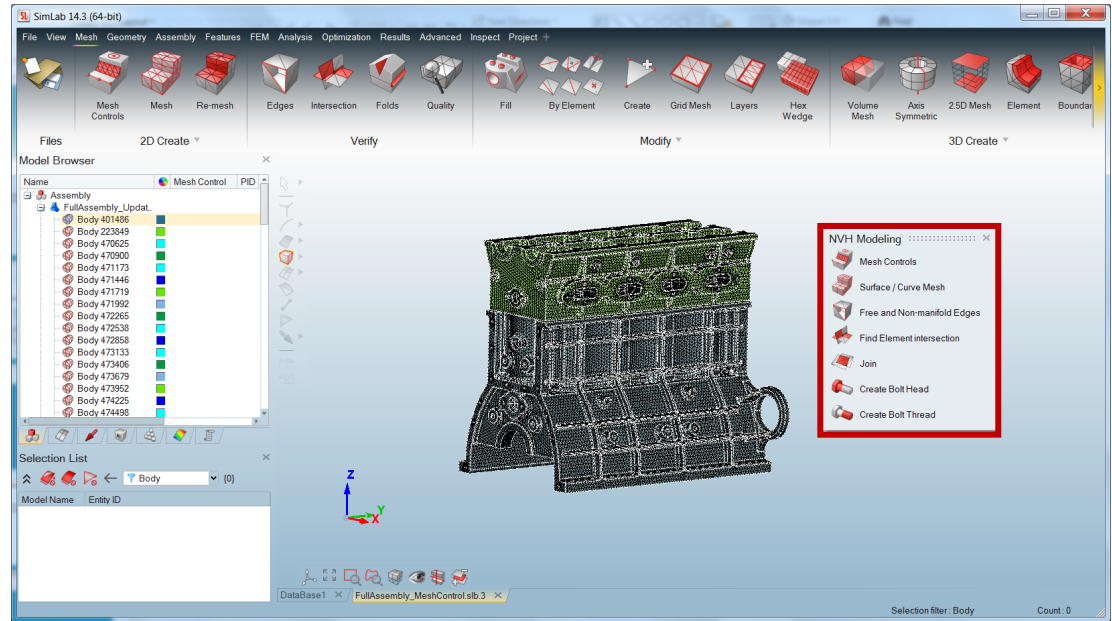
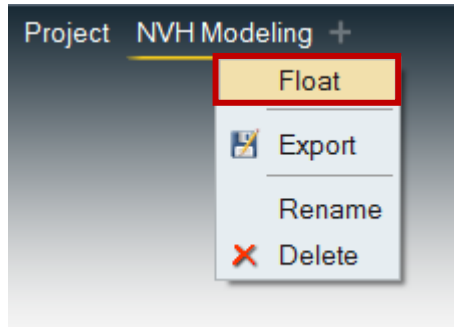


