

ENT 135
FINAL PROJECT DESCRIPTION

2017

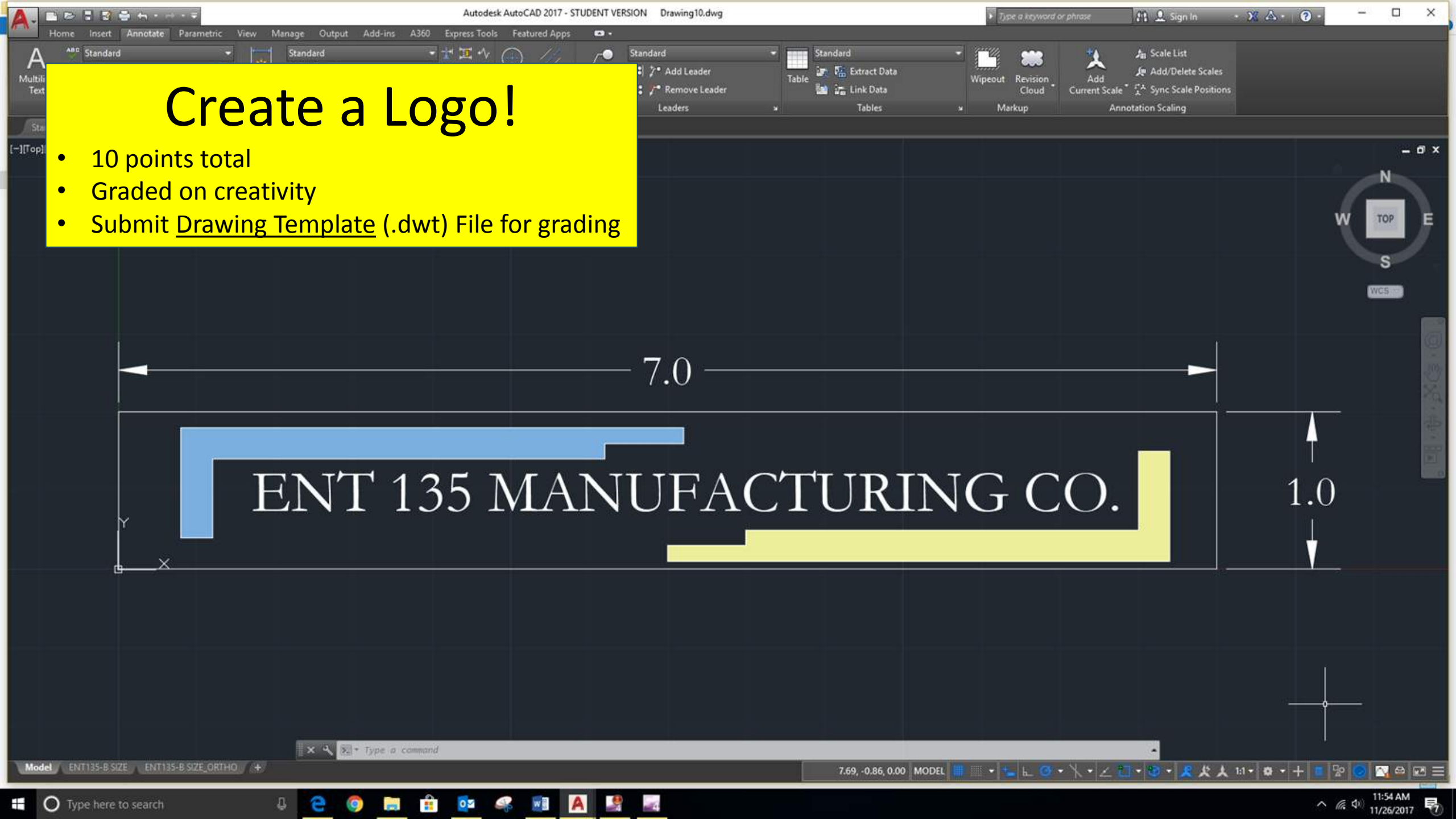
Create a Logo!

- 10 points total
- Graded on creativity
- Submit Drawing Template (.dwt) File for grading

ENT 135 MANUFACTURING CO.

7.0

1.0



Home Insert Annotate Parametric View Manage Output Add-ins A360 Express Tools Featured Apps Layout

Multiline Text Times Find text 0.13 Dimension Use Current Linear Quick Continue Center Mark Centerline Multileader Add Leader Remove Leader Tables Extract Data Link Data Wipeout Revision Cloud Add Current Scale Scale List Add/Delete Scales Sync Scale Positions Annotation Scaling

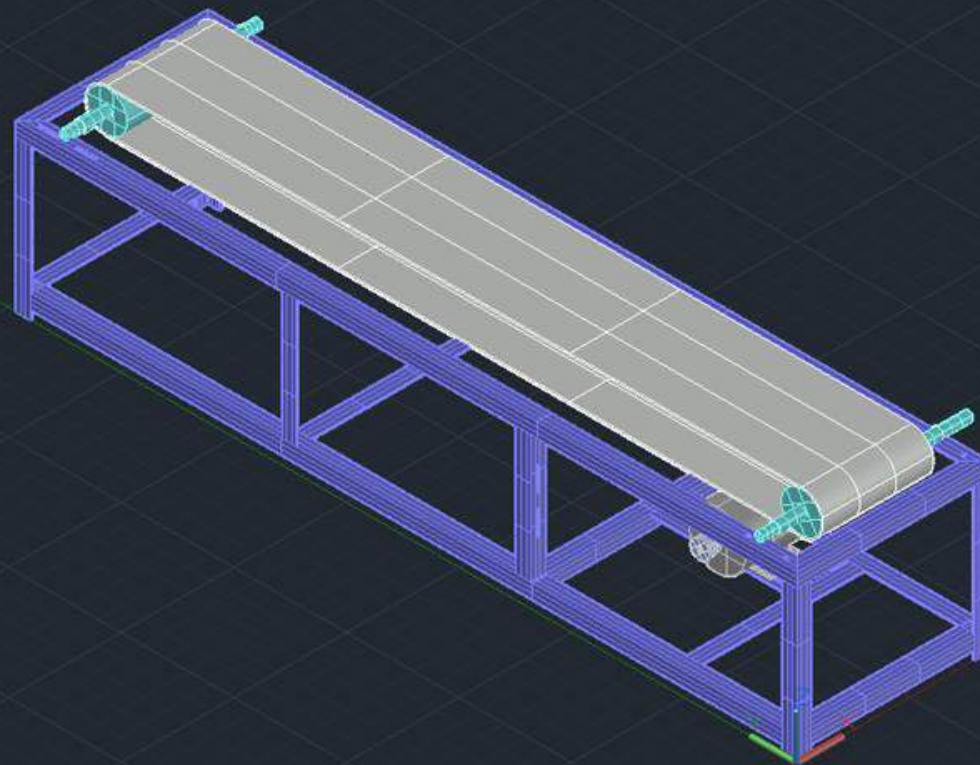
Start Week 11 ASSY* Drawing9* Drawing10*



