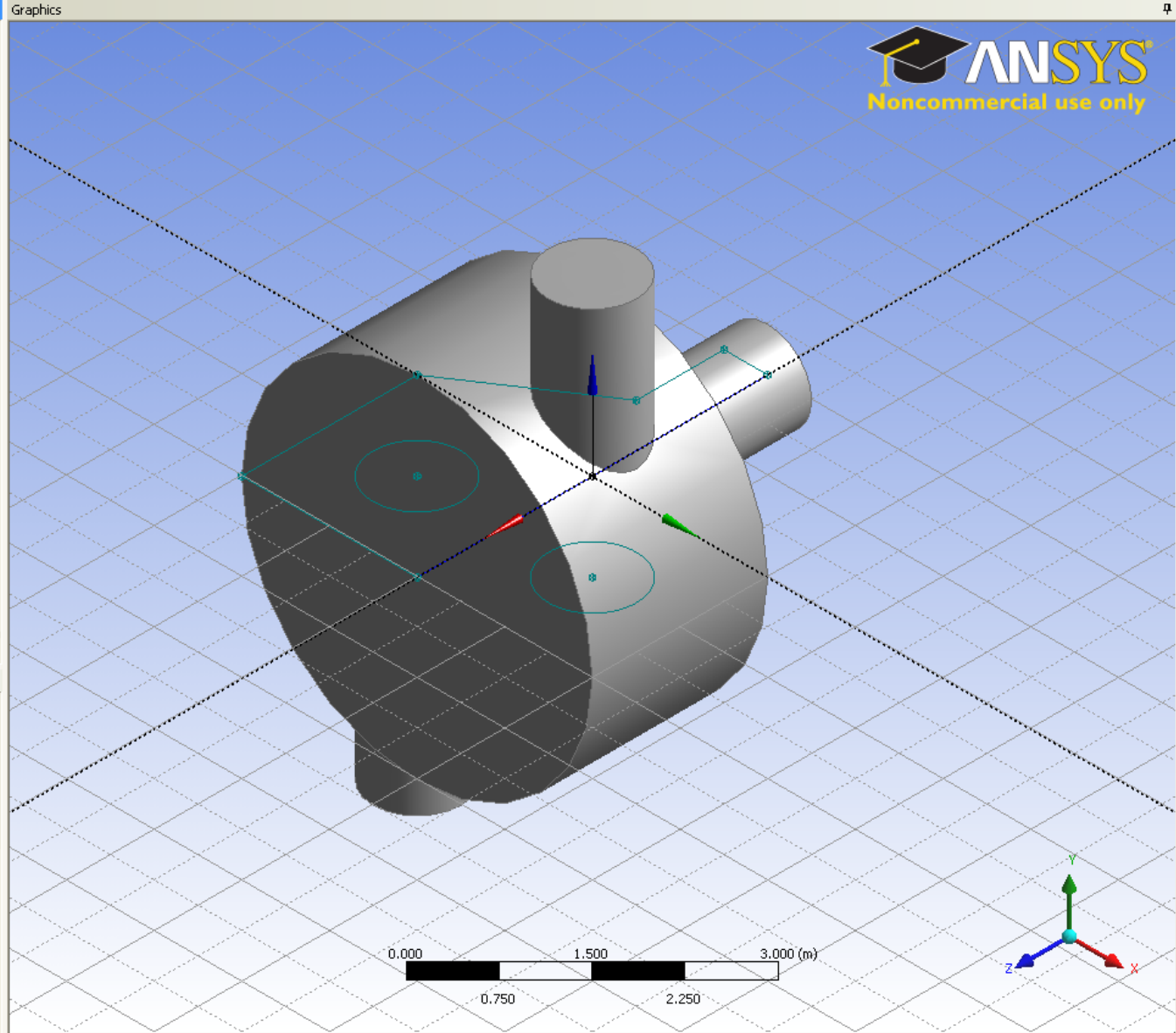
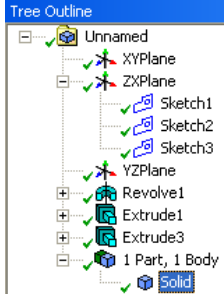
- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - Extrude3
 - 1 Part, 1 Body
 - Solid1

[Context Menu for Solid1]
Show Body
Suppress Body
Generate
Rename



Details of Body

Body	Solid
Volume	33,447 m ³
Surface Area	63,784 m ²
Faces	9
Edges	8
Vertices	0



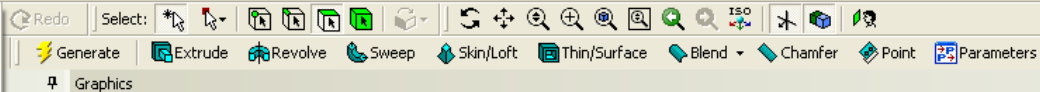
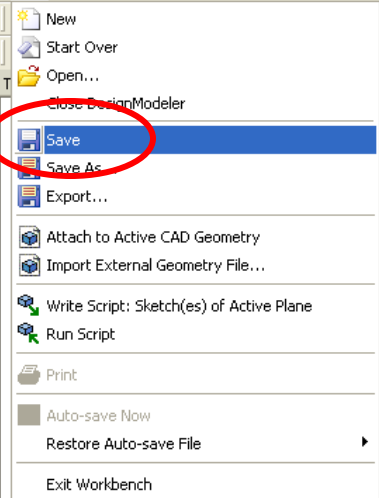
Sketching Modeling

Details View

[-] Details of Body

Body	Solid
Volume	33,447 m ³
Surface Area	63,784 m ²
Faces	9
Edges	8
Vertices	0

Model View Print Preview

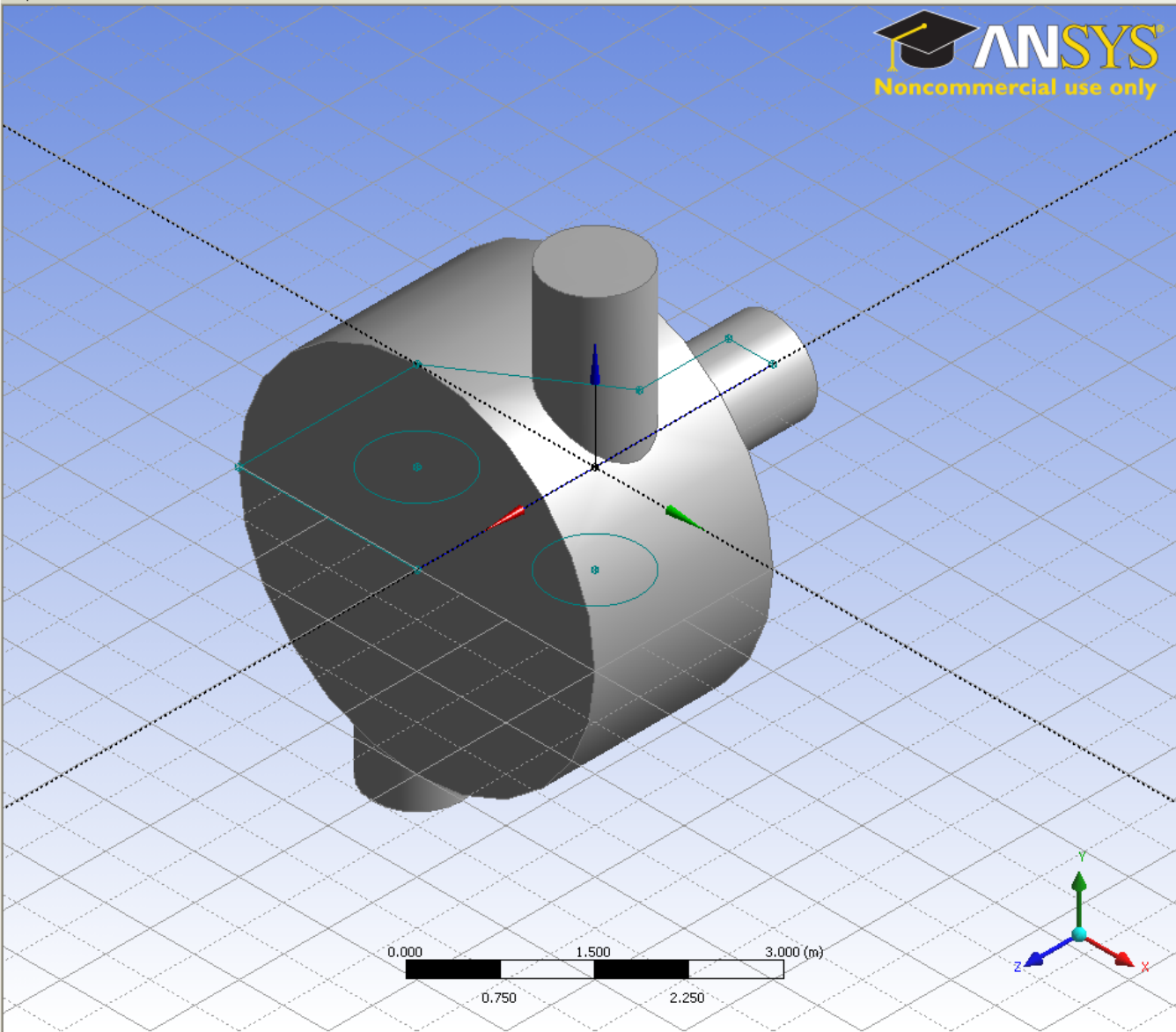


Sketching Modeling

Details View

Details of Body

Body	Solid
Volume	33,447 m ³
Surface Area	63,784 m ²
Faces	9
Edges	8
Vertices	0

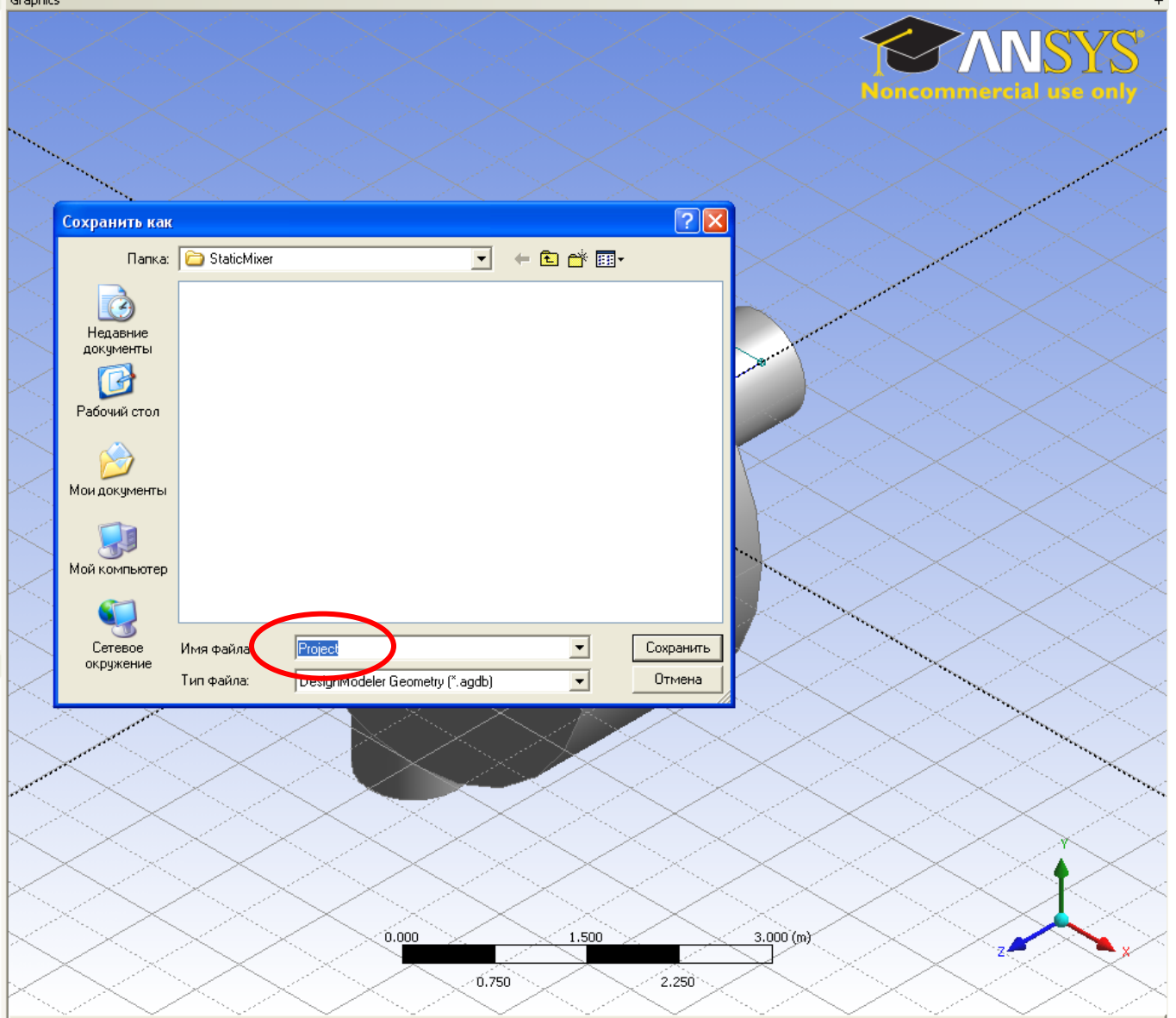


Model View Print Preview

Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - Extrude3
 - 1 Part, 1 Body
 - Solid

Details of Body	
Body	Solid
Volume	33,447 m ³
Surface Area	63,784 m ²
Faces	9
Edges	8
Vertices	0



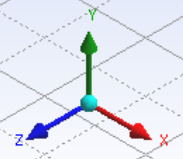
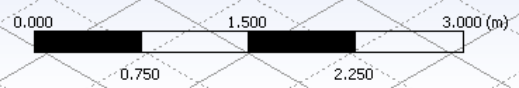
Сохранить как