# SimLab 14.3 업데이트

# Graphics / UI

# Custom Ribbon

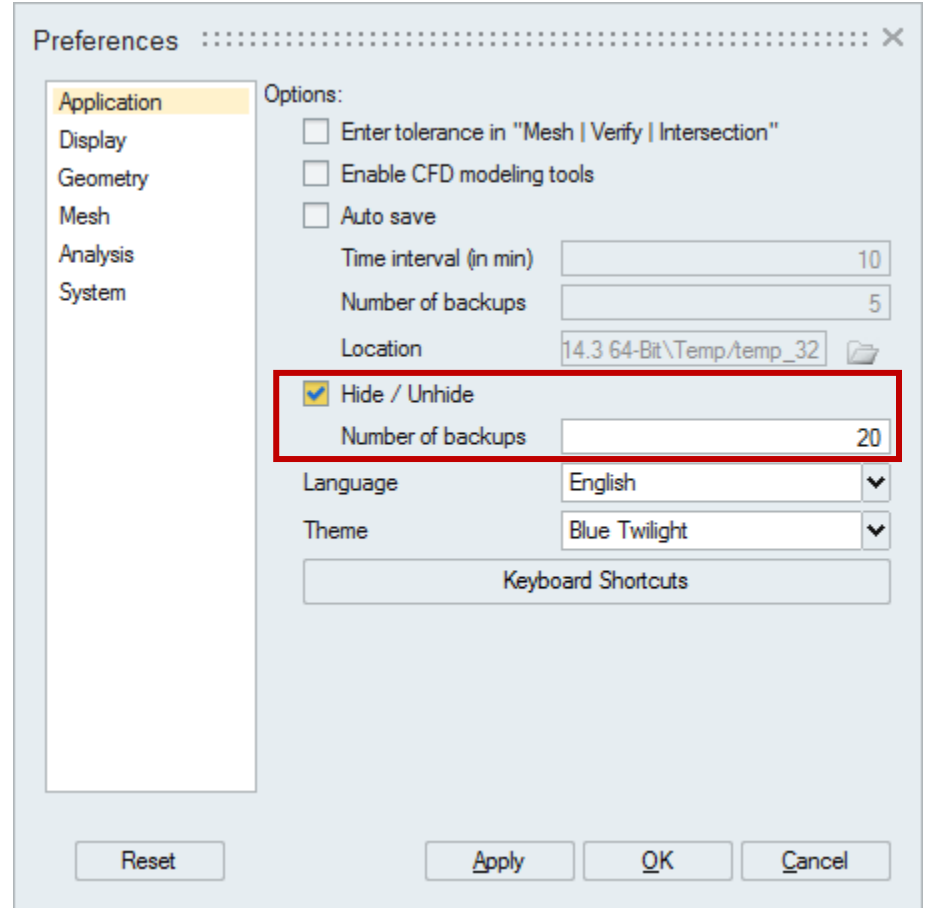
- 사용자가 만든 리본 메뉴 그룹의 위치 지정이 가능



# Hide / Unhide

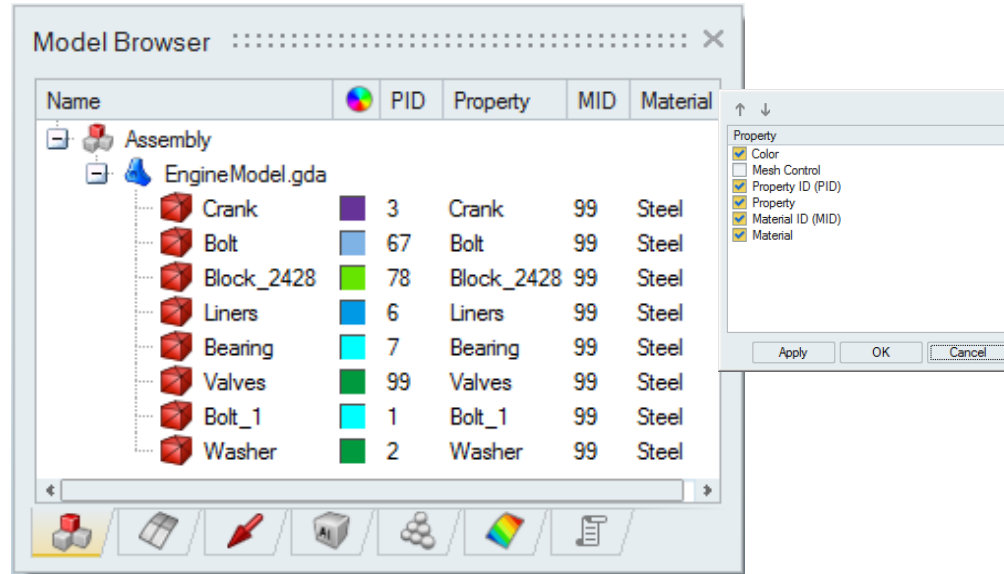
## File > Preferences > Application

- 숨기기 기능에 대한 단축키 지원
- H – 숨기기
- 순차적으로 엔티티를 숨긴 경우, 아래의 단축키로 숨김/표시가 가능
  - Shift + H
  - Ctrl + H
- 숨김의 백업 개수 설정 가능