DRAWN	ENT 135 MANUFACTURING CO.	TITLE	
DATE		PROJECTION	REVISION

Import Conveyor .step file

- Use 3d Rotate and 3d Move to orient the conveyor as shown

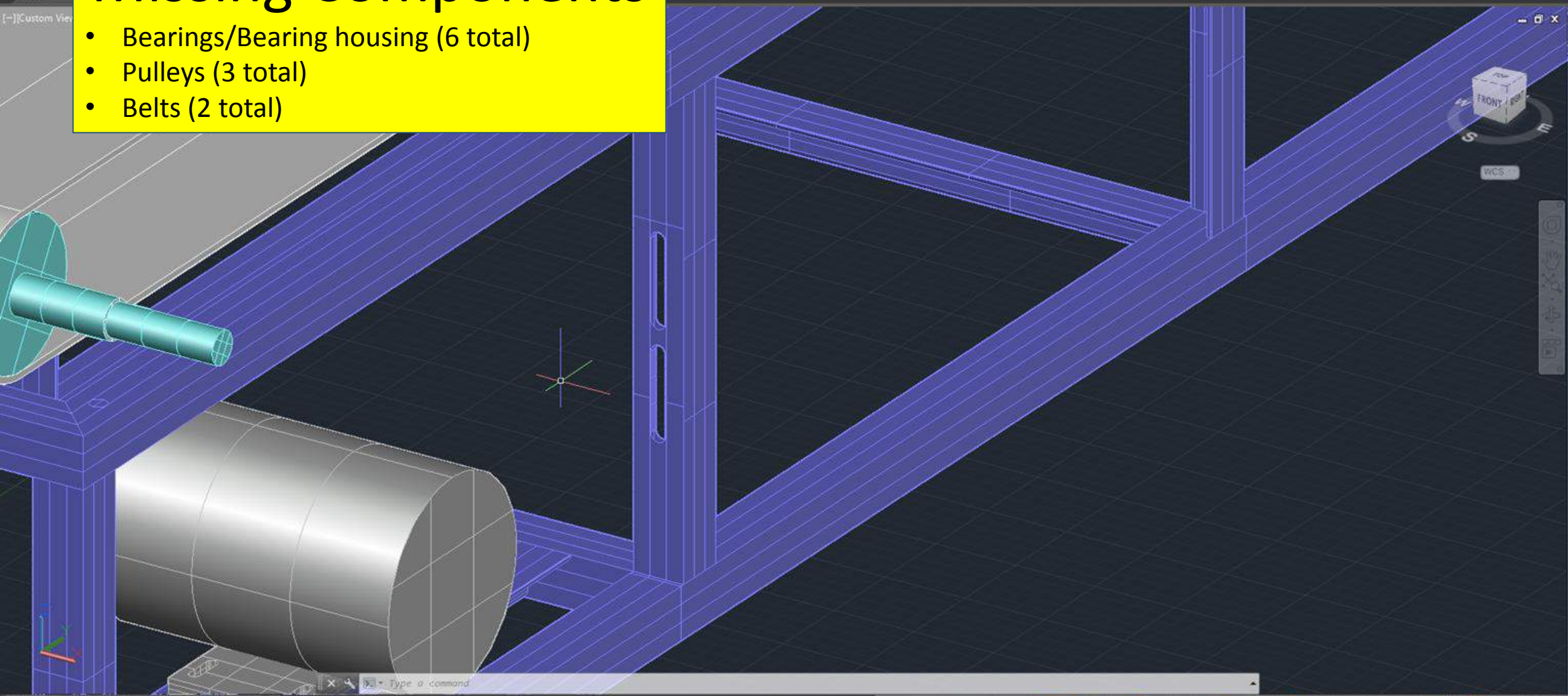


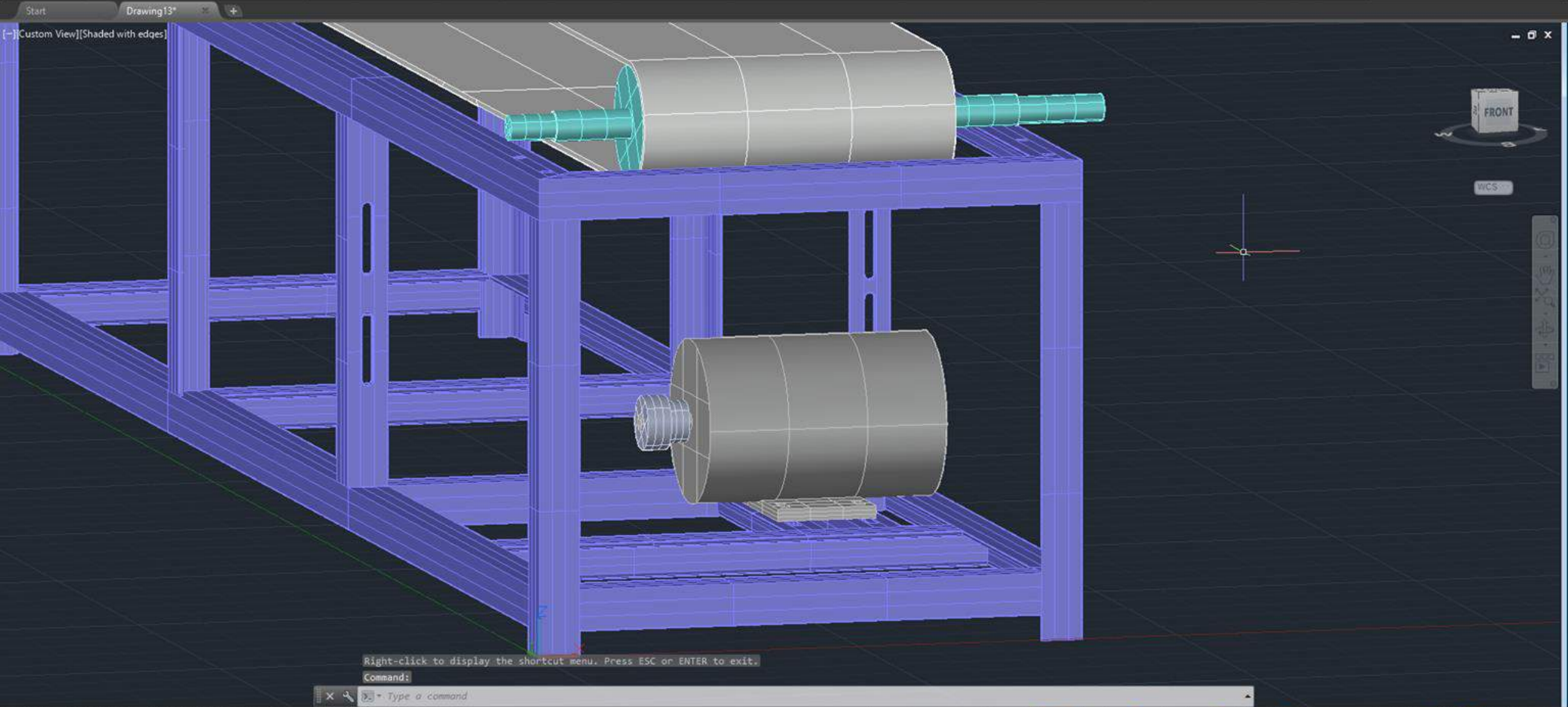
Type a command

Model ENT135-B SIZE ENT135-B SIZE_ORTHO 82.81, -3.50, 0.00 MODEL

Missing Components

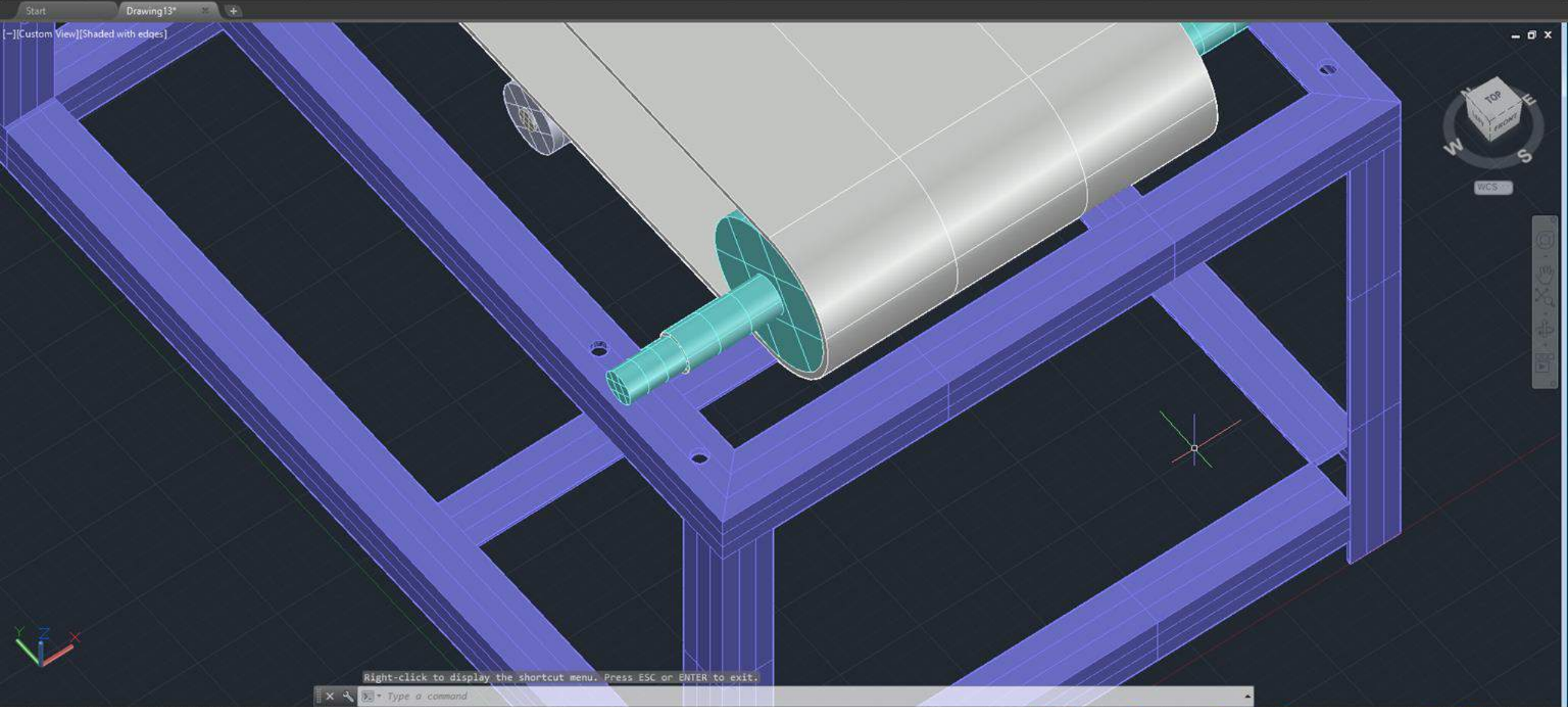
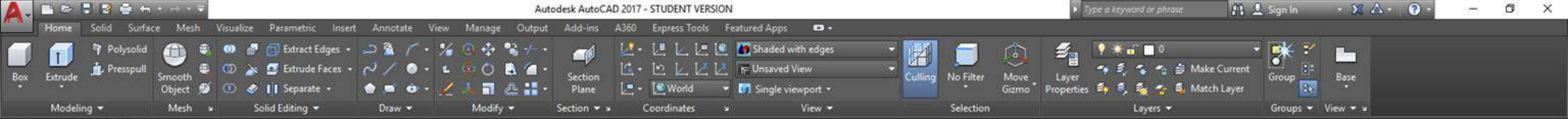
- Bearings/Bearing housing (6 total)
- Pulleys (3 total)