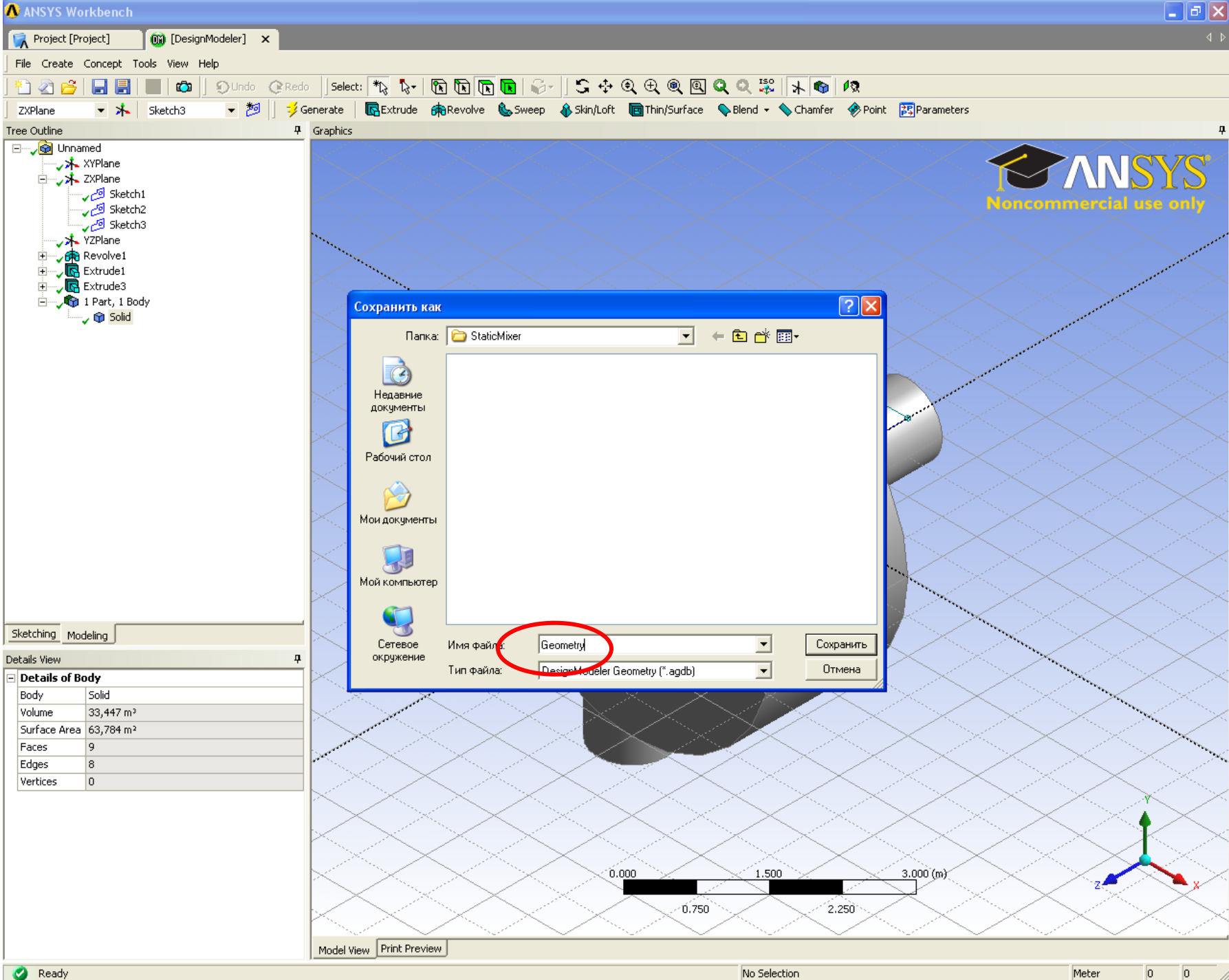
Папка: StaticMixer

Имя файла: Project

Тип файла: DesignModeler Geometry (*.agdb)

Сохранить Отмена



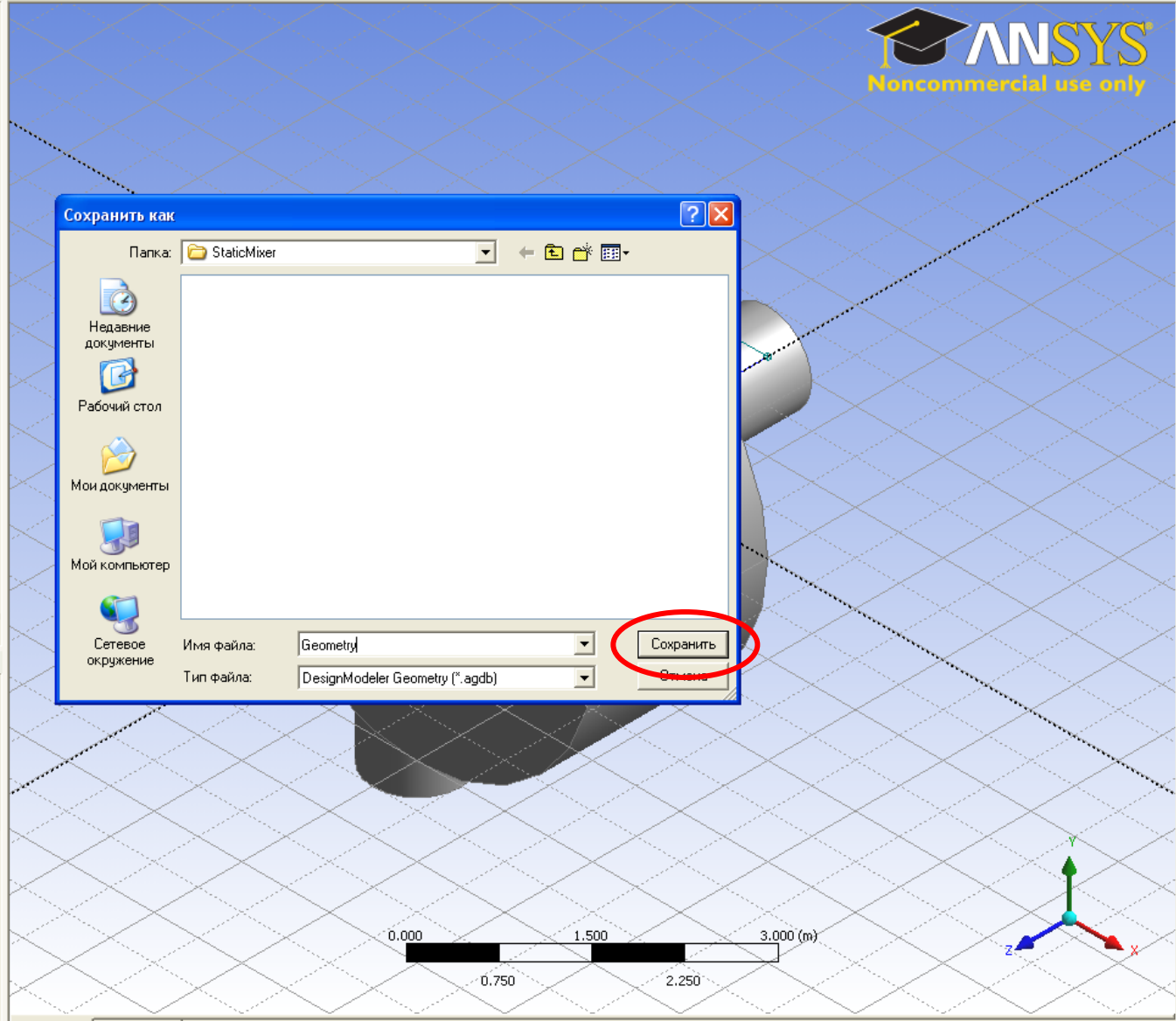


Tree Outline

- Unnamed
 - XYPlane
 - ZXPlane
 - Sketch1
 - Sketch2
 - Sketch3
 - YZPlane
 - Revolve1
 - Extrude1
 - Extrude3
 - 1 Part, 1 Body
 - Solid

Details of Body

Body	Solid
Volume	33,447 m ³
Surface Area	63,784 m ²
Faces	9
Edges	8
Vertices	0



Сохранить как

Папка: StaticMixer

Имя файла: Geometry

Тип файла: DesignModeler Geometry (*.agdb)

Сохранить

DesignModeler Tasks

- Open
- Open copy
- New mesh
- New simulation
- Proceed to Advanced Meshing

Default Geometry Options

- Solid bodies
- Surface bodies
- Line bodies
- Parameters
- Attributes
- Named selections
- Material properties

Advanced Geometry Defaults

▶

Edit Item

- Rename
- Open containing folder...
- Find file...
- Delete...

Name	File	Size	Timestamp	Type
Project	Project.wbdb	539 B	17.06.2009 18:41:04	Workbench Project
Geometry	Geometry.agdb	11 KB	17.06.2009 19:09:47	DesignModeler Geometry

DesignModeler Tasks

- Open
- Open copy
- New mesh**
- New simulation
- Proceed to Advanced Meshing

Default Geometry Options

- Solid bodies
- Surface bodies
- Line bodies
- Parameters
- Attributes
- Named selections
- Material properties

Advanced Geometry Defaults

Edit Item

- Rename
- Open containing folder...
- Find file...
- Delete...

Name	File	Size	Timestamp	Type
------	------	------	-----------	------

Project	Project.wbdb	539 B	17.06.2009 18:41:04	Workbench Project
Geometry	Geometry.agdb	11 KB	17.06.2009 19:09:47	DesignModeler Geometry

Project [Project] Geometry [DesignModeler] [Meshing] x

File Edit View Units Tools Help

Selection Visibility Suppression

Model Geometry Virtual Topology Symmetry Connections Coordinate Systems

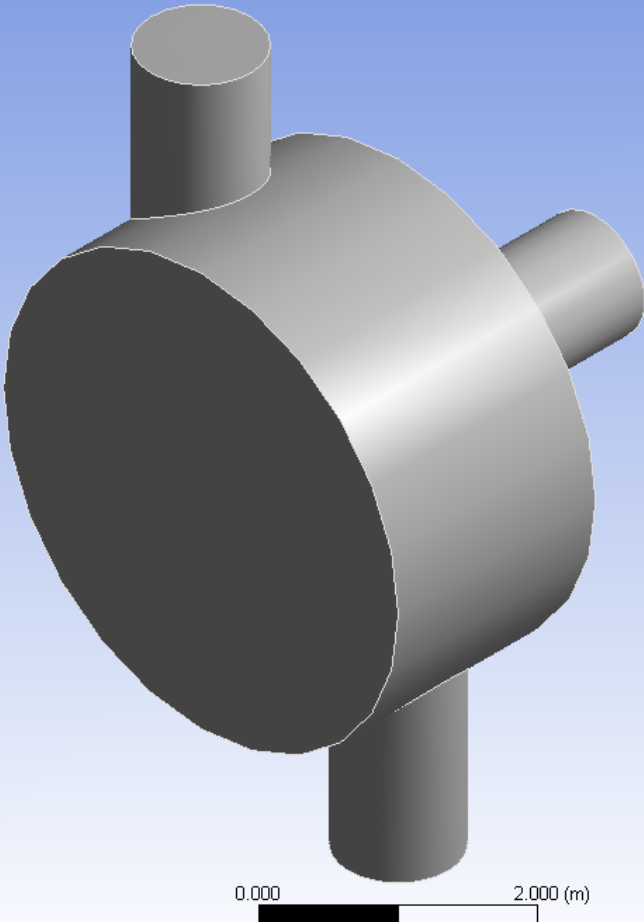
Outline

- Project
 - Model
 - Geometry
 - Mesh

Details of "Model"

Lighting

Ambient Light	0,1
Diffuse Light	0,6
Specular Light	1
Light Color	



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Meshing Options

Use this panel to start the meshing process by defining a physics preference and an initial Method control, or to set application defaults for future meshing work.

Physics Preference

- CFD
- Explicit
- Mechanical
- Electromagnetic

Mesh Method

- Automatic (Patch Conforming/Sweeping)
- Tetrahedrons (Patch Independent)
- Tetrahedrons (Patch Conforming)
- CFX-Mesh

Set Physics and Create Method

Sets the Physics Preference for the current Mesh object in the Outline. Inserts a Method control, sets the Scope selection to all solid bodies and configures the Definition per the method selected above.

Set Meshing Defaults

Updates preferences in the Option dialog. For compatibility, this action disables "Enclosure and Symmetry Processing" (under "Geometry Import") if "CFD" or "CFX-Mesh" is selected.

Display this panel at Meshing startup.

OK Cancel Help

Geometry Worksheet Print Preview

Project [Project] Geometry [DesignModeler] [Meshing] x

File Edit View Units Tools Help

Selection Visibility Suppression

Model Geometry Virtual Topology Symmetry Connections Coordinate Systems

Outline

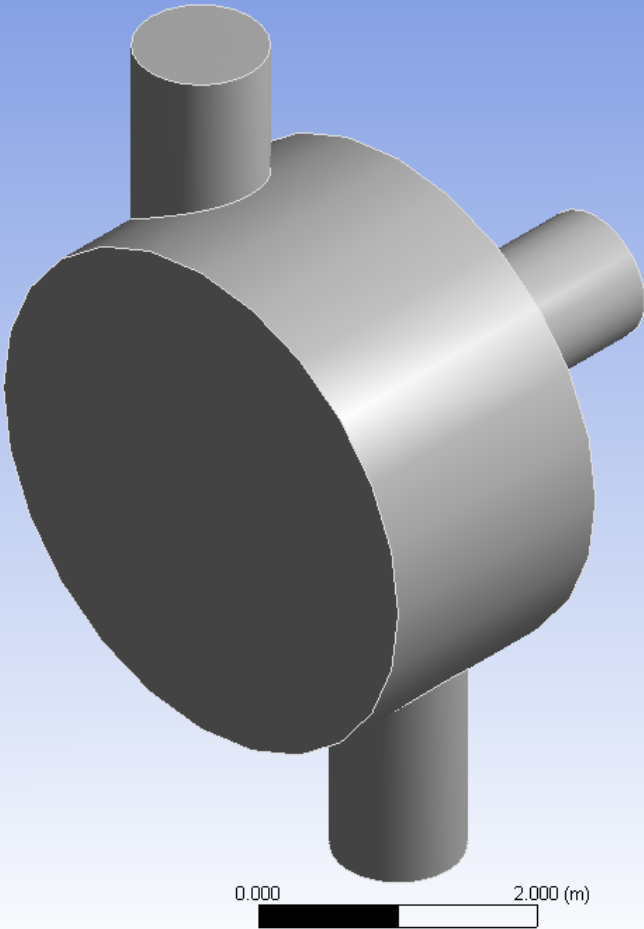
- Project
 - Model
 - Geometry
 - Mesh

Details of "Model"

Lighting

Ambient Light	0,1
Diffuse Light	0,6
Specular Light	1
Light Color	

ANSYS
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Meshing Options

Use this panel to start the meshing process by defining a physics preference and an initial Method control, or to set application defaults for future meshing work.

