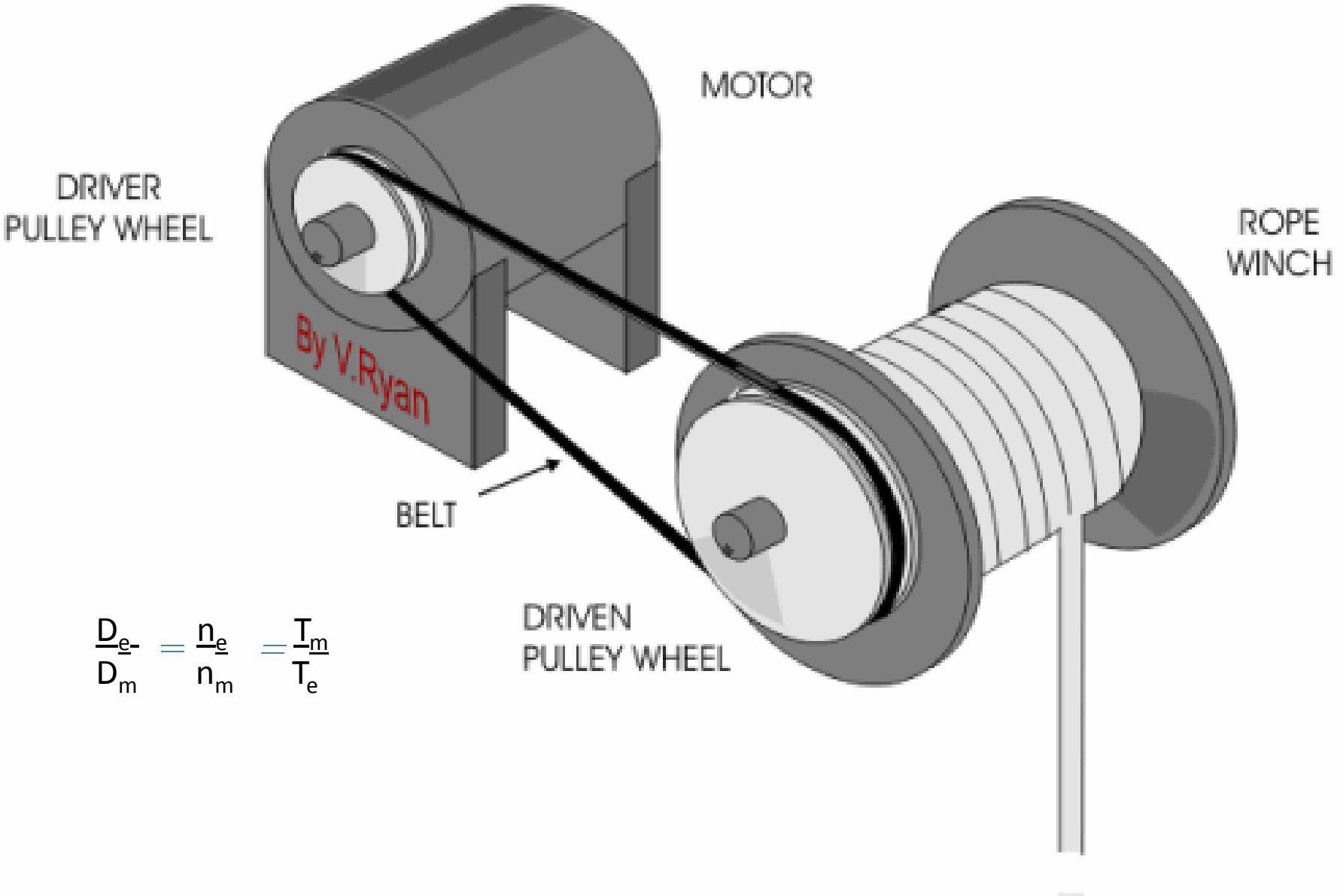
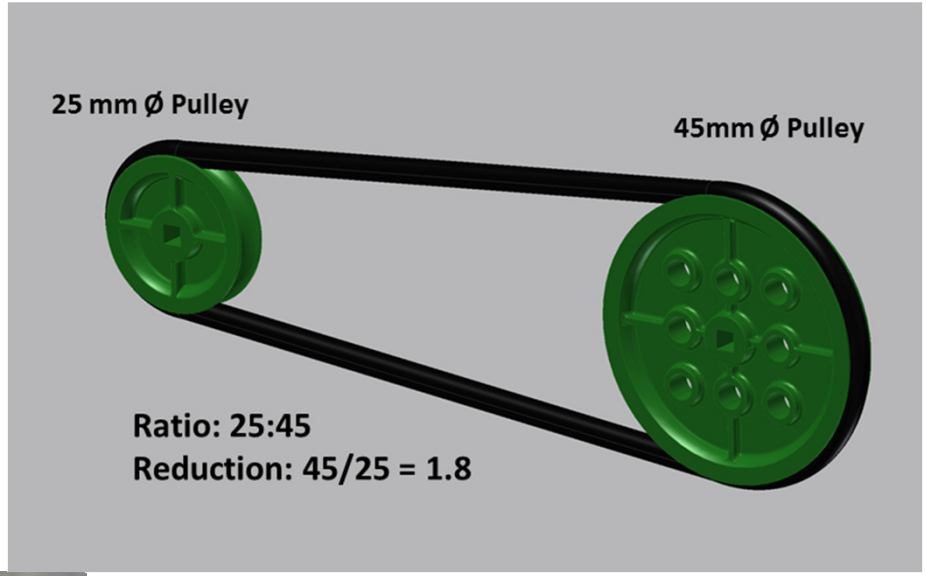
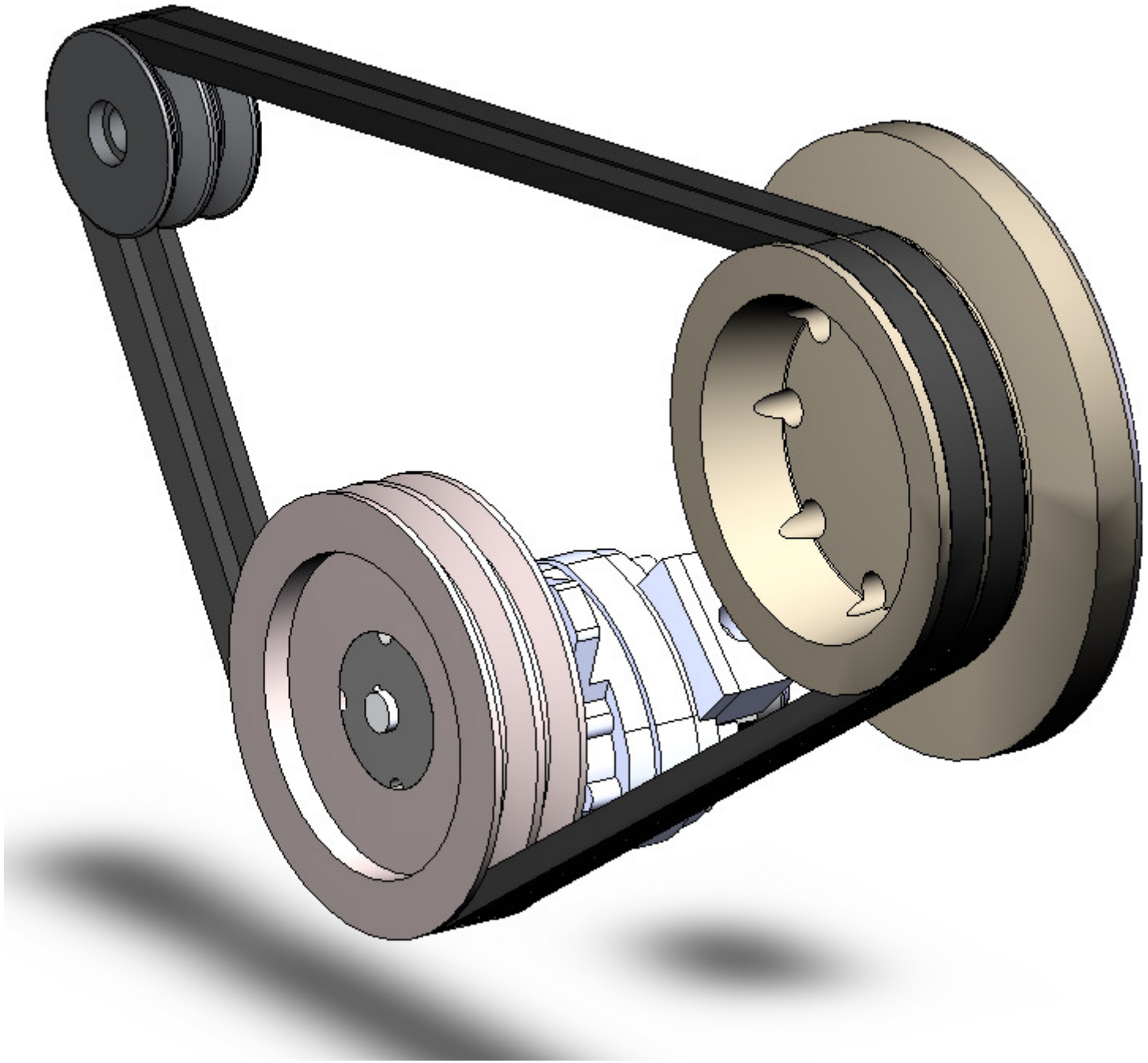
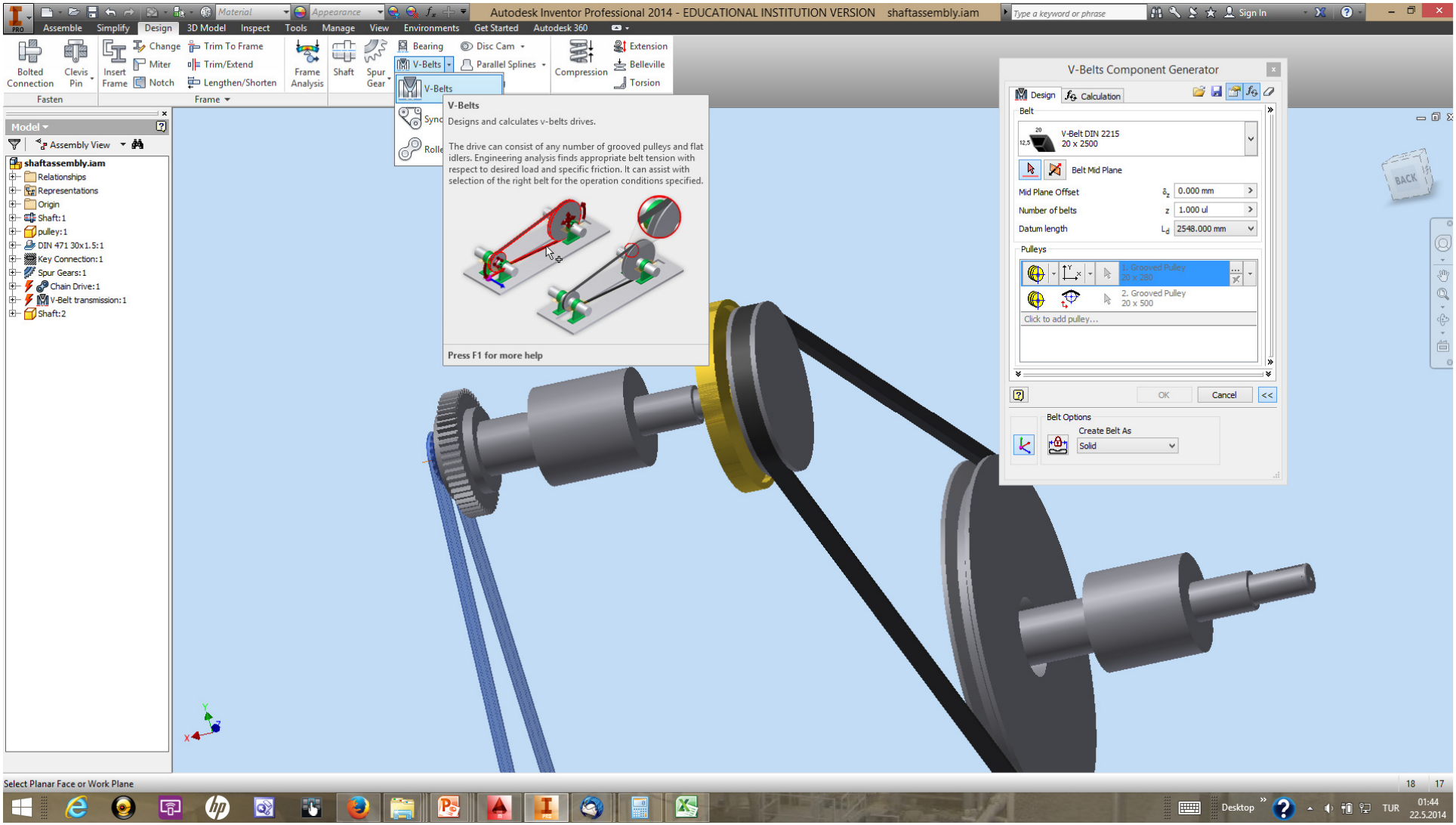
PULLEY- BELT MECHANISM



$$\frac{D_e}{D_m} = \frac{n_e}{n_m} = \frac{T_m}{T_e}$$


25 mm Ø Pulley
45mm Ø Pulley
Ratio: 25:45
Reduction: 45/25 = 1.8




Autodesk Inventor Professional 2014 - EDUCATIONAL INSTITUTION VERSION shaftassembly.iam
Assemble Simplify Design 3D Model Inspect Tools Manage View Environments Get Started Autodesk 360
Bolted Connection
Clevis Pin
Insert Frame