- Belts (2 total)





Right-click to display the shortcut menu. Press ESC or ENTER to exit.
Command:

Type a command



Autodesk AutoCAD 2017 - STUDENT VERSION

Home Solid Surface Mesh Visualize Parametric Insert Annotate View Manage Output Add-ins A360 Express Tools Featured Apps

Box Extrude Presspull Smooth Object Extract Edges Extrude Faces Separate Section Plane Draw Modify Coordinates View

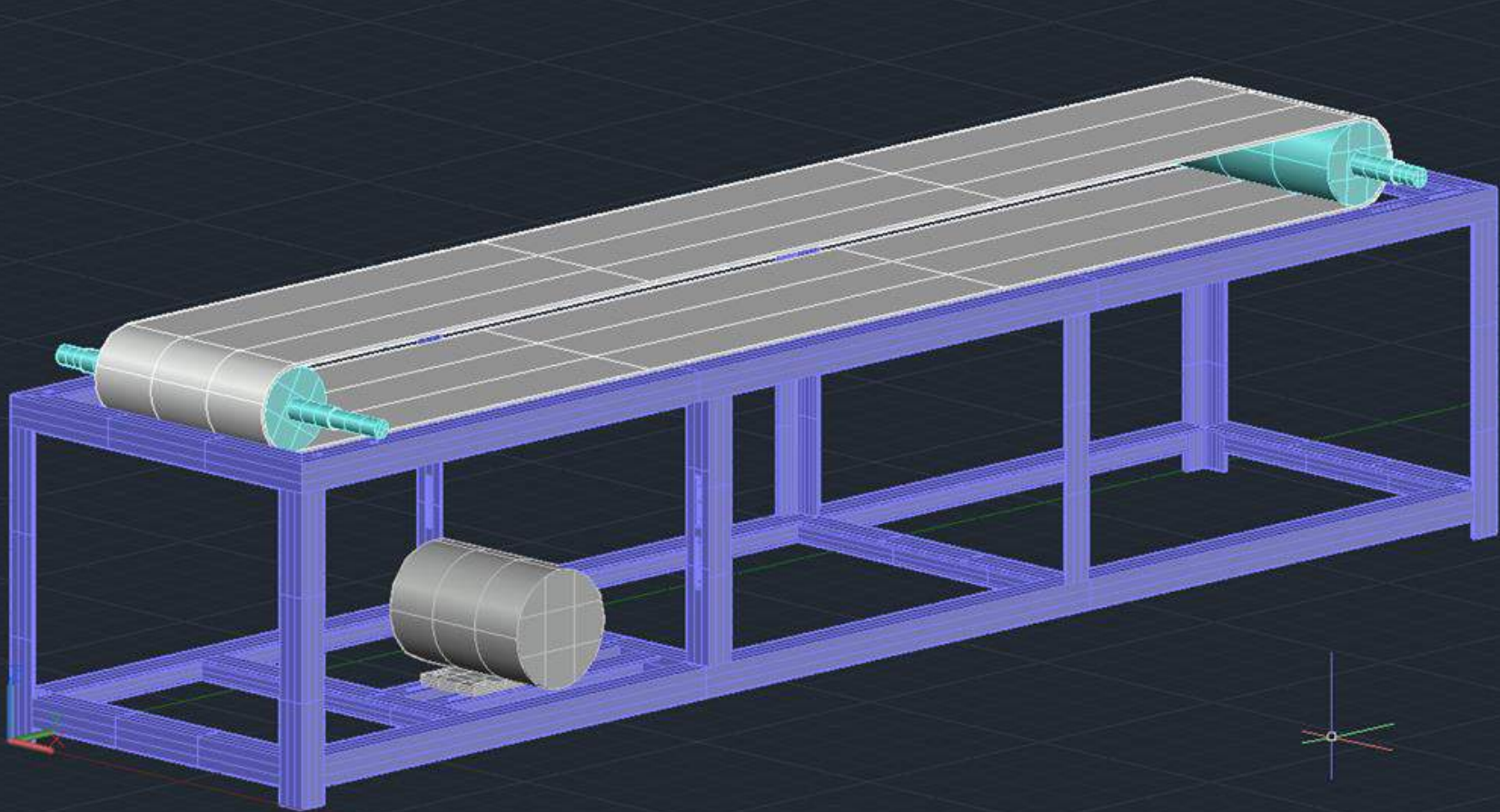
Shaded with edges Unsaved View Single viewport