Physics Preference

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- Explicit
- Mechanical
- Electromagnetic

Mesh Method

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- Tetrahedrons (Patch Independent)
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Updates preferences in the Option dialog. For compatibility, this action disables "Enclosure and Symmetry Processing" (under "Geometry Import") if "CFD" or "CFX-Mesh" is selected.

Display this panel at Meshing startup.

OK Cancel Help

Project [Project] Geometry [DesignModeler] [Meshing] x

File Edit View Units Tools Help

Selection Visibility Suppression

Model Geometry Virtual Topology Symmetry Connections Coordinate Systems

Outline

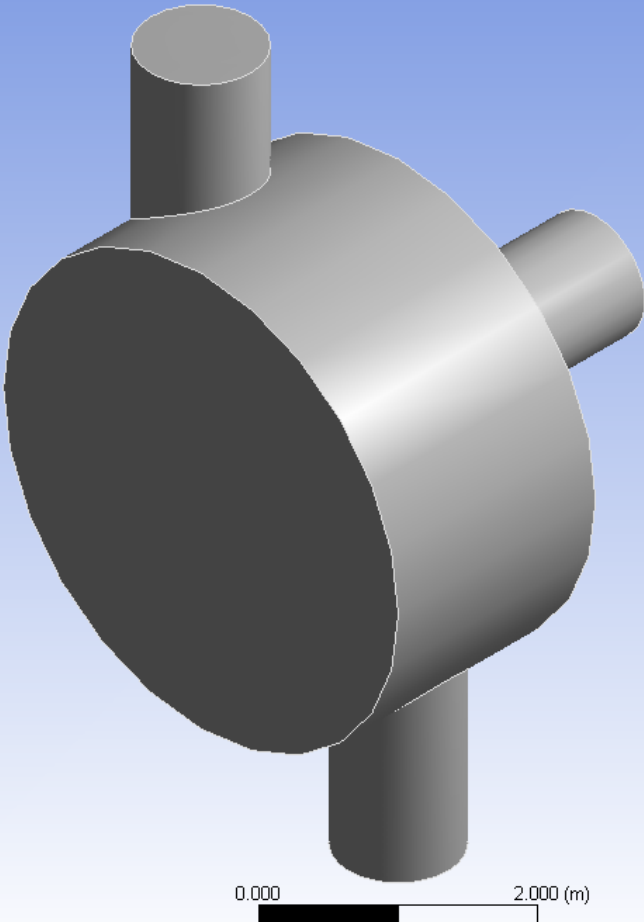
- Project
 - Model
 - Geometry
 - Mesh

Details of "Model"

Lighting

Ambient Light	0,1
Diffuse Light	0,6
Specular Light	1
Light Color	

ANSYS
Noncommercial use only



Meshing Options

Use this panel to start the meshing process by defining a physics preference and an initial Method control, or to set application defaults for future meshing work.

Physics Preference

- CFD
- Explicit
- Mechanical
- Electromagnetic

Mesh Method

- Automatic (Patch Conforming/Sweeping)
- Tetrahedrons (Patch Independent)
- Tetrahedrons (Patch Conforming)
- CFX-Mesh

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Sets the Physics Preference for the current Mesh object in the Outline. Inserts a Method control, sets the Scope selection to all solid bodies and configures the Definition per the method selected above.

Set Meshing Defaults
Updates preferences in the Option dialog. For compatibility, this action disables "Enclosure and Symmetry Processing" (under "Geometry Import") if "CFD" or "CFX-Mesh" is selected.

Display this panel at Meshing startup.

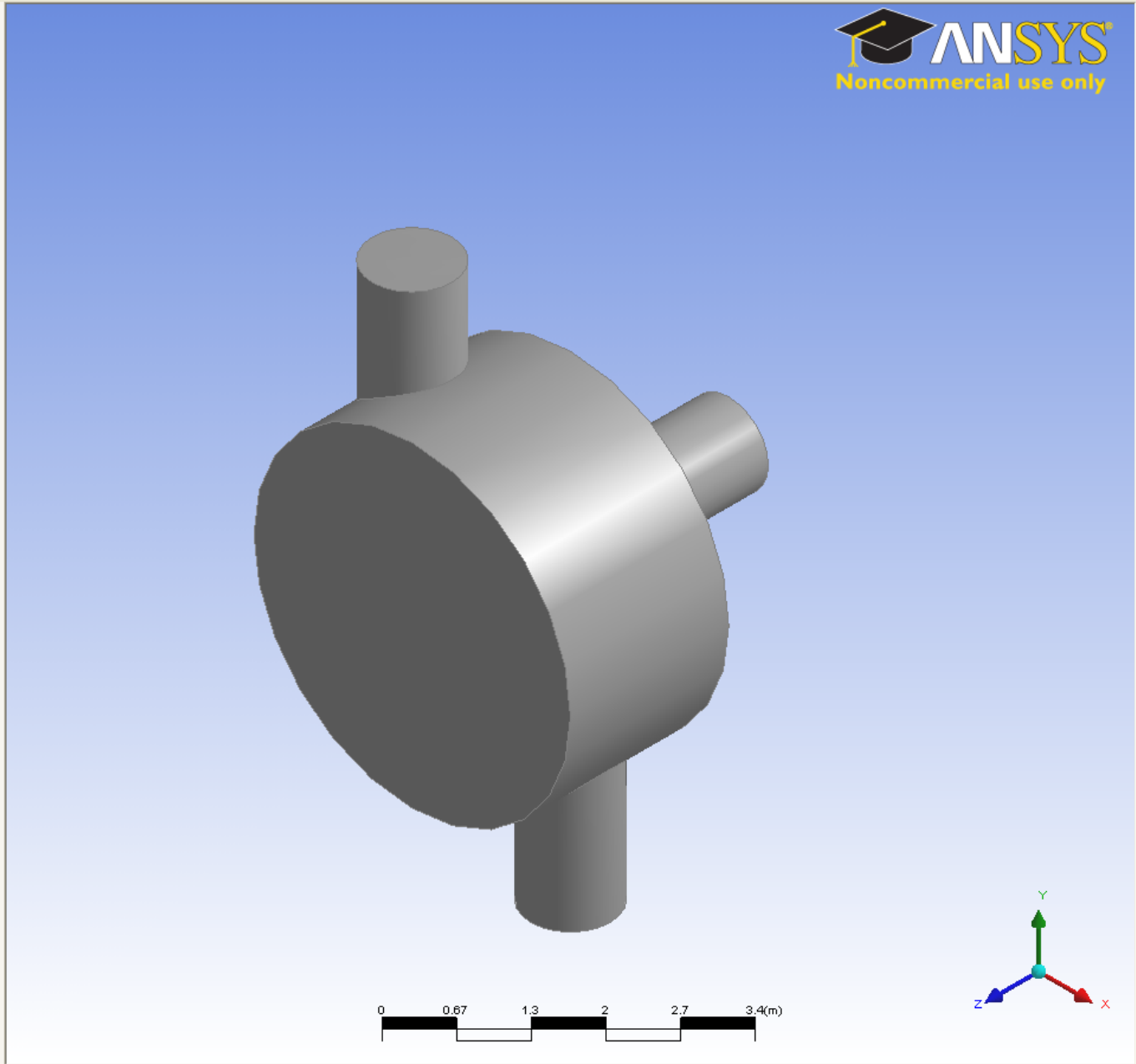
OK Cancel Help

Geometry Worksheet Print Preview

Tree View

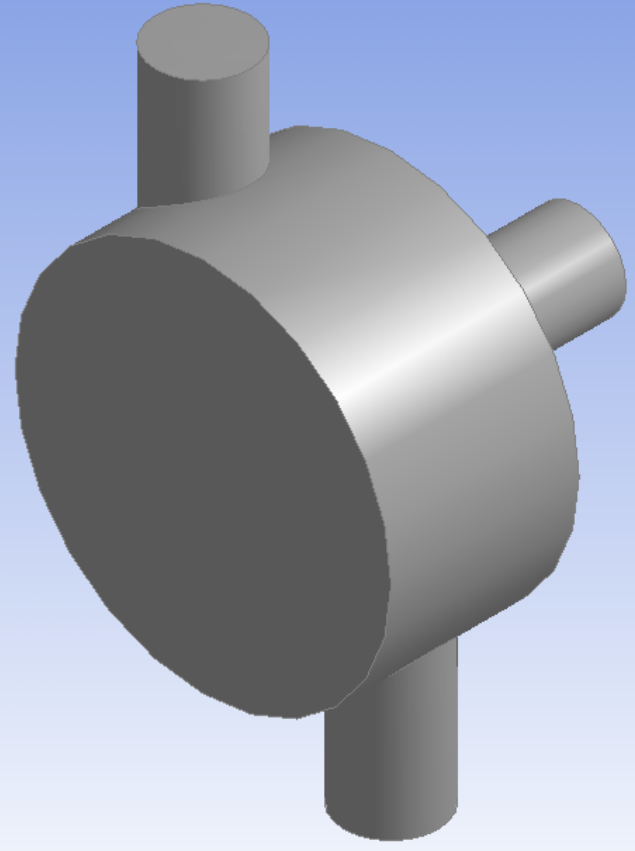
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview

Details View

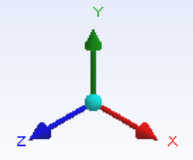


Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions**
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview

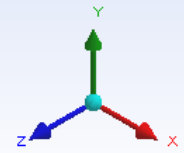
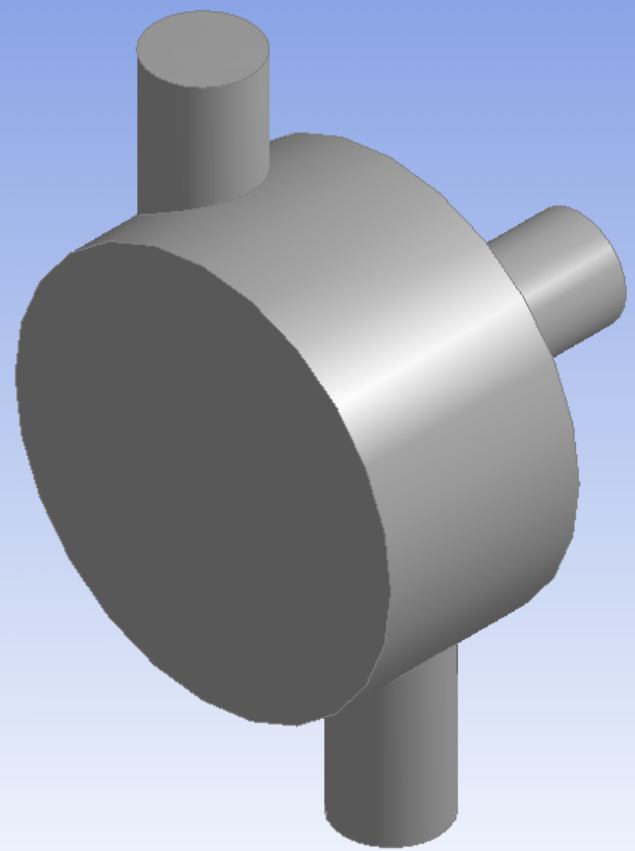


Details View



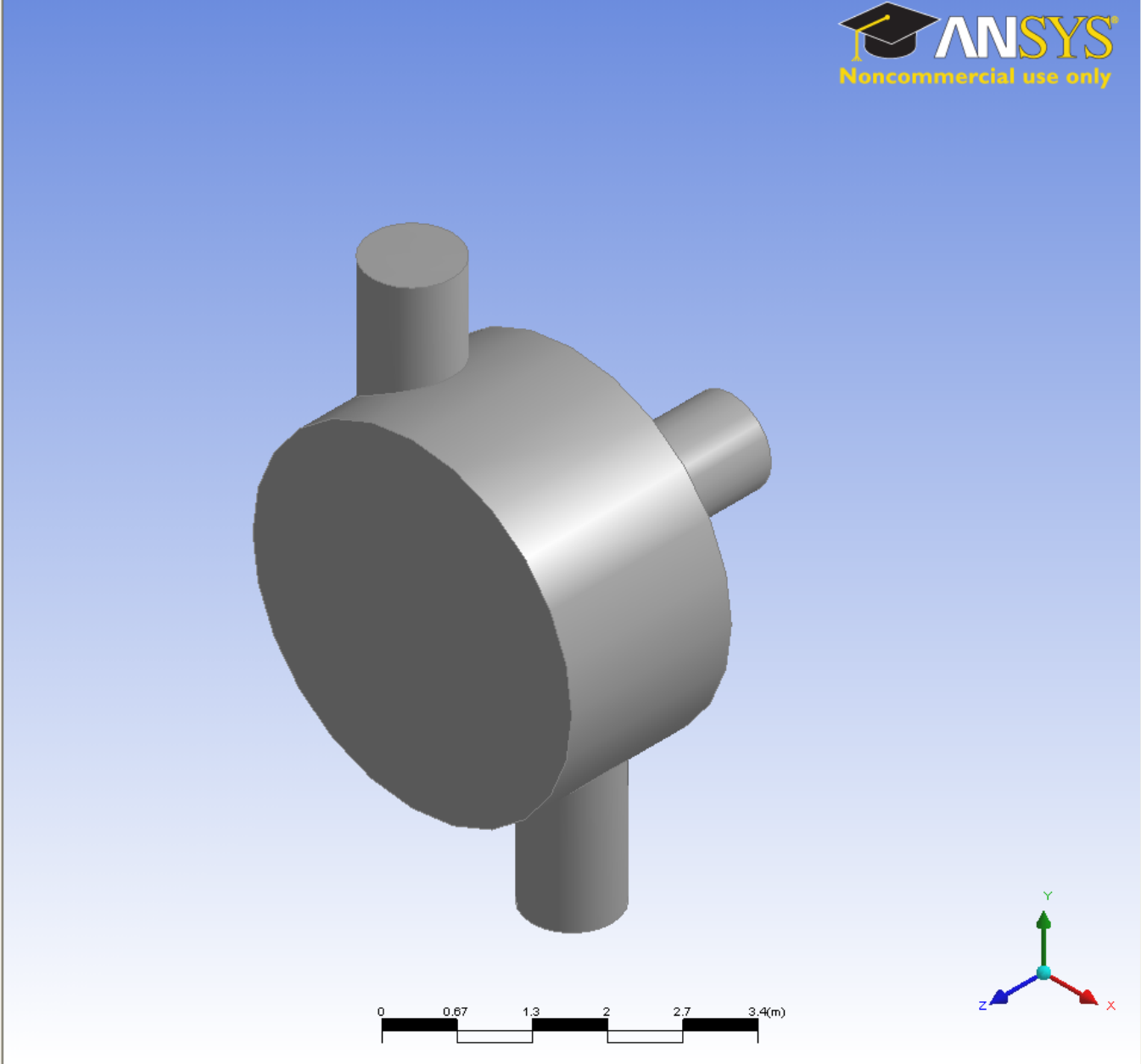
Tree View

- Model
 - Geometry
 - Welded Topology
 - Region
 - Insert
 - Composite 2D Region
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Tree View