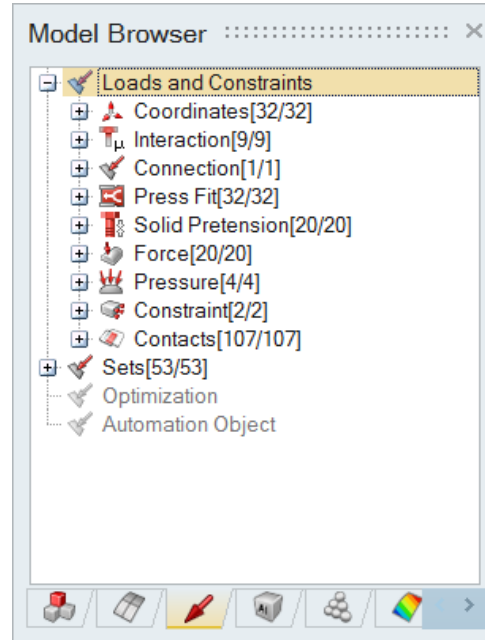
# Assembly Browser

- Body들의 다양한 정보 확인이 가능
  - mesh control, property ID, property, material ID, material



# Loads and Constraints Browser

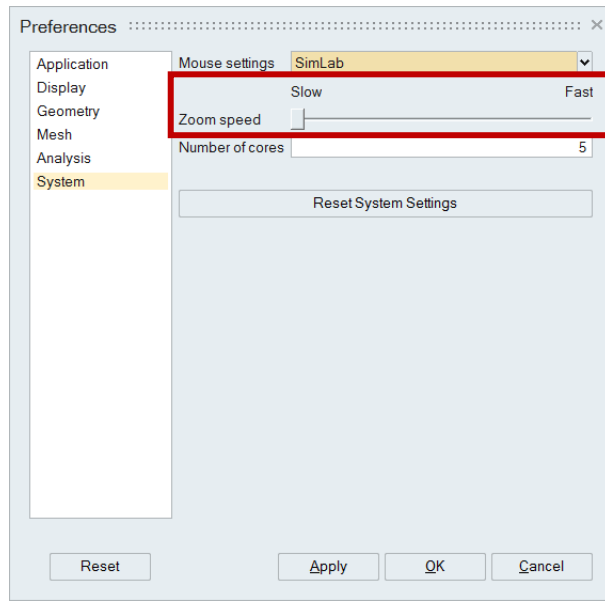
- 경계 조건 타입에 따라 그룹핑 기능 제공



# System Settings

File > Preferences > System

- Zoom Speed 설정 가능



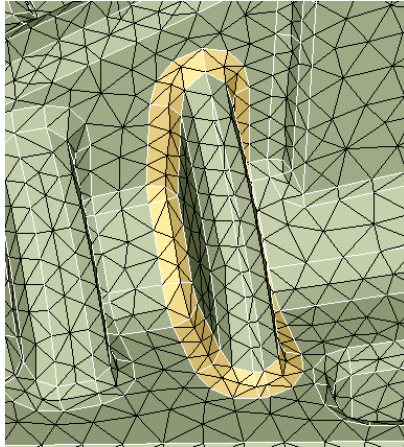
# Geometry



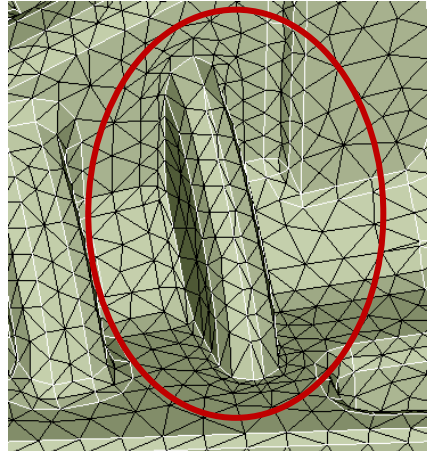
# Flatten Face

Geometry > Face > Modify

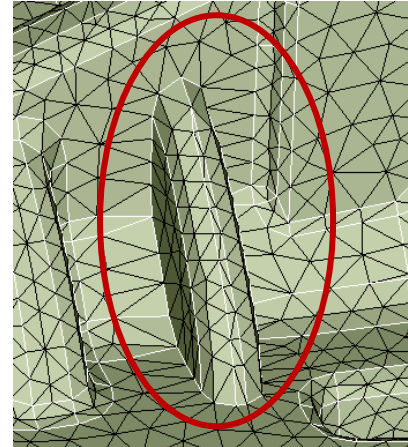
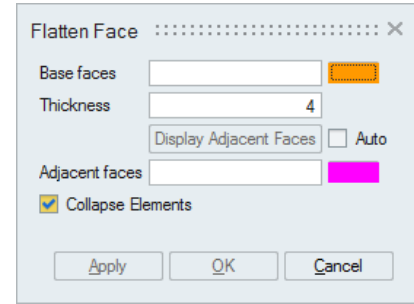
- 경사면 제거 시, 품질 저하 개선



Input



Output  
(Collapse Elements = OFF)



Output  
(Collapse Elements = ON)