Culling No Filter Move Gizmo Layer Properties Make Current Match Layer

Group Base Groups View

Start Drawing13*

[--][Custom View][Shaded with edges]

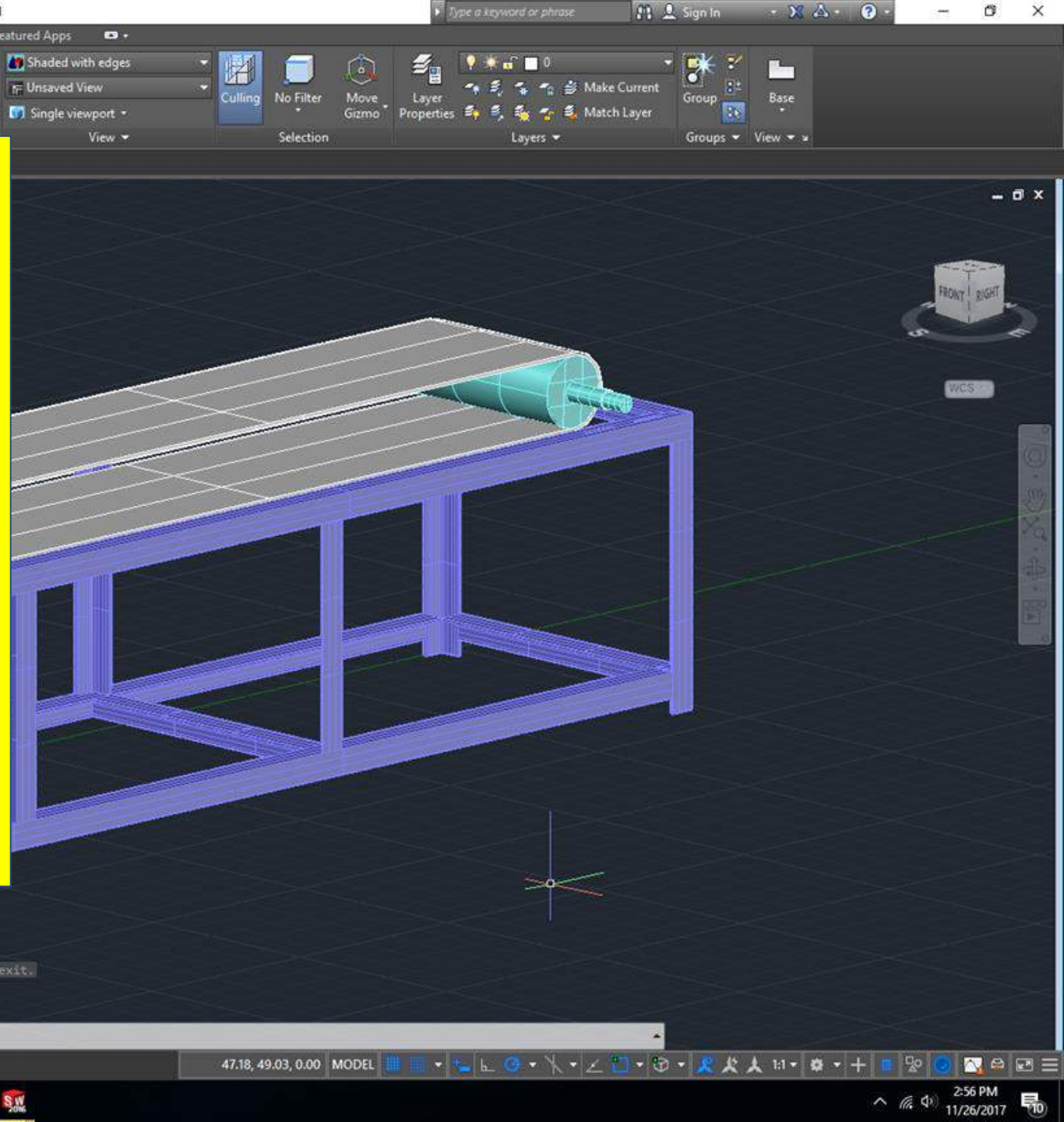


Right-click to display the shortcut menu. Press ESC or ENTER to exit.
Command:
Command:

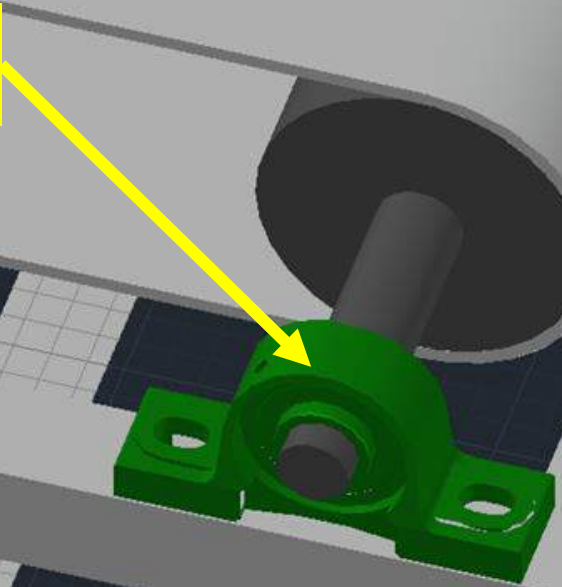
Type a command

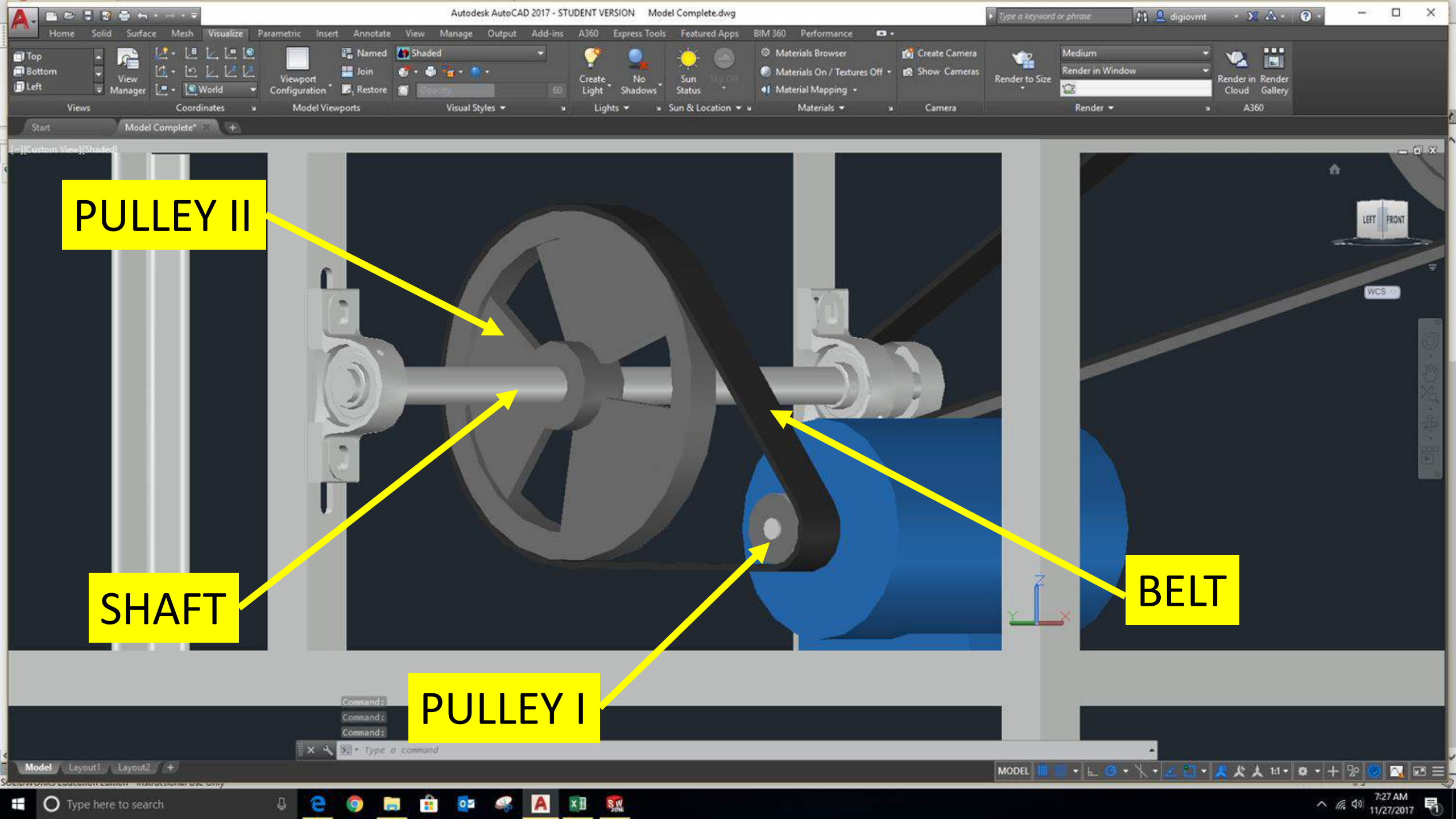
Challenge!

- Create pulley/belt configuration to generate linear conveyor travel speed = 1.5 – 2.0 feet per second.
- Motor RPM = 1600
- Calculate any unknown pulley diameters (pulley calc. optional)
- Generate 3D CAD models for the following
 - Bearing housing
 - Pulley (3 total)
 - Shaft (1 + pulley)
 - Belts (2 total)
- Create Orthographic Projection View Drawings for each using logo template



Bearing Housing (6)