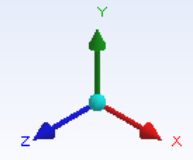
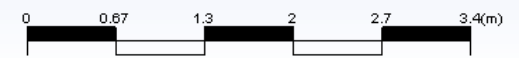
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 3D Region
 - in1**
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

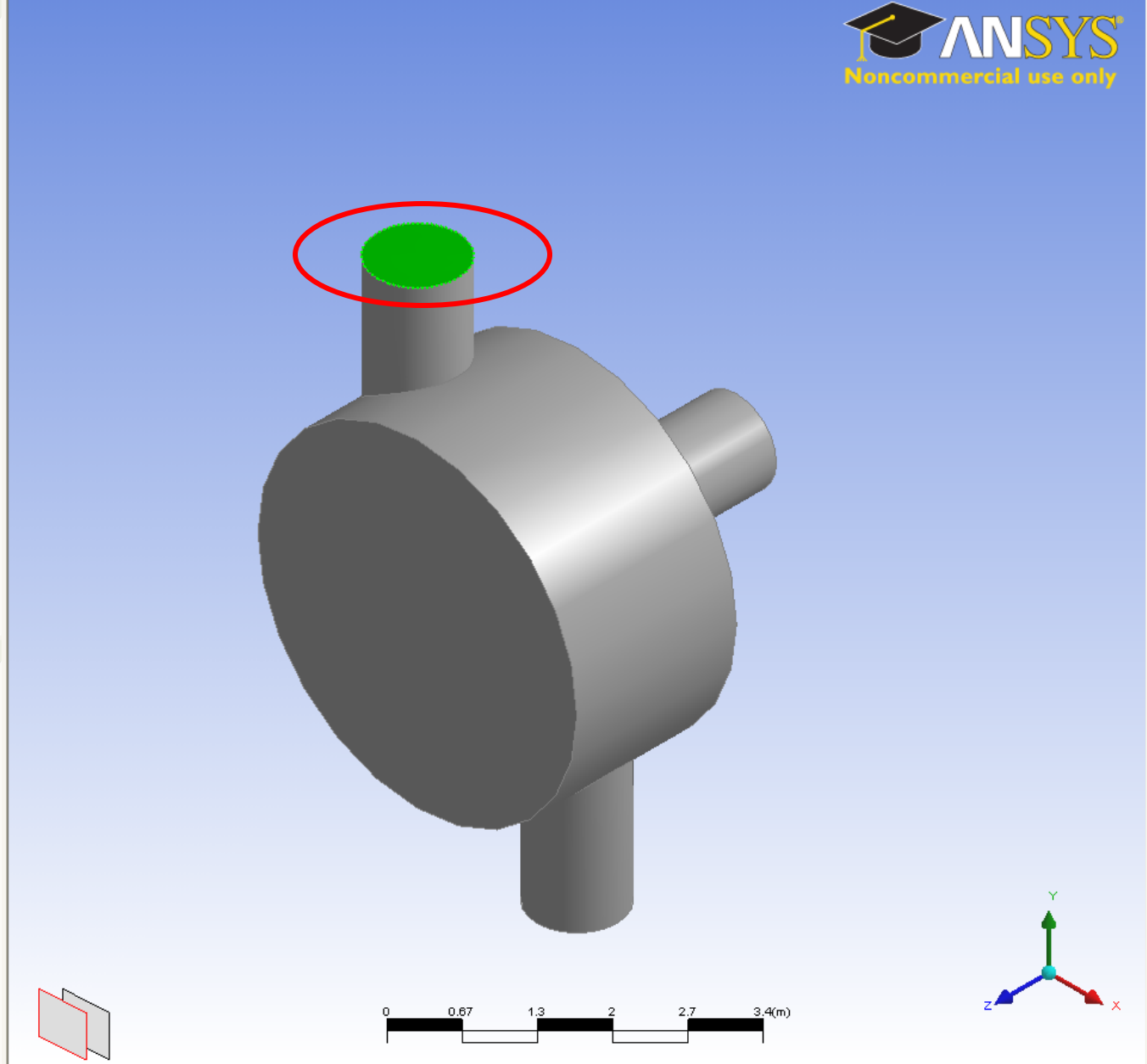
in1

Location Apply Cancel



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



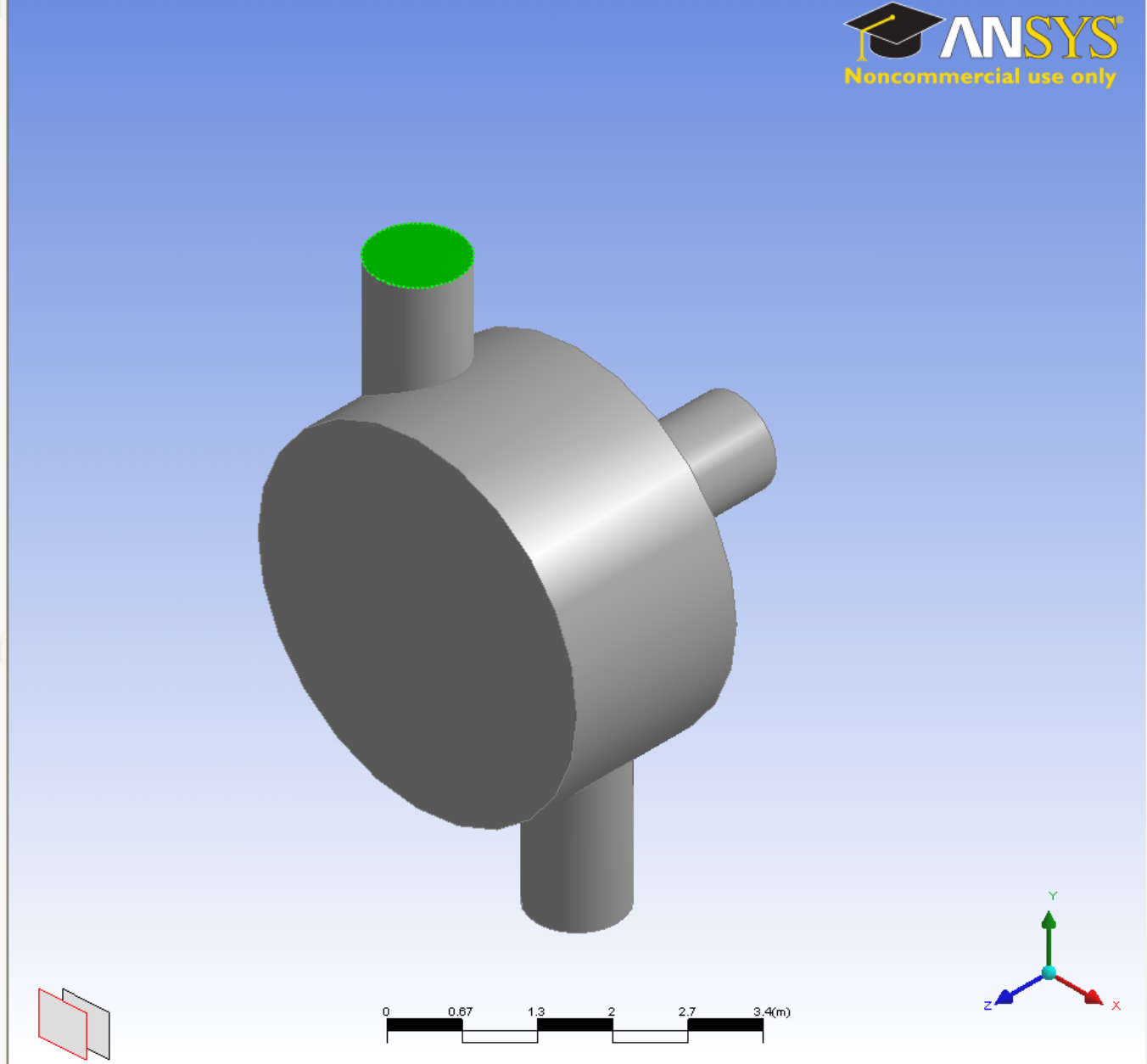
Details View

in1

Location	Apply	Cancel
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Tree View

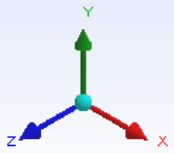
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

in1

Location



Tree View

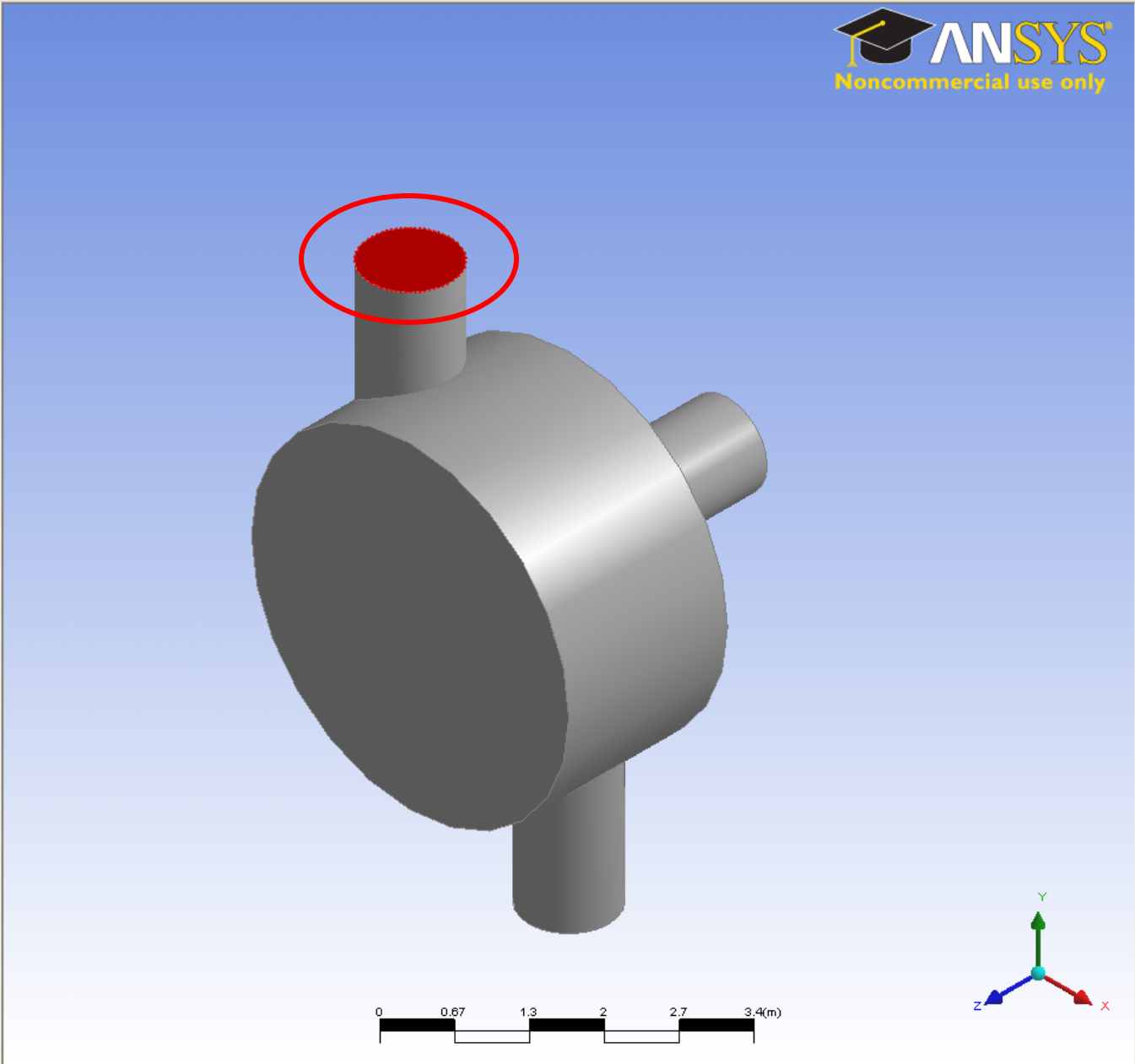
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