# Meshing

# Face Mesh Control

Mesh > 2D Create > Mesh control

- 얇은 영역에 대해서도 Layer Control이 유지

Input

SimLab 14.2

SimLab 14.3

Layer 유지 X

얇은 영역에 Layer Control이 유지

Mesh Controls

Mesh control name: Face\_MeshControl\_1

Average element size: 1

Merge selected faces

Layers

Number of layers: 2

Uniform

Stretched

Use rest of the parameters from global

Minimum element size: 0.3

Geometry Approximation:

Maximum angle per element: 30

Curvature minimum element size: 0.5

Surface Mesh Quality:

Aspect ratio: 5

Mesh grading: 1.5

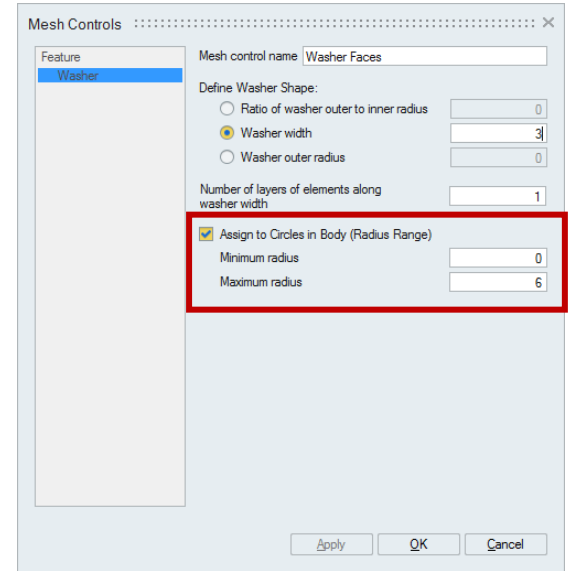
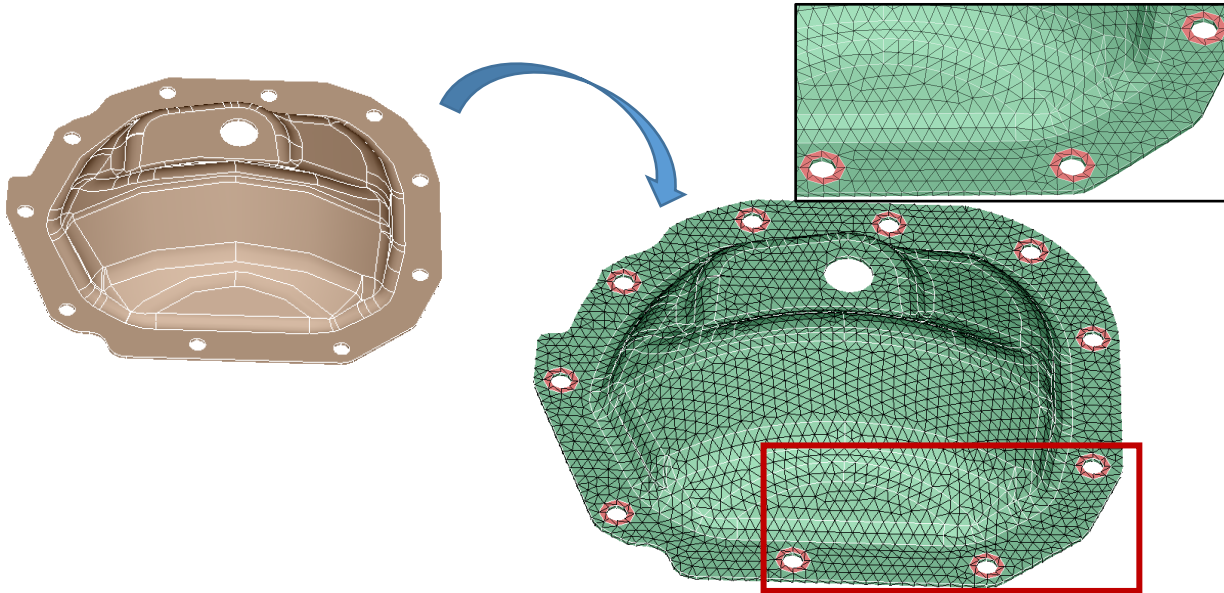
Mesh control display color: Yellow