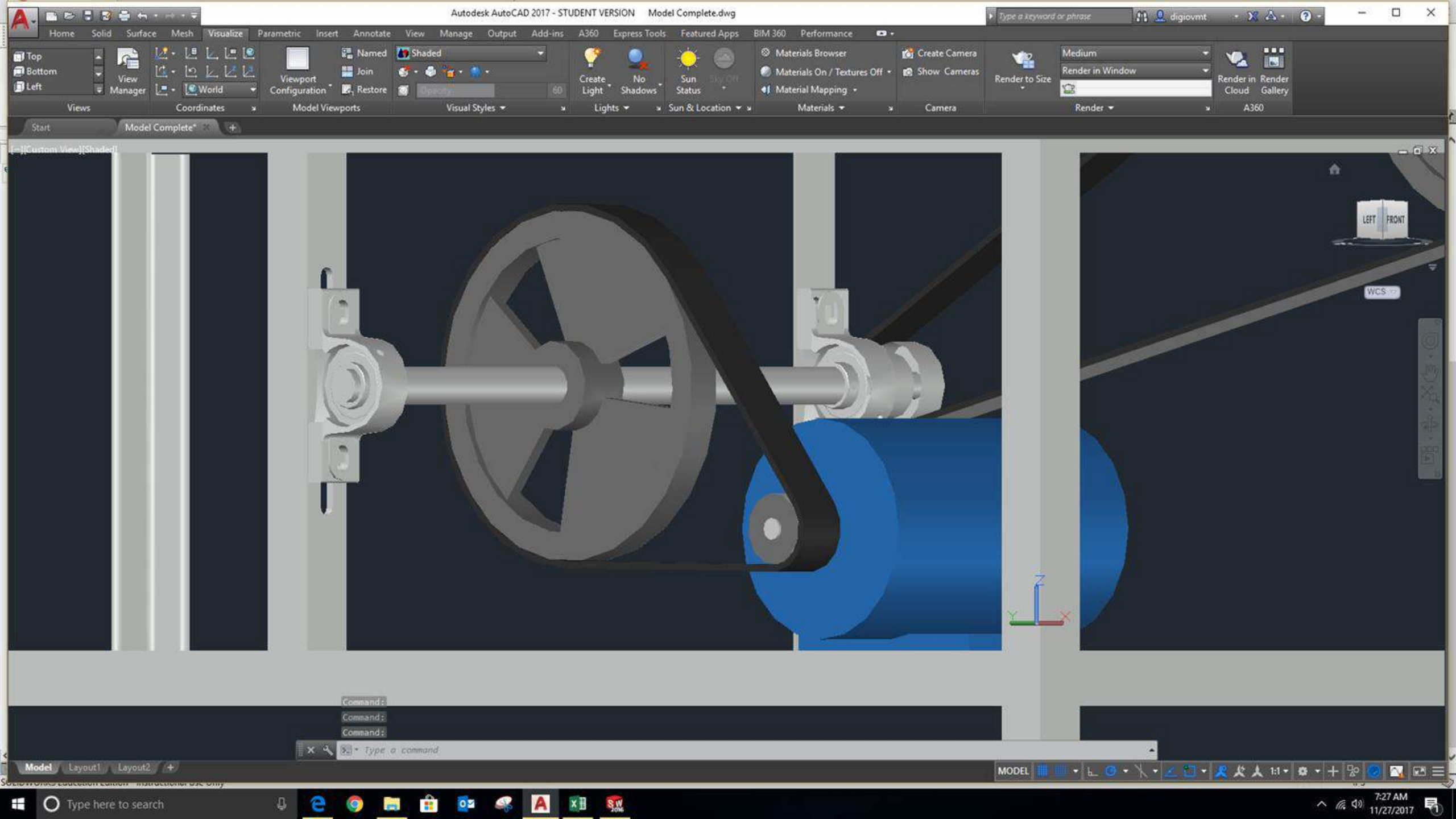


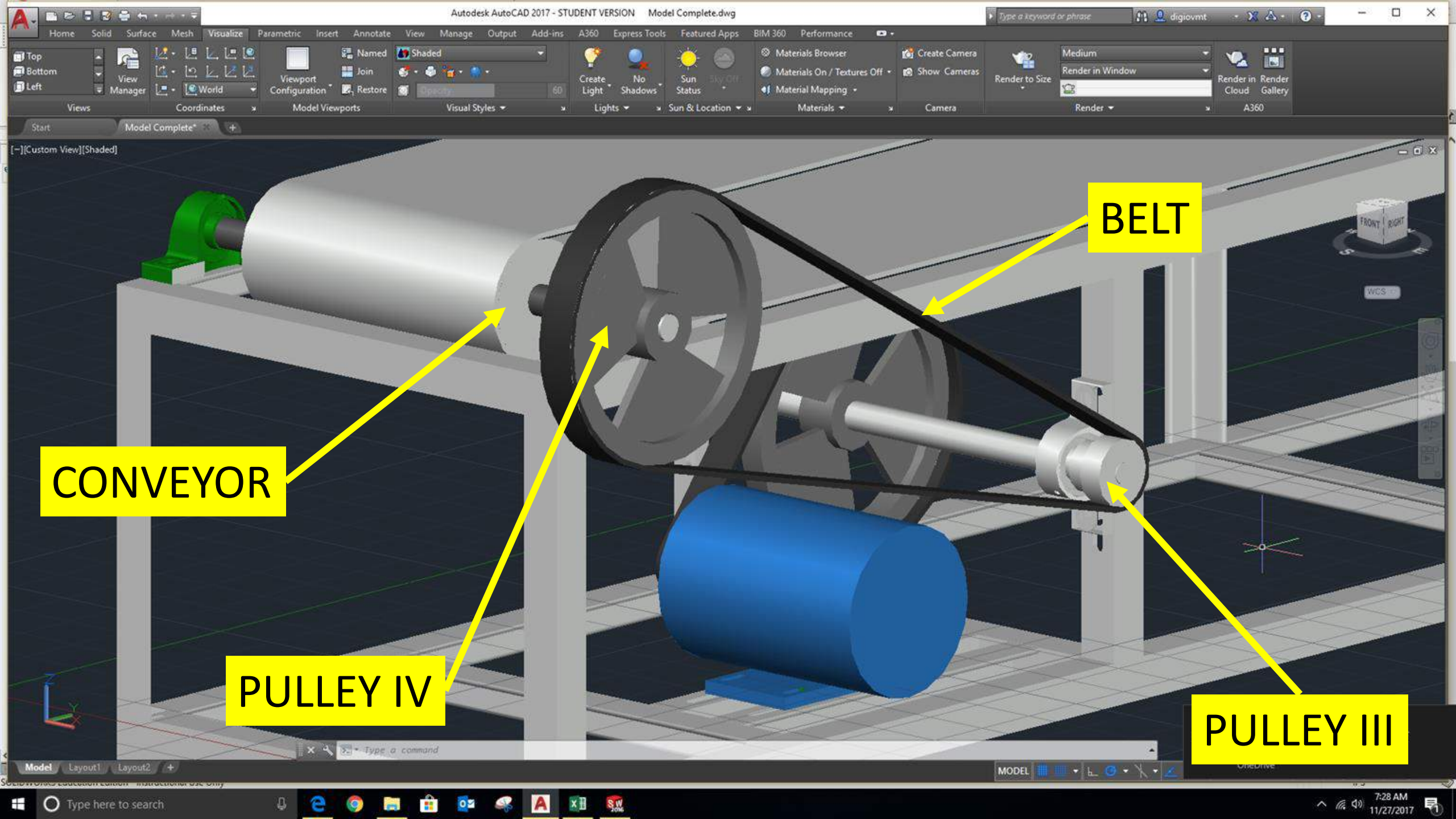
PULLEY II

SHAFT

PULLEY I

BELT



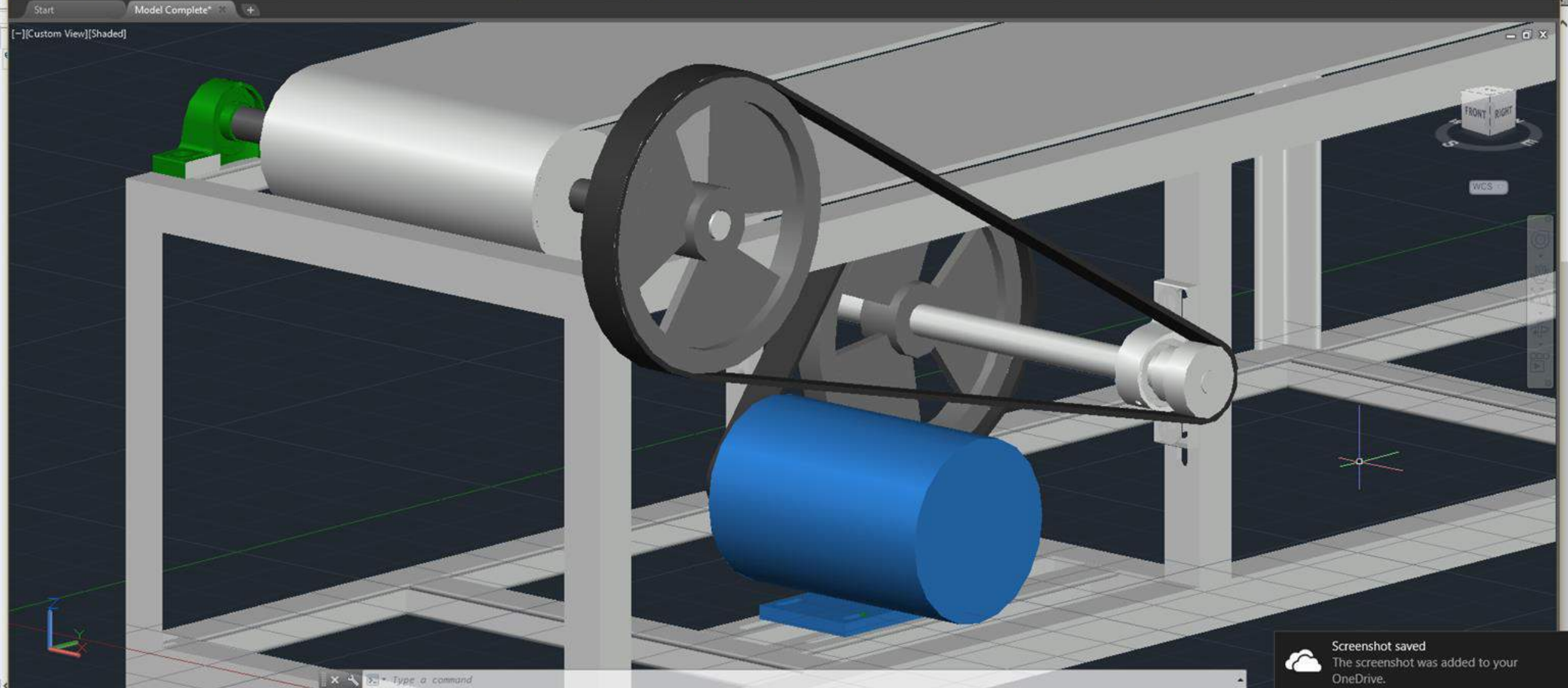


CONVEYOR

PULLEY IV

BELT

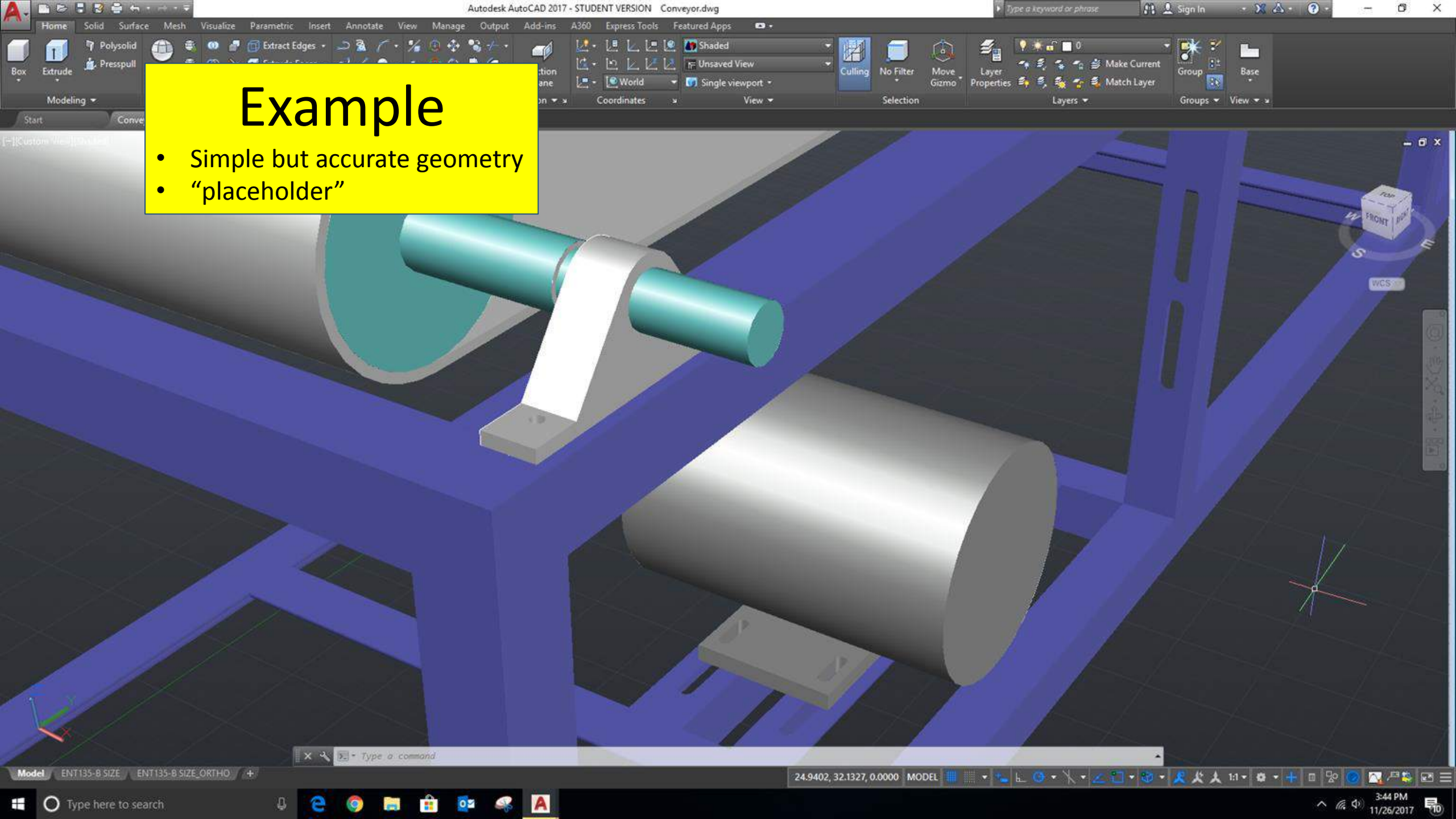
PULLEY III



Screenshot saved
The screenshot was added to your OneDrive.
OneDrive

Example

- Simple but accurate geometry
- “placeholder”



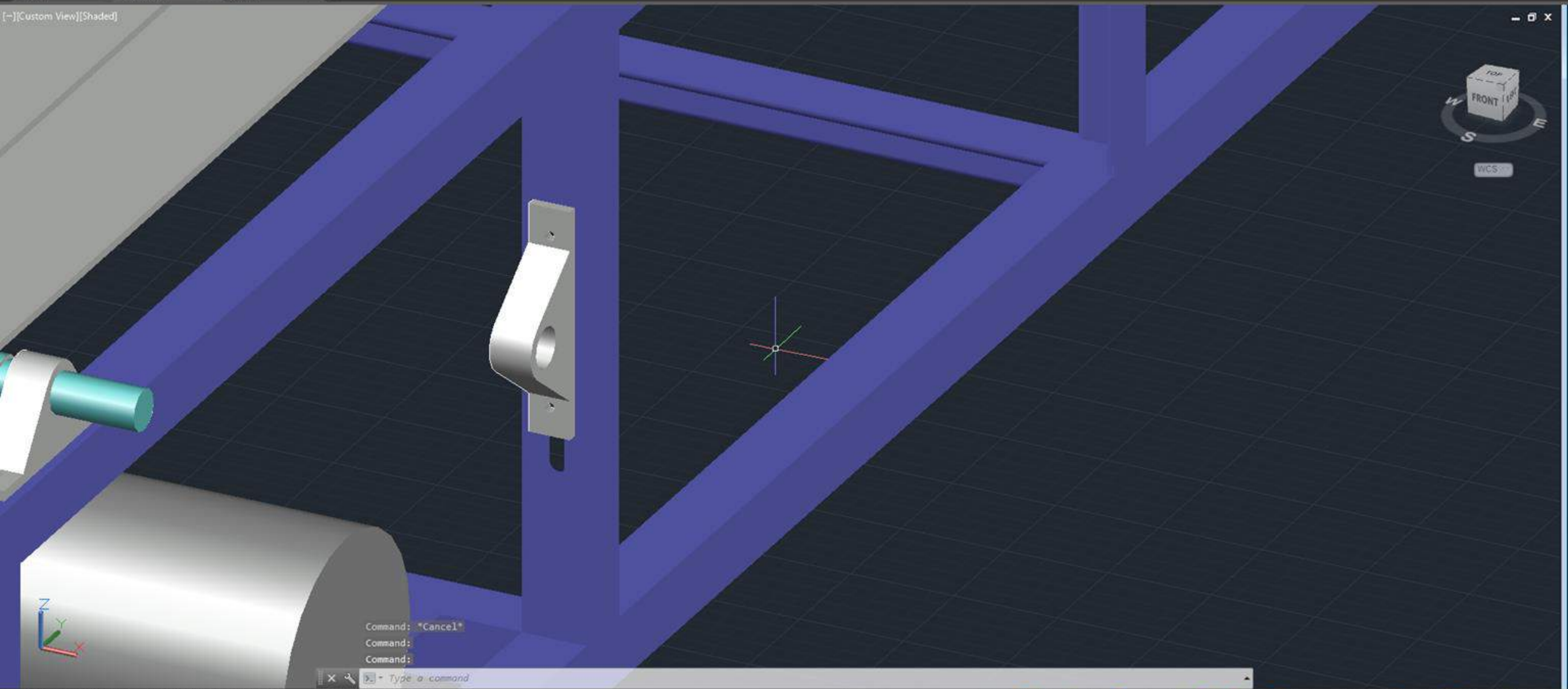
Autodesk AutoCAD 2017 - STUDENT VERSION Conveyor.dwg

Home Solid Surface Mesh Visualize Parametric Insert Annotate View Manage Output Add-ins A360 Express Tools Featured Apps

Box Extrude Presspull Smooth Object Mesh Solid Editing Draw Modify Section Plane Coordinates View

Shaded Unsaved View Single viewport Culling No Filter Move Gizmo Layer Properties Make Current Match Layer Group Base