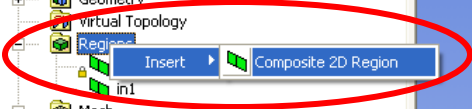
in1	
Location	1 2D Region

Empty details view area



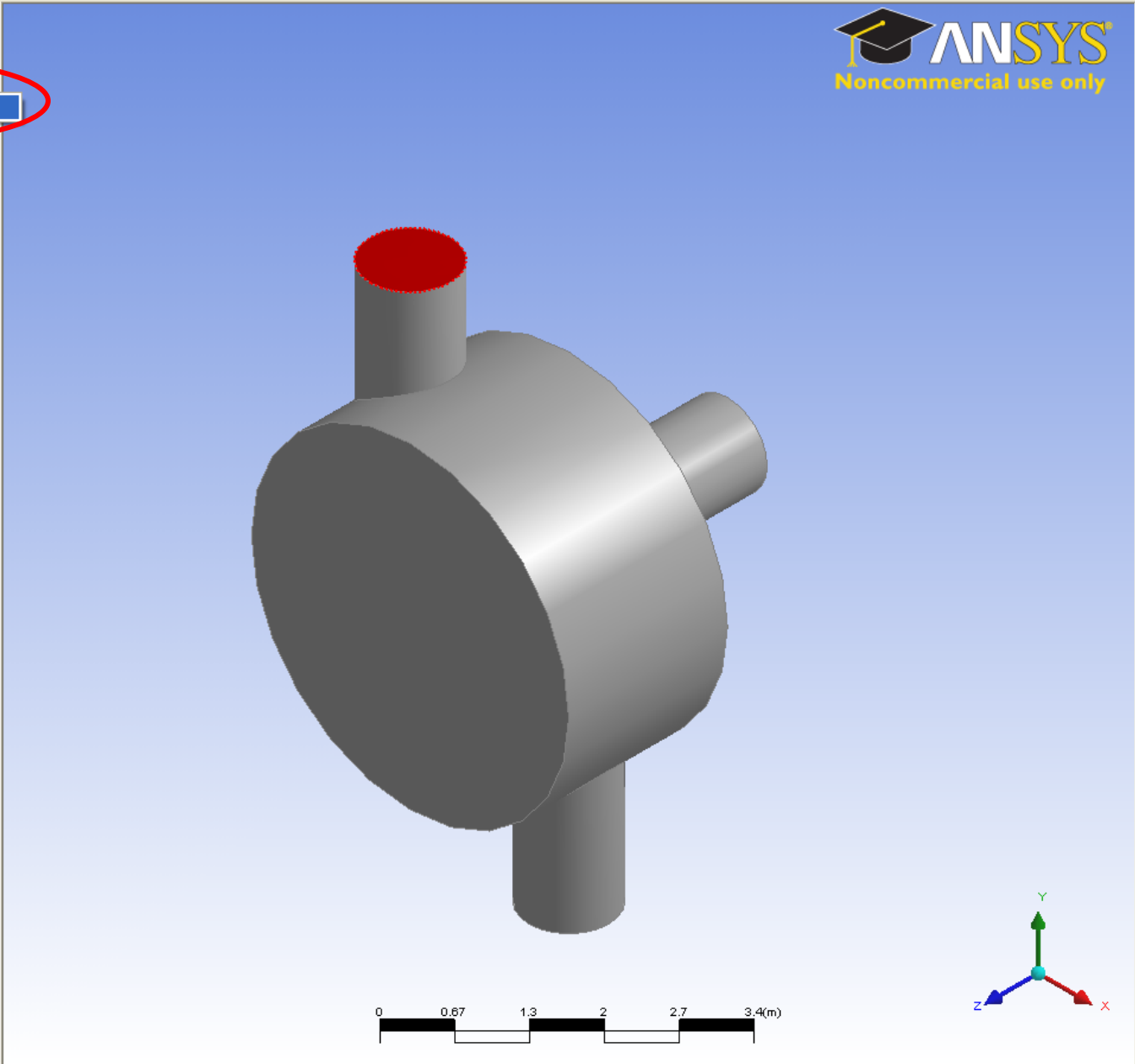
Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - in1
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

in1	
Location	1 2D Region



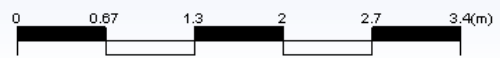
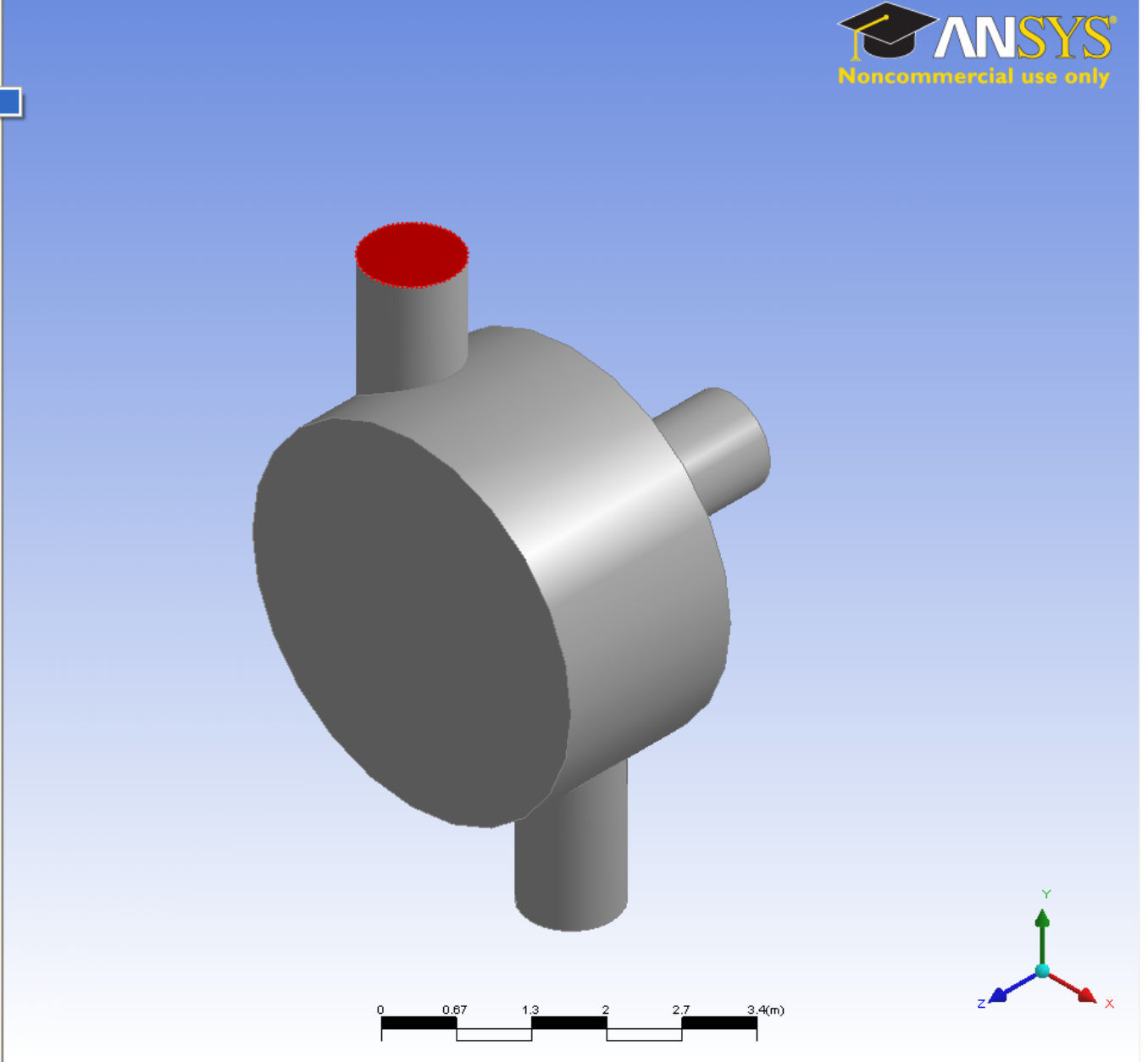
Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - in1
 - Insert
 - Composite 2D Region
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



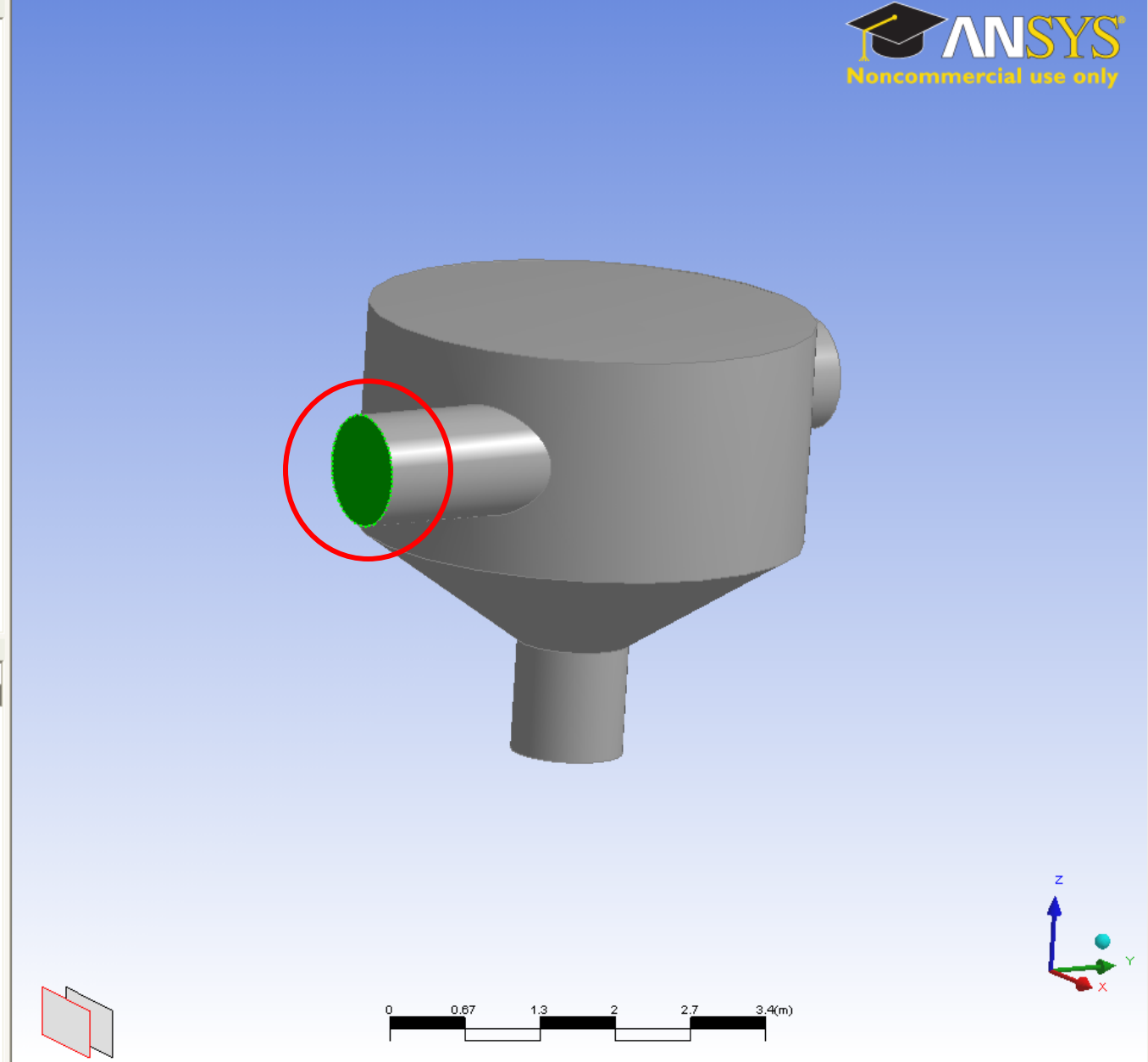
Details View

in1	
Location	1 2D Region



Tree View

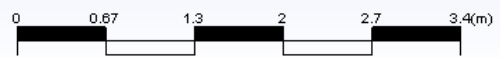
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

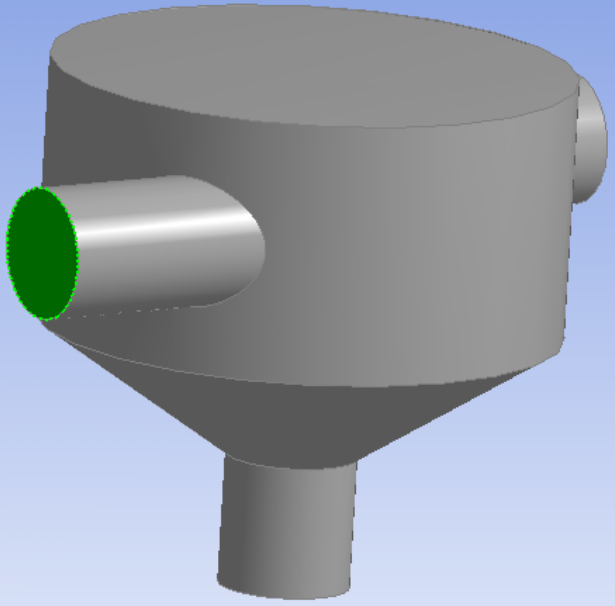
in2

Location Apply Cancel



Tree View

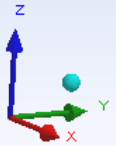
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

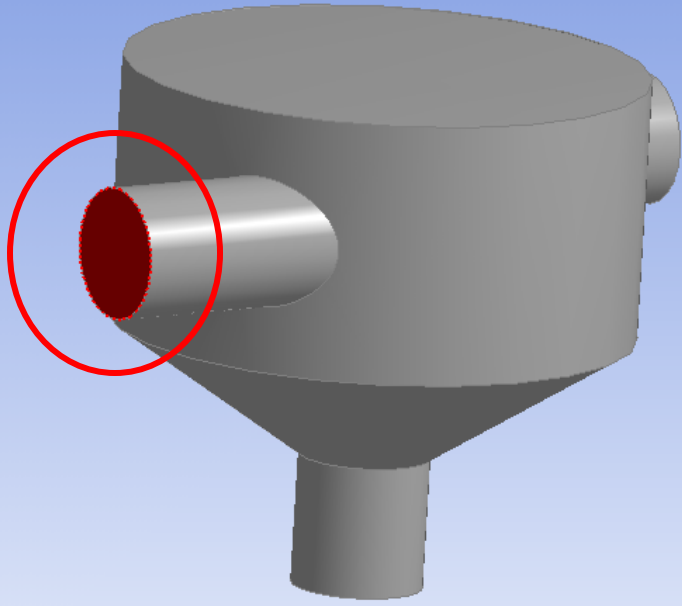
in2

Location



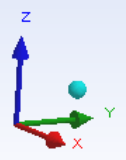
Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