Apply OK Cancel

# Washer Mesh control

Mesh > 2D Create > Mesh control

- Radius 영역을 이용하여 Washer Mesh Control 적용 가능

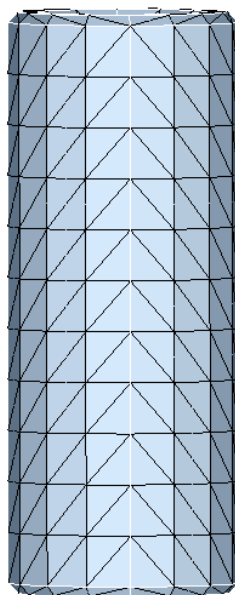


## Iso Mesh

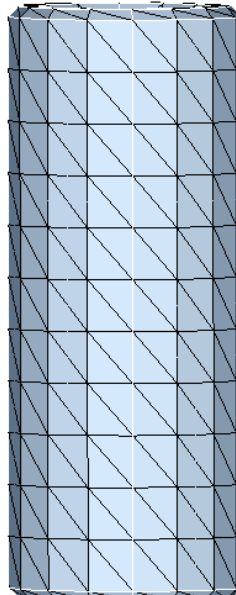
Mesh > Modify > Change Mesh pattern

- 인접한 Face에 대해서 동일한 Iso mesh pattern이 적용

SimLab 14.2



SimLab 14.3



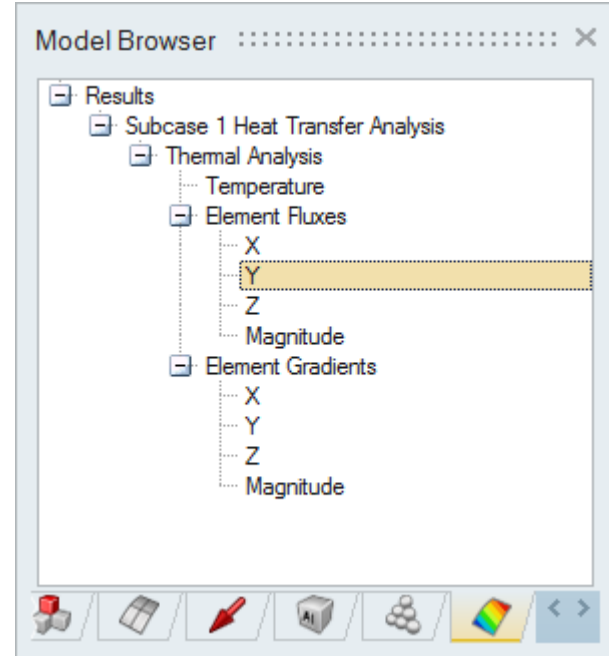
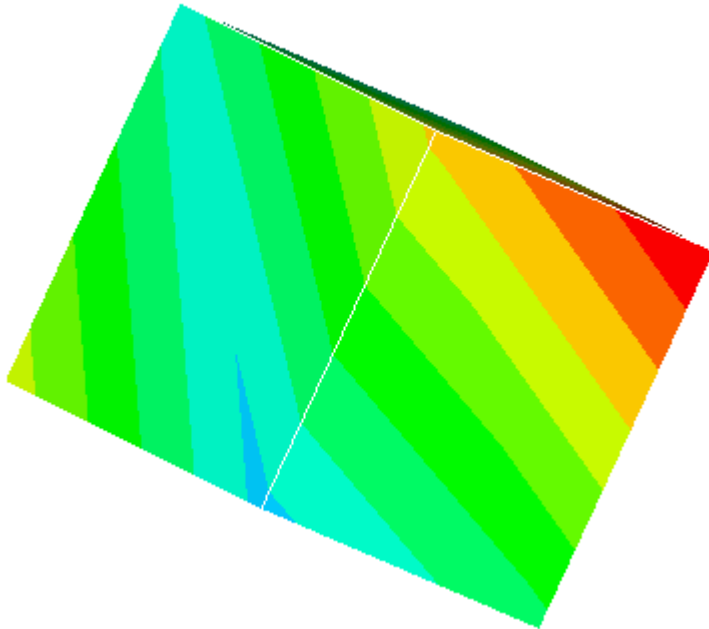
# Results