Change
Miter
Notch
Trim To Frame
Trim/Extend
Lengthen/Shorten
Frame Analysis
Shaft
Spur Gear
Bearing
V-Belts
Parallel Splines
Disc Cam
Compression
Extension
Belleville
Torsion
Fasten
Frame
V-Belts
Designs and calculates v-belts drives.
The drive can consist of any number of grooved pulleys and flat idlers. Engineering analysis finds appropriate belt tension with respect to desired load and specific friction. It can assist with selection of the right belt for the operation conditions specified.
Press F1 for more help
Model
Assembly View
shaftassembly.iam
Relationships
Representations
Origin
Shaft:1
pulley:1
DIN 471 30x1.5:1
Key Connection:1
Spur Gears:1
Chain Drive:1
V-Belt transmission:1
Shaft:2
V-Belts Component Generator
Design
Calculation
Belt
V-Belt DIN 2215
20 x 2500
Belt Mid Plane
Mid Plane Offset
0.000 mm
Number of belts
1.000 ul
Datum length
2548.000 mm
Pulleys
1. Grooved Pulley
20 x 280
2. Grooved Pulley
20 x 500
Click to add pulley...
OK
Cancel
Belt Options
Create Belt As
Solid
BACK
Select Planar Face or Work Plane
18
17
Desktop
TUR
01:44
22.5.2014