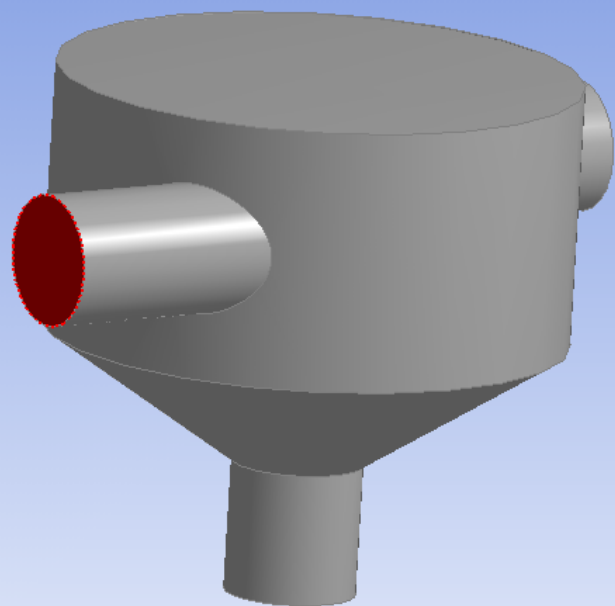
Details View

in2	
Location	1 2D Region



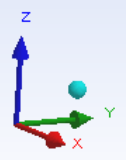
Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



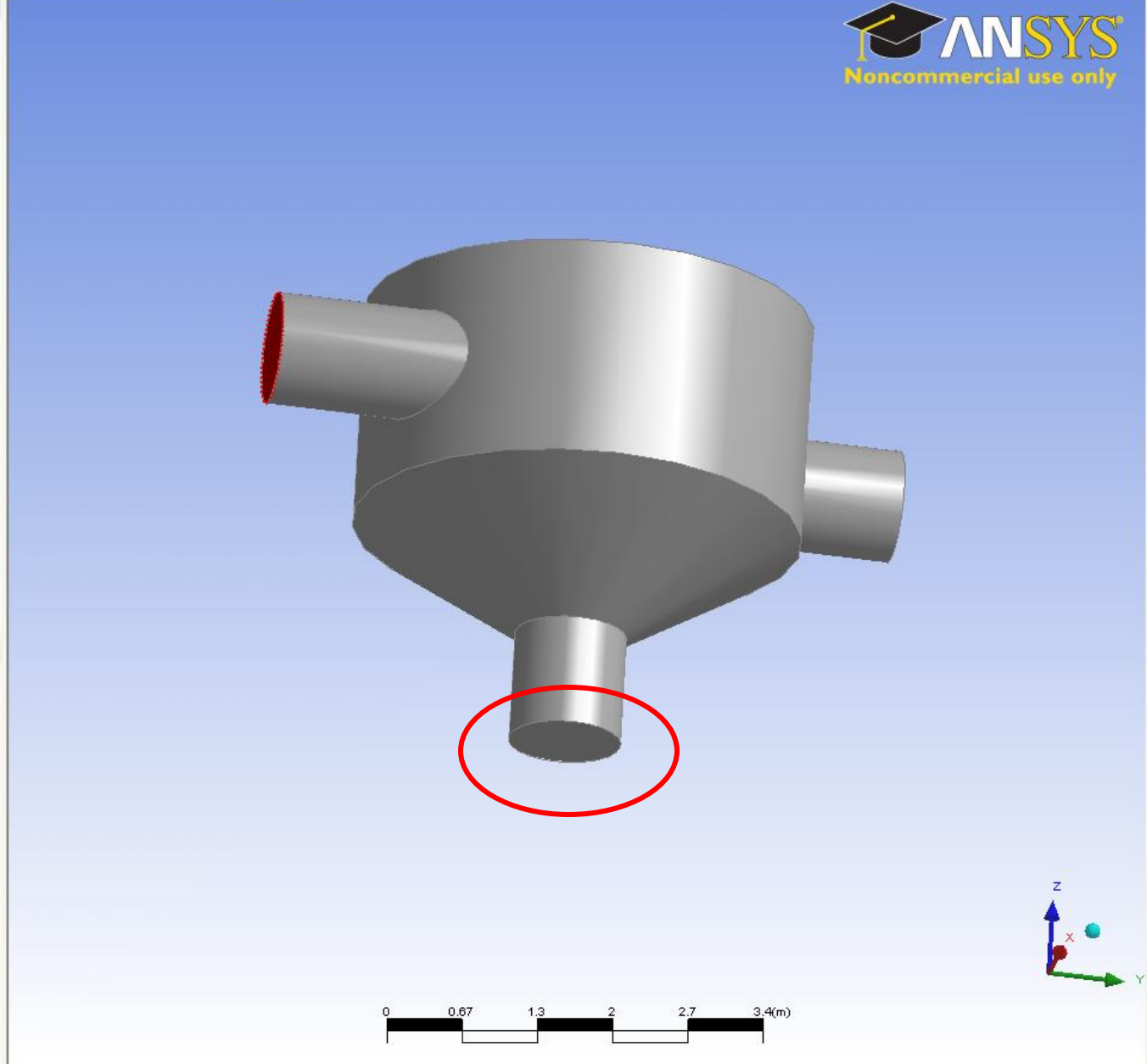
Details View

in2	
Location	1 2D Region



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default: 2D Region
 - in1
 - in2
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

in2	
Location	1 2D Region

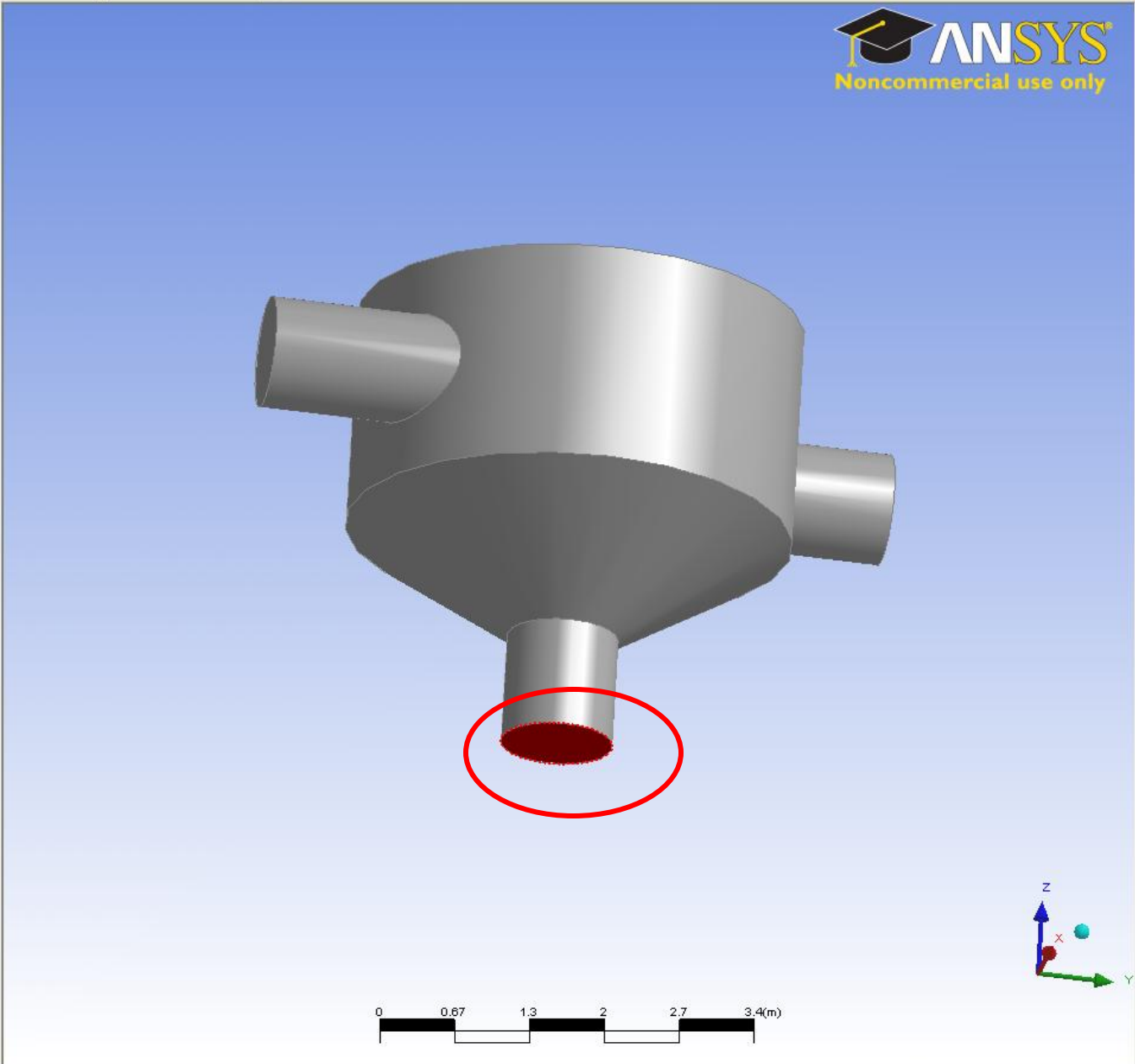


Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview

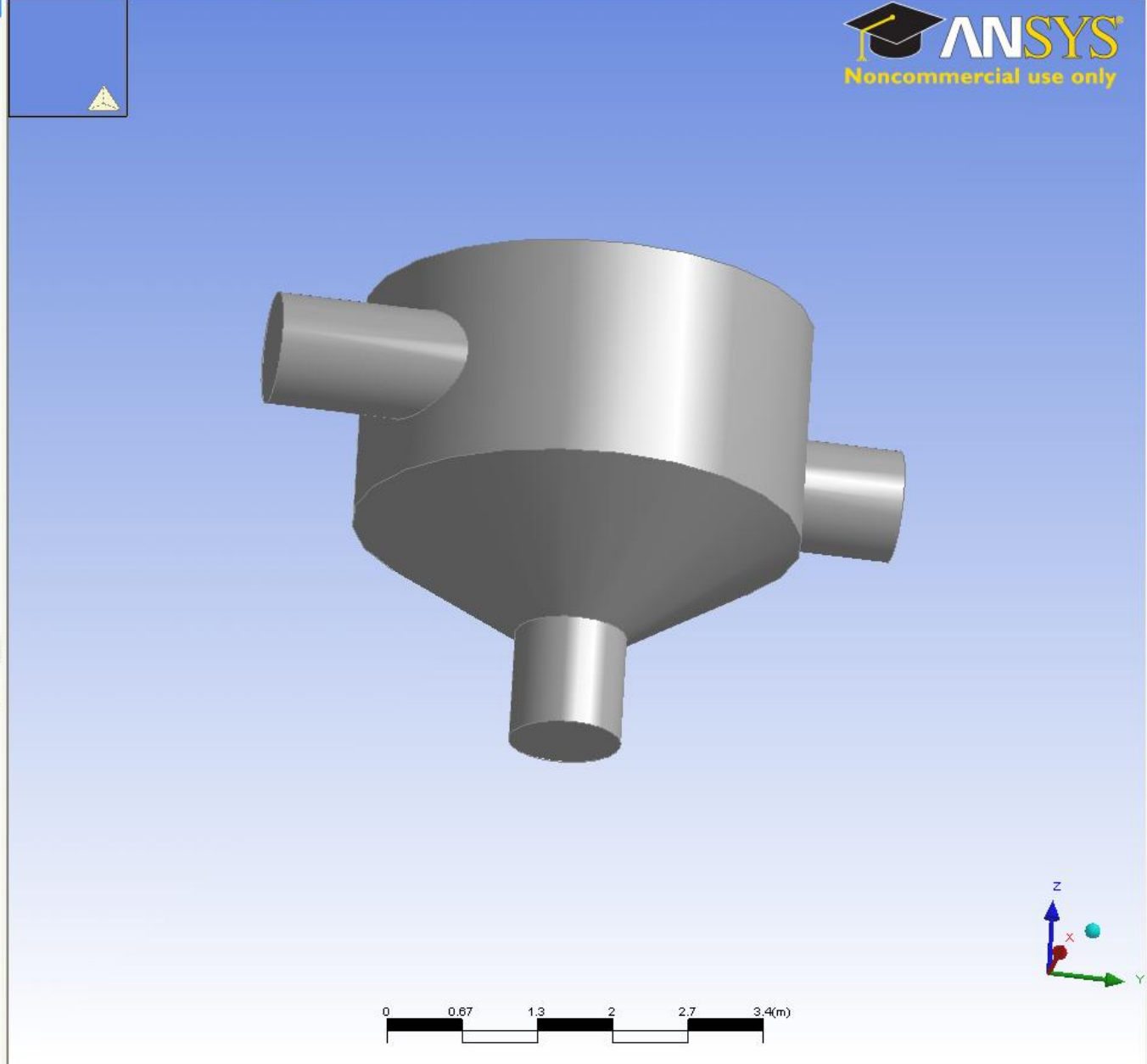
Details View

out	
Location	1 2D Region



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

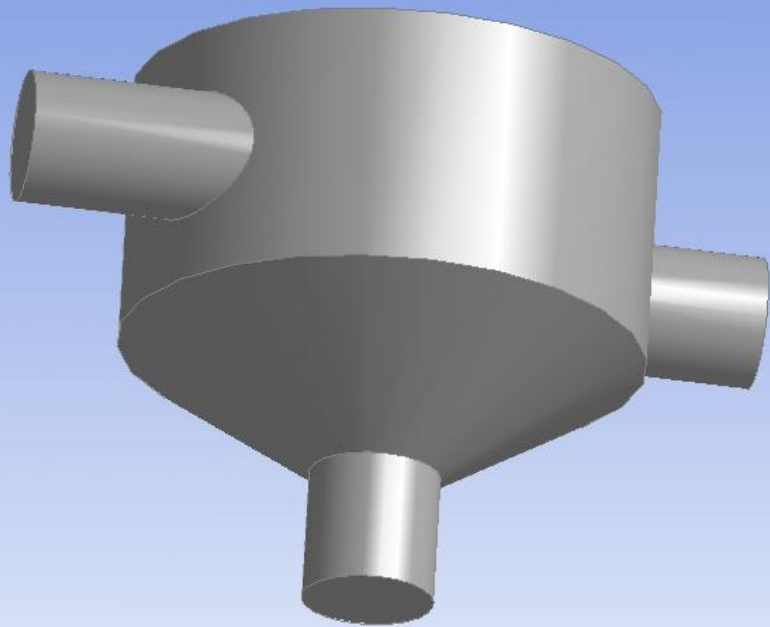
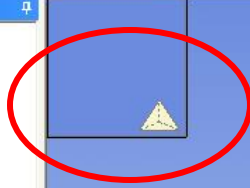
Default Body Spacing