# Hyper3D

File > Import > Results

- SPC force, heat flux and thermal gradient 결과 지원

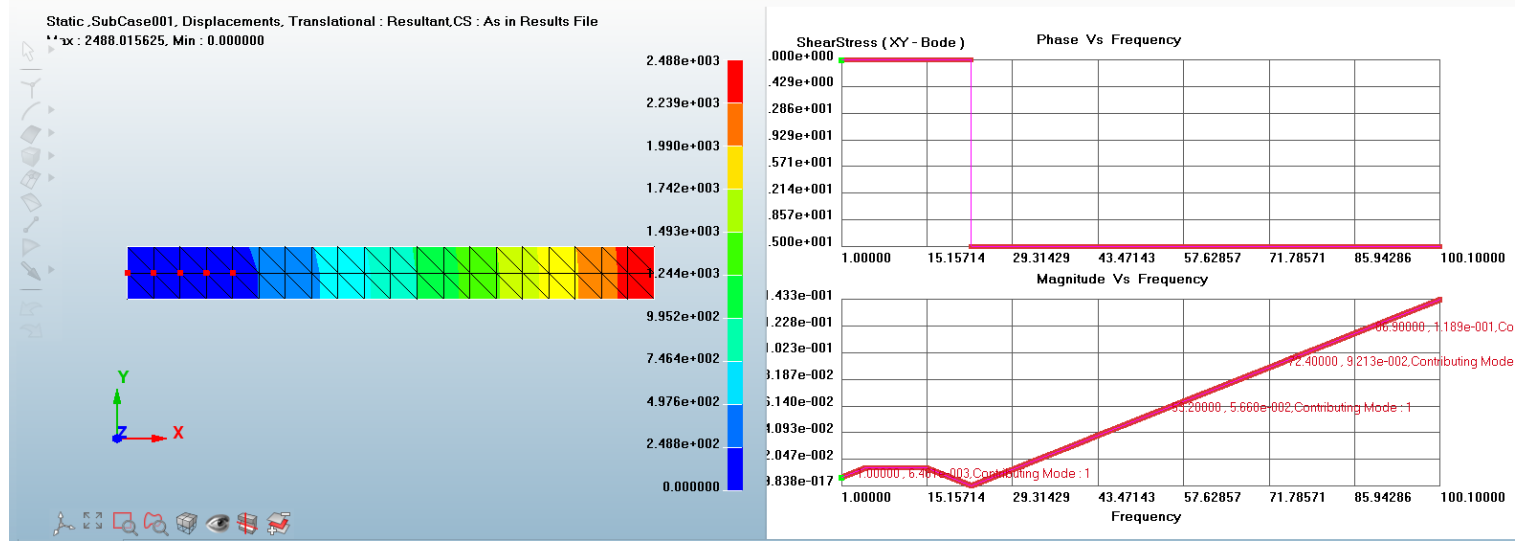
Thermal ,SubCase 01, Element Flux : Y ,CS : As in Results File  
Max : 5.907293. Min : -3.982482