Start Conveyor* Bearing*

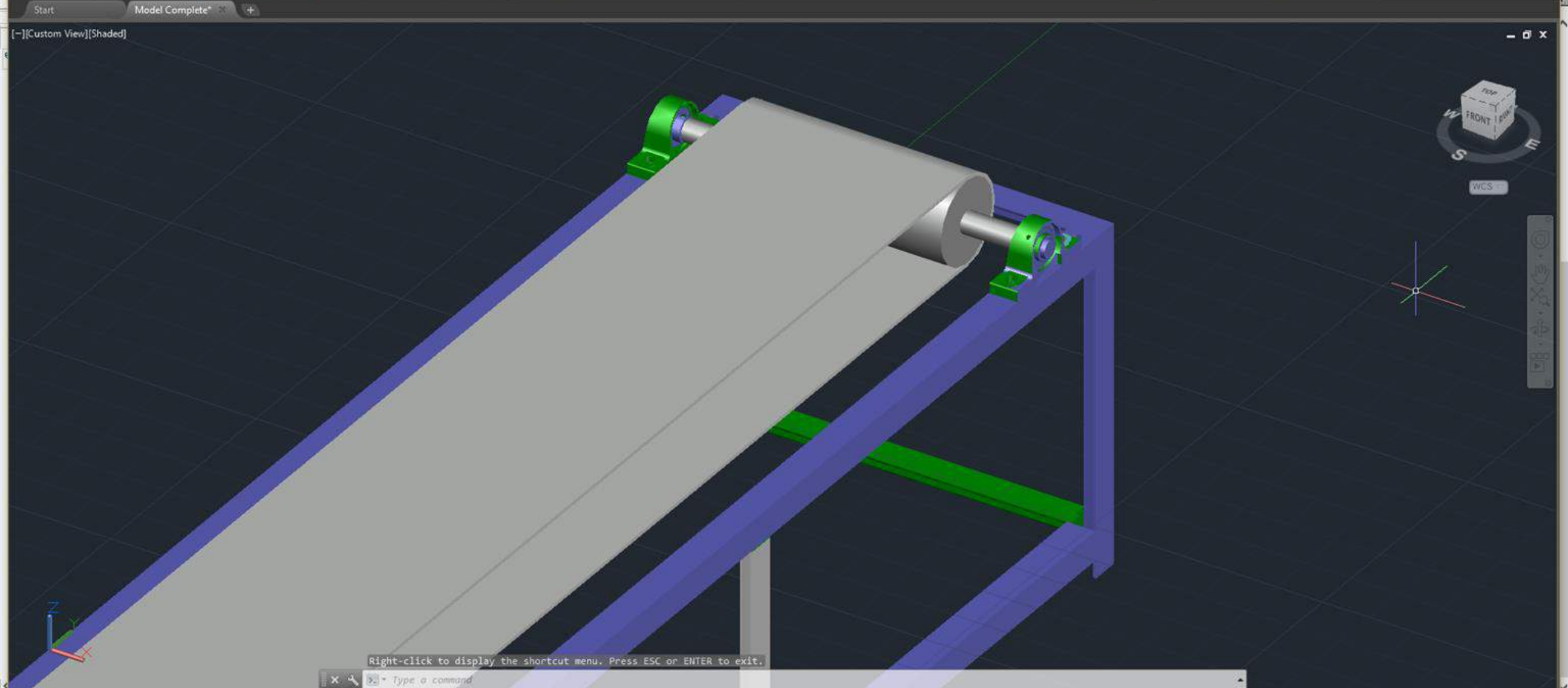


Model ENT135-B SIZE ENT135-B SIZE_ORTHO

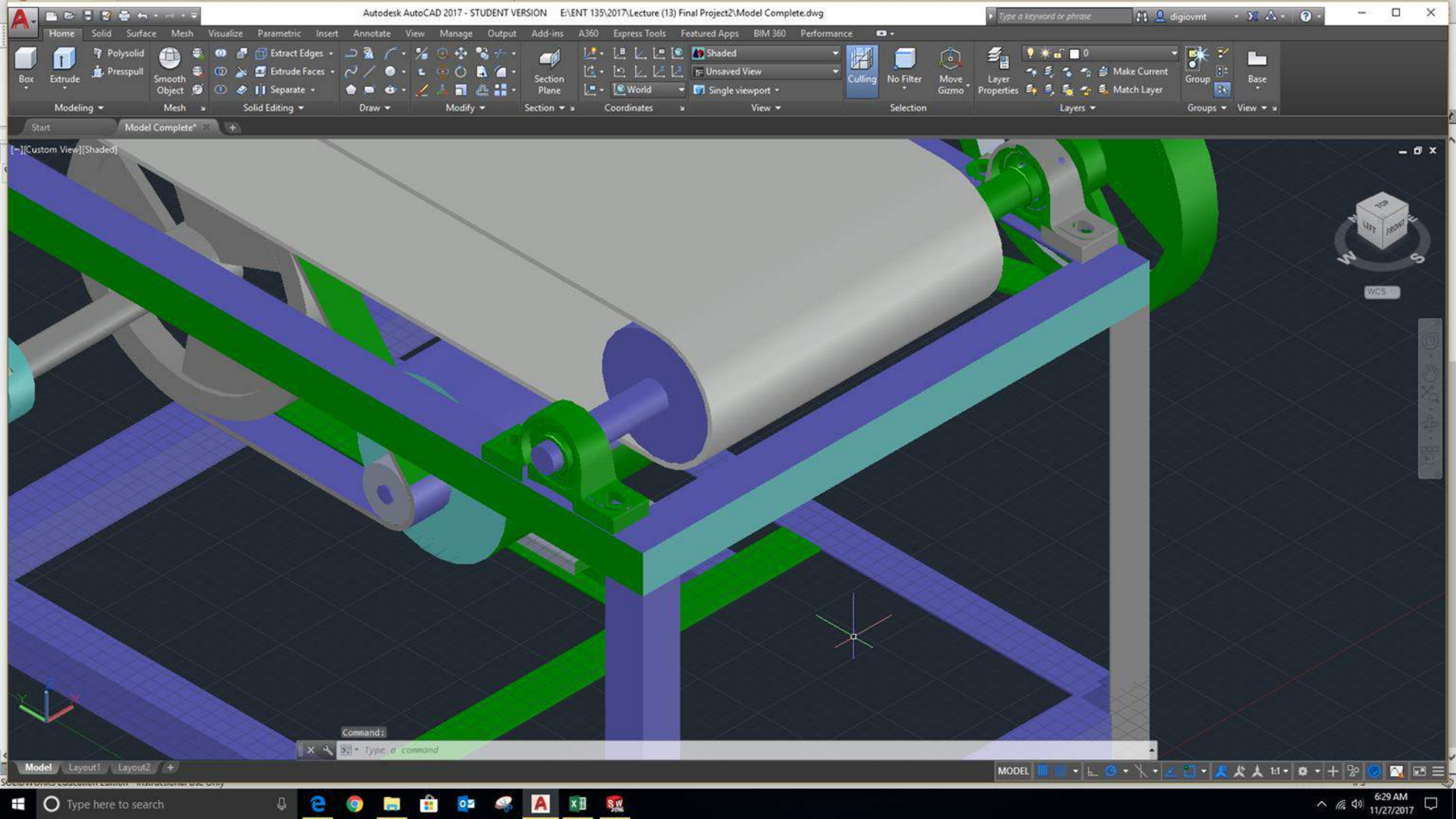
16.1326, 49.3081, 0.0000 MODEL

Type here to search

3:46 PM 11/26/2017



Right-click to display the shortcut menu. Press ESC or ENTER to exit.



Required to Submit...	Points Possible (each)	Points Total
LOGO <ul style="list-style-type: none"> • Submit .dwt file • Use in required drawings 	10	10
Bearing Housing (3d model, .dwg file)	10	10
Pulley II, III, IV (3d model, .dwg file)	10	30
Shaft (3d model, .dwg file)	10	10
Belts (3d model, .dwg file)	10	20
Bearing Housing (Orth Proj, dims/tols/gd&t, .pdf file)	20	20
Pulley II, III, IV (Orth Proj, dims/tols/gd&t, .pdf file)	20	20
Shaft (Orth Proj, dims/tols/gd&t, .pdf file)	20	20
Belts (Orth Proj, dims/tols/gd&t, .pdf file)	20	20
Calculations	20	20
Total		180