Maximum Spacing [m]	0.3
---------------------	-----



Tree View

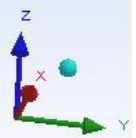
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview



Details View

Default Body Spacing

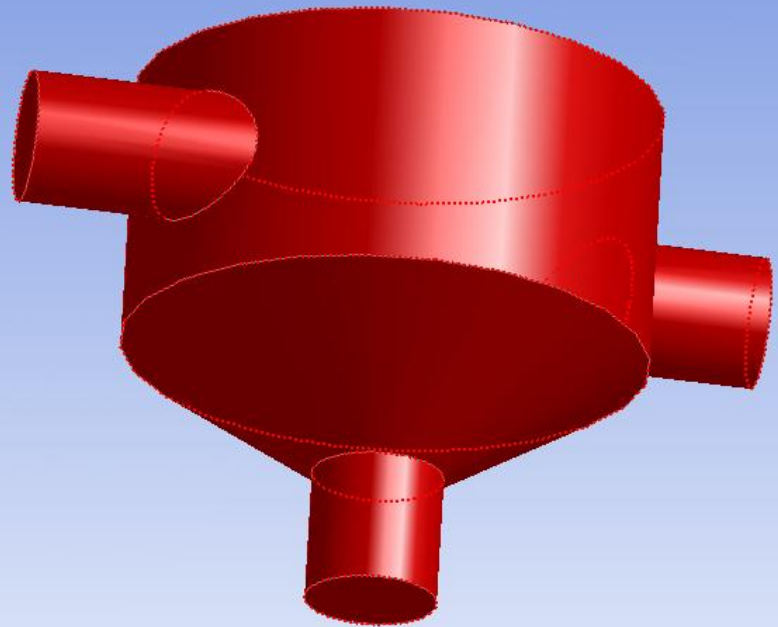
Maximum Spacing [m] 0.3



Tree View

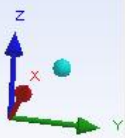
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics

Generate the surface mesh for the current problem



Details View

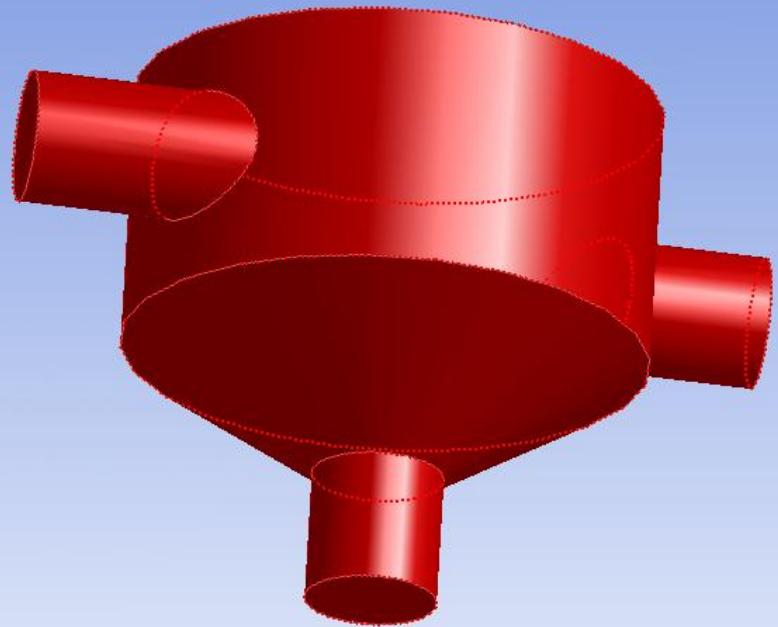
Default Preview Group



Tree View

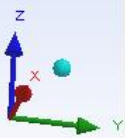
- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics

Generate the surface mesh for the current problem



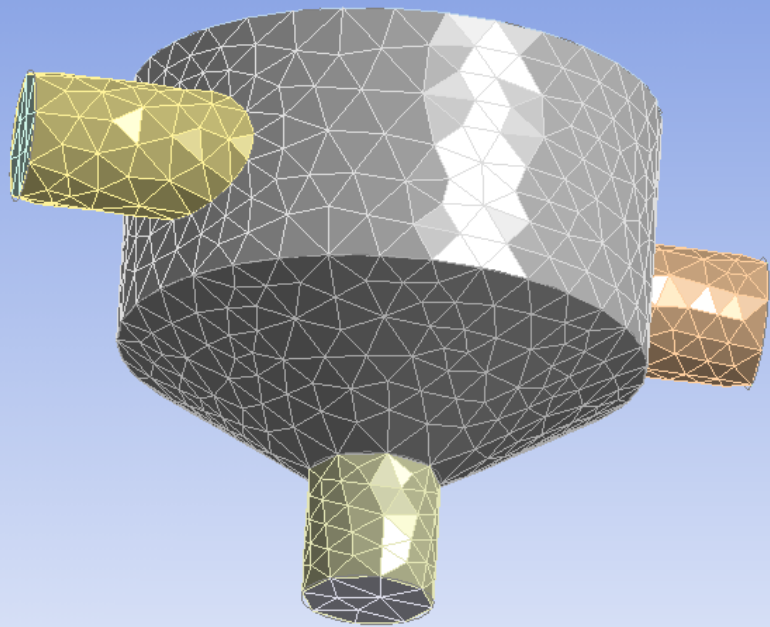
Details View

Default Preview Group



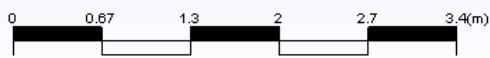
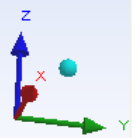
Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



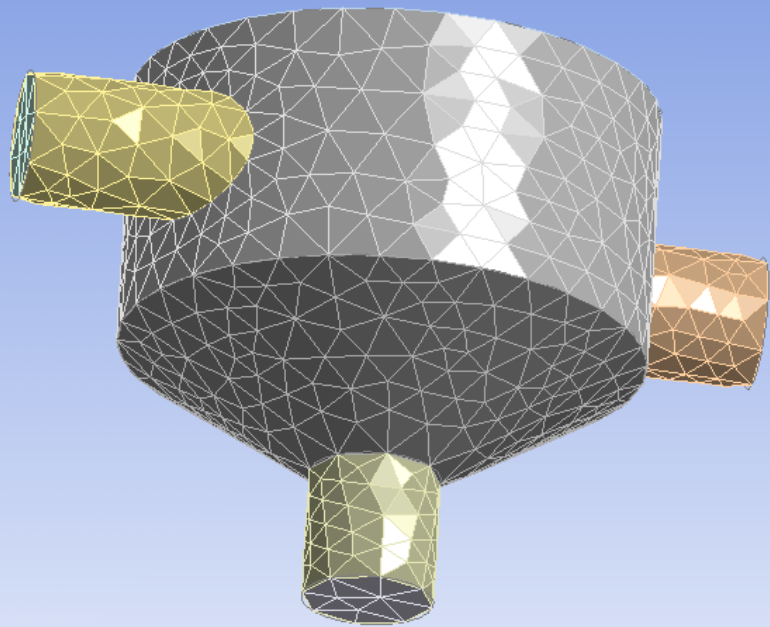
Details View

Default Preview Group



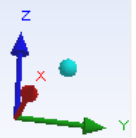
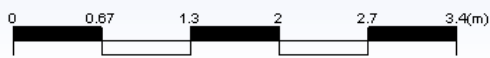
Tree View

- Rotate
- Mouse Pan
- Mouse Zoom
- Box Zoom
- Zoom to Fit
- Pick Vertex
- Pick Edge
- Pick Region
- Pick Face
- Pick Body
- Options... (highlighted with a red circle)
- Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
- Preview
 - Default Preview Group
 - Mesh Statistics



Details View

Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Options

- Common Settings
- DesignModeler
- AUTODYN
- Meshing
 - Meshing
 - CFX-Mesh Options**
 - Simulation
- FE Modeler
- DesignExplorer
- Licensing

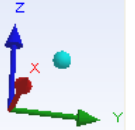
CFX-Mesh Options

- Assembly Display**
 - View: Shaded Display with 3D Edges
 - Transparency: 0
 - Shine: 30
- Mesh Display**
 - Transparency: 0
 - Shine: 0
- Tree Colours**
 - Normal: [Black swatch]
 - Dimmed: [Grey swatch]
 - Highlight: [Blue swatch]
- Properties View**
 - Auto Activate Invalid Entries: Yes
- Geometry**
 - Auto Verify on Change: No
- Mesh Edge Lengths**
 - Adjust 'Default Mesh Scale' on Geometry Change: Yes

Reset OK Cancel Help

Details View

Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Options

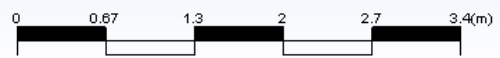
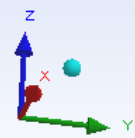
CFX-Mesh Options

- Assembly Display
 - View: Shaded Display with 3D Edges
 - Transparency: 0
 - Shine: 30
- Mesh Display
 - Transparency: 0
 - Shine: 0
- Tree Colours
 - Normal: [Black swatch]
 - Dimmed: [Grey swatch]
 - Highlight: [Blue swatch]
- Properties View
 - Auto Activate Invalid Entries: Yes
- Geometry
 - Auto Verify on Change: No
- Mesh Edge Lengths
 - Adjust 'Default Mesh Scale' on Geometry Change: Yes

Reset OK Cancel Help

Details View

Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Options

- Common Settings
- DesignModeler
- AUTODYN
- Meshing
 - CFX-Mesh Options
- Simulation
- FE Modeler
- DesignXplorer
- Licensing

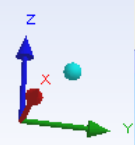
CFX-Mesh Options

Auto Activate Invalid Entries	Yes
Geometry	
Auto Verify on Change	No
Mesh Edge Lengths	
Adjust 'Default Mesh Scale' on Geometry Change	Yes
'Default Mesh Scale Factor'	1
Virtual Topology	
Automatically Remove Invalidated Virtual Cells	Yes
Automatic Edge Merging Tolerance (Degrees)	5
Volume Mesh	
Volume Mesh Output	Add To CMDB File
Commit Mesh To CMDB on Generate	Yes
GTM File Location	Automatic
Miscellaneous	
Frequency of Auto Backup	Infrequently
Auto Backup Before Action	Yes
Keep Backup Files	No

Reset OK Cancel Help

Details View

Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Options

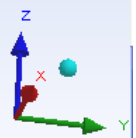
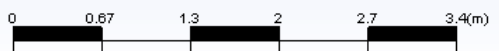
CFX-Mesh Options

Auto Activate Invalid Entries	Yes
Geometry	
Auto Verify on Change	No
Mesh Edge Lengths	
Adjust 'Default Mesh Scale' on Geometry Change	Yes
'Default Mesh Scale Factor'	1
Virtual Topology	
Automatically Remove Invalidated Virtual Cells	Yes
Automatic Edge Merging Tolerance (Degrees)	5
Volume Mesh	
Volume Mesh Output	Add To CMDB File
Commit Mesh To CMDB on Generate	Add To CMDB File
GTM File Location	write GTM File
	Both CMDB and GTM
Miscellaneous	
Frequency of Auto Backup	Infrequently
Auto Backup Before Action	Yes
Keep Backup Files	No

Reset OK Cancel Help

Details View

Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Options

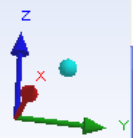
CFX-Mesh Options

Auto Activate Invalid Entries	Yes
Geometry	
Auto Verify on Change	No
Mesh Edge Lengths	
Adjust 'Default Mesh Scale' on Geometry Change	Yes
'Default Mesh Scale Factor'	1
Virtual Topology	
Automatically Remove Invalidated Virtual Cells	Yes
Automatic Edge Merging Tolerance (Degrees)	5
Volume Mesh	
Volume Mesh Output	Add To CMDB File
Commit Mesh To CMDB on Generate	Add To CMDB File
GTM File Location	Write GTM File
	Both CMDB and GTM
Miscellaneous	
Frequency of Auto Backup	Infrequently
Auto Backup Before Action	Yes
Keep Backup Files	No