# Frequency Response

## Results > Frequency Response

- Response Plot이 별도의 창에서 표시
- 입력 파라미터에 따라 Plot이 자동 업데이트



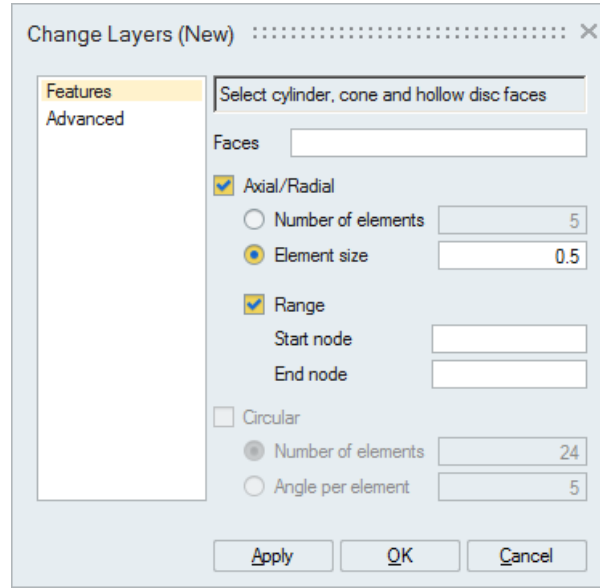


# Trials

# Layers (New)

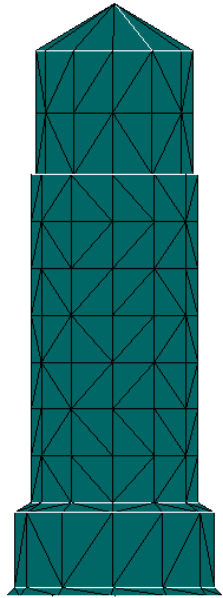
Advanced > Trials

- Layer 적용 시, '축 방향'과 '원주 방향' 이 동시에 고려 가능
- cylinder, cone, disc, hollow disc and bolt-hole 지원

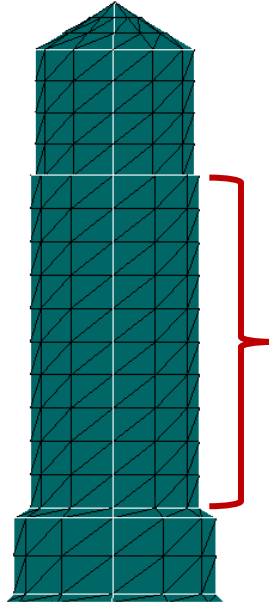


# Layers (New)

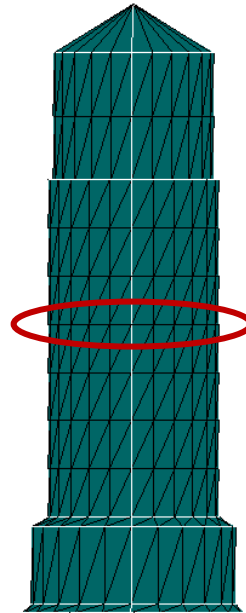
Advanced > Trials



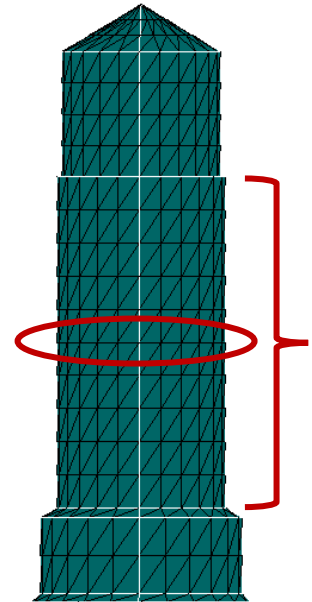
Input



Output  
Axial/Radial = ON  
Circular = OFF



Output  
Axial/Radial = OFF  
Circular = ON



Output  
Axial/Radial = ON  
Circular = ON

Thank You