Reset OK Cancel Help

Details View

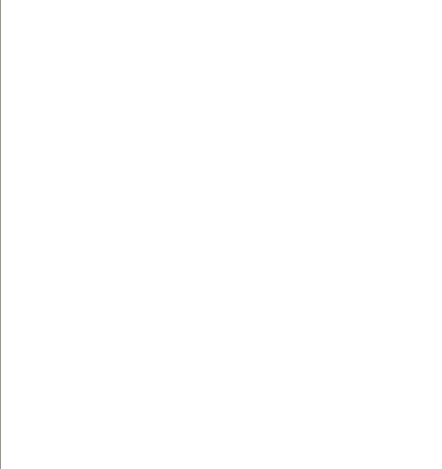
Default Preview Group



Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics

Details View



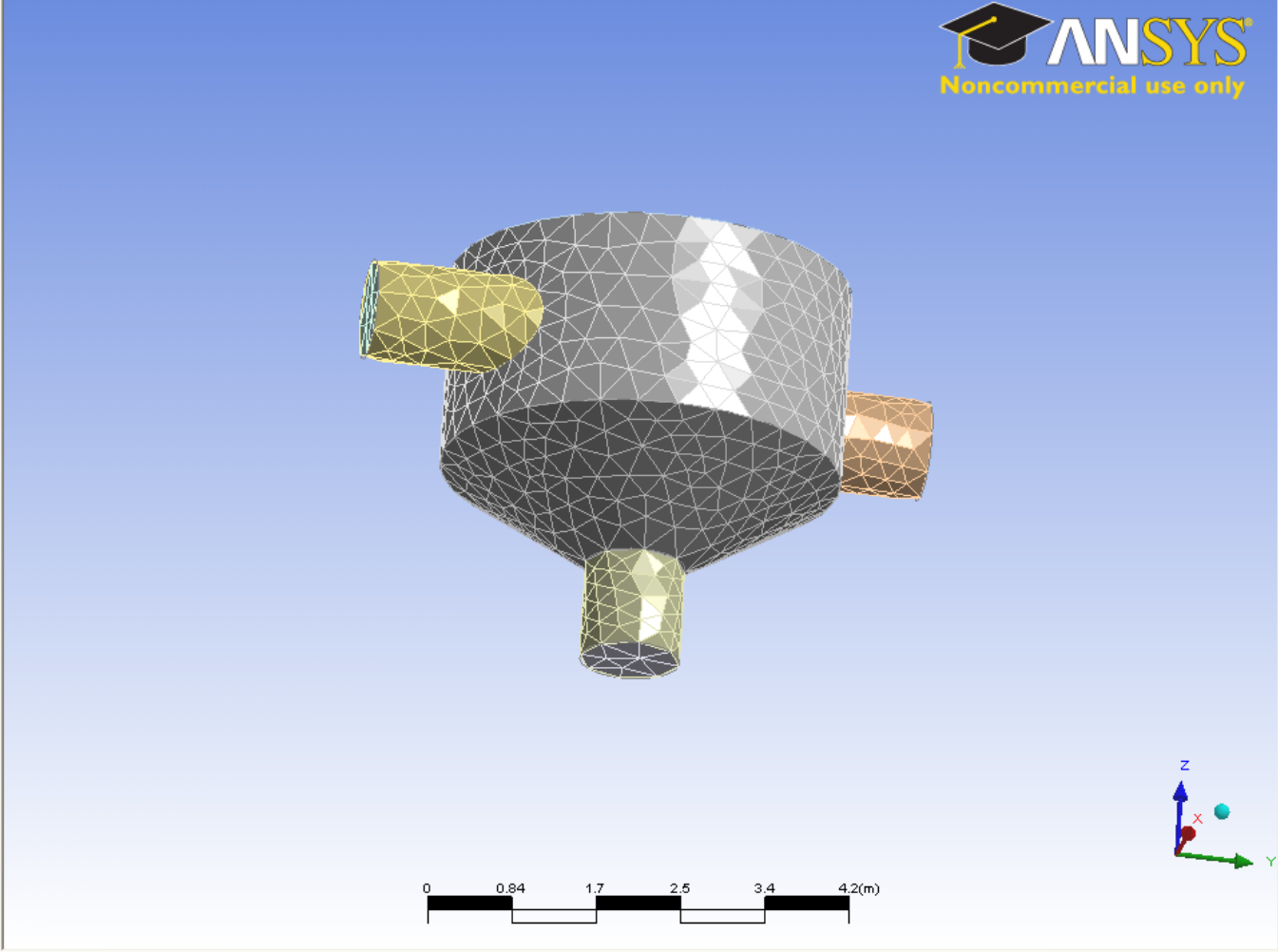
Generate the volume mesh for the current problem

ANSYS[®]
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0 0.67 1.3 2 2.7 3.4(m)

Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics



Details View

Default Preview Group

Messages

Information

Mesh statistics

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
Total number of prisms	0

File Tool View Go Help

Clear Settings

Revert Settings to Saved

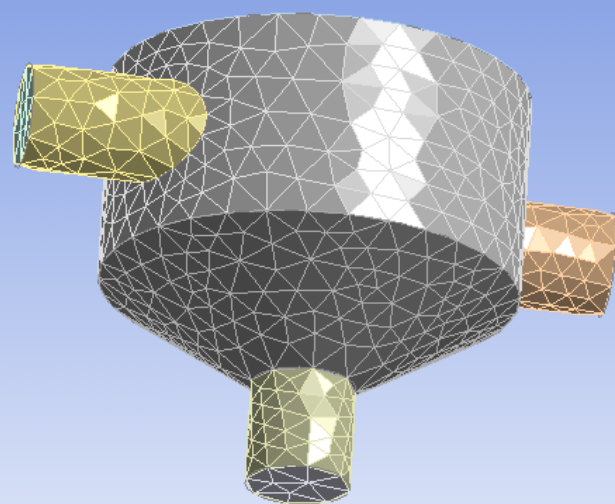
Save

Save As...

Export CCL...

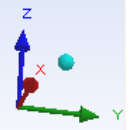
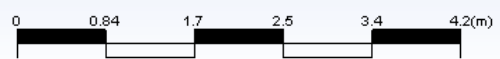
Close CFX-Mesh

- Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
- Preview
 - Default Preview Group
 - Mesh Statistics



Details View

Default Preview Group



Messages

Information

Mesh statistics

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
Total number of prisms	0

Tree View

- Model
 - Geometry
 - Virtual Topology
 - Regions
 - Default 2D Region
 - in1
 - in2
 - out
 - Mesh
 - Spacing
 - Default Body Spacing
 - Default Face Spacing
 - Controls
 - Periodicity
 - Inflation
 - Stretch
 - Proximity
 - Options
 - Preview
 - Default Preview Group
 - Mesh Statistics

Details View

Default Preview Group

Сохранить как

Папка: StaticMixer

Имя файла: Geometry.cmbd

Тип файла: Mesh Files (*.cmbd)

Сохранить Отмена

Messages

Information

Mesh statistics



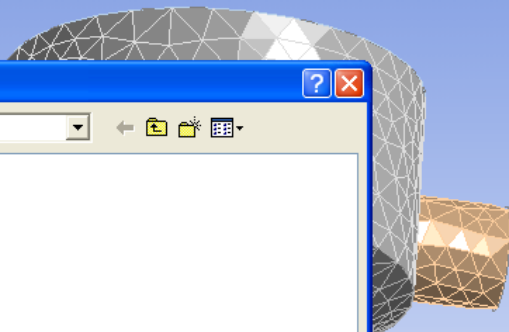

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
Total number of prisms	0

Tree View

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 - Geometry
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 - Regions
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Details View

Default Preview Group



Сохранить как

Папка: StaticMixer

- Geometry
- Geometry.gtm
- Project
- Project

Имя файла: Geometry

Тип файла: All Files (*.*)

Сохранить Отмена

Messages

Information

Mesh statistics

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
Total number of prisms	0

Tree View

- Model
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 - Preview
 - Default Preview Group
 - Mesh Statistics

Сохранить как

Папка: StaticMixer

- Geometry
- Geometry.gtm
- Project
- Project

Warning

C:\ANSYS\StaticMixer\Geometry.gtm already exists. Replace existing file?

Да Нет

Имя файла: Geometry

Тип файла: All Files (*.*)

Сохранить Отмена

0 0.84 1.7 2.5 3.4 4.2(m)

Details View

Default Preview Group

Messages

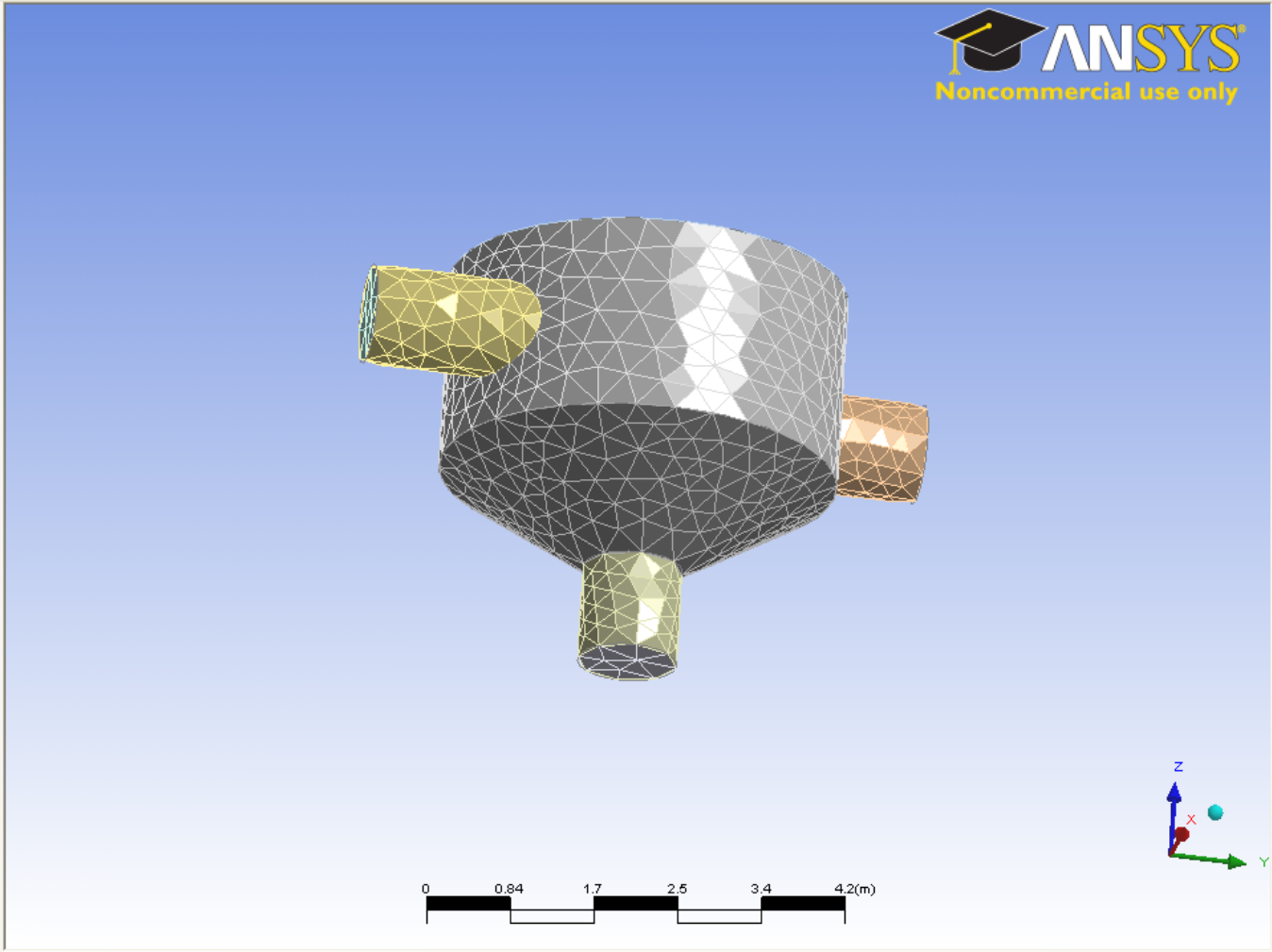
Information

Mesh statistics

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
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Tree View

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Details View

Default Preview Group

Messages

Information

Mesh statistics

Total number of nodes	2344
Total number of tetrahedra	11185
Total number of pyramids	0
Total number of prisms	0

Meshing Applet Tasks

- Open
- Convert to Simulation
- Proceed to Advanced Meshing
- New FE model

Parametric Geometry Updates

- Update **Model** using parameter values and geometry from **Geometry**.
- Regenerate **Geometry** using parameter values from **Model**, then update **Model** with the latest geometry from **Geometry**.

Edit Item

- Open containing folder...
- Delete...

Advanced CFD Tasks

- Create CFD Simulation with Mesh
- Examine in CFX-Post

Name	File	Size	Timestamp	Type
Project	Project.wbdb	543 B	17.06.2009 16:42:07	Workbench Project
Geometry	Geometry.agdb	11 KB	17.06.2009 18:01:14	DesignModeler Geometry
Model	Geometry.gtm	169 KB	17.06.2009 18:28:13	Meshing
Advanced CFD		0 B		Advanced CFD
Geometry		0 B		CFX Mesh File

File Tools Help

- New
- Open...
- Close Project
- Save
- Save As...
- Save All**
- Exit

Updates

- Update **Model** using parameter values and geometry from **Geometry**.
- Regenerate **Geometry** using parameter values from **Model**, then update **Model** with the latest geometry from **Geometry**.

Edit Item

- Open containing folder...
- Delete...

Advanced CFD Tasks

- Create CFD Simulation with Mesh
- Examine in CFX-Post

Name	File	Size	Timestamp	Type
Project	Project.wbdb	543 B	17.06.2009 16:42:07	Workbench Project
Geometry	Geometry.agdb	11 KB	17.06.2009 18:01:14	DesignModeler Geometry
Model	Geometry.gtm	169 KB	17.06.2009 18:28:13	Meshing
Advanced CFD		0 B		Advanced CFD
Geometry		0 B		CFX Mesh File

- New
- Open...
- Close Project
- Save
- Save As...
- Save All
- Exit**

Name	File	Size	Timestamp	Type
Project	Project.wbdb	3 KB	17.06.2009 18:29:55	Workbench Project
Geometry	Geometry.agdb	11 KB	17.06.2009 18:29:55	DesignModeler Geometry
Model	Geometry.gtm	169 KB	17.06.2009 18:28:13	Meshing
Advanced CFD		0 B		Advanced CFD

Update Model using parameter values and geometry from **Geometry**.

Regenerate **Geometry** using parameter values from **Model**, then update **Model** with the latest geometry from **Geometry**.

Edit Item

- Open containing folder...
- Delete...

Advanced CFD Tasks

- Create CFD Simulation with Mesh
- Examine in CFX-Post