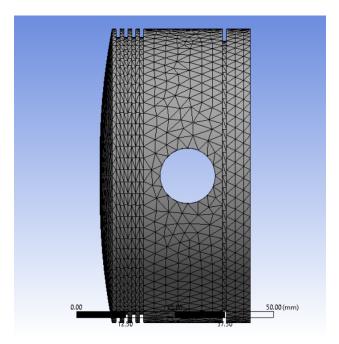
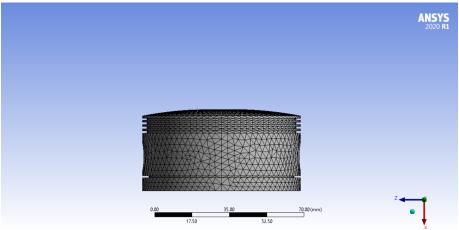
# **Question 2: Static Structural Analysis**

## Meshing Details:

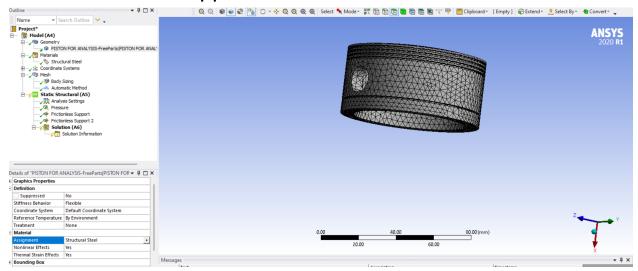
- 1. Meshing Methods= Automatic
- 2. Body Sizing
- 3. Element Size= 3mm



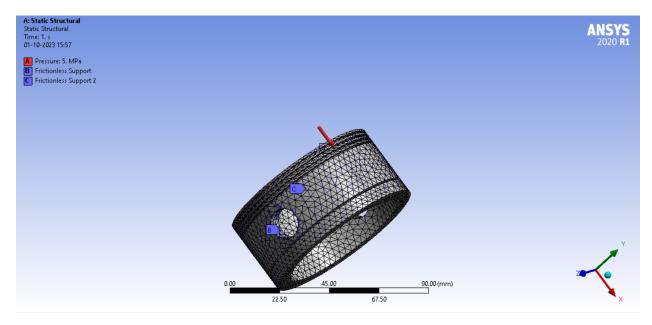


## • Boundary Condition:

- 1. . Material Structural Steel
- 2. Pressure 5Mpa
- 3. Frictionless support



## Image shows material assignment to model



## Image shows boundary conditions for model

- Results to find:
  - Total Deformation

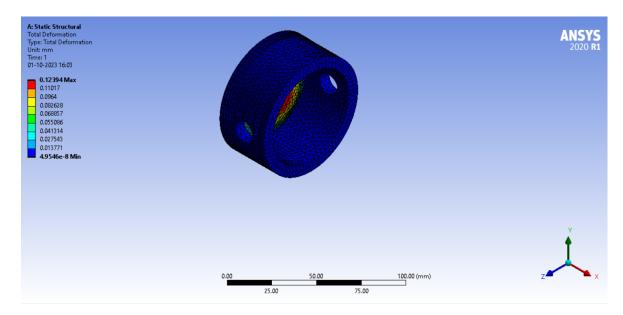
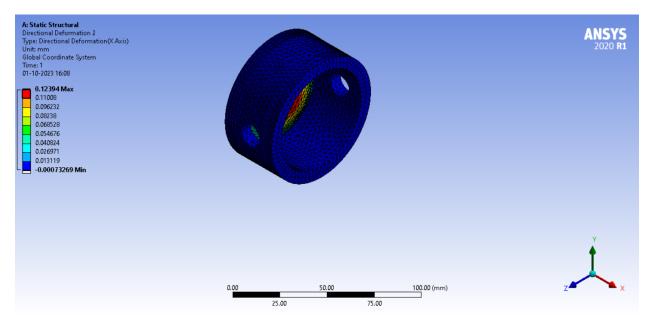
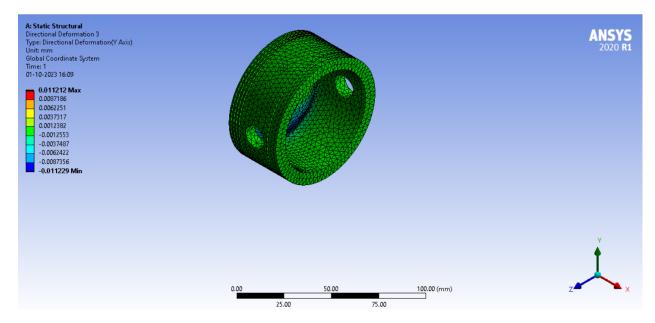


Image shows results for total deformation

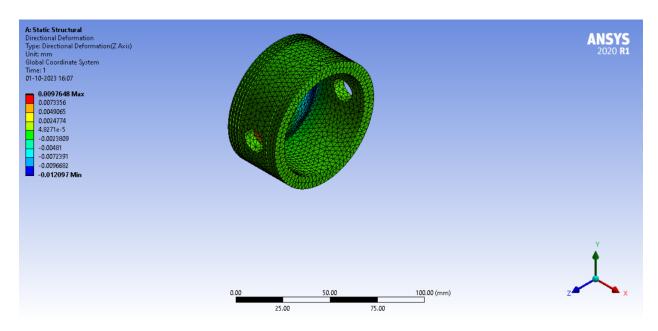
#### • Directional Deformation:



Directional deformation in X axis



#### **Directional Deformation in Y axis**



**Directional Deformation in Z axis** 

**Questions 1 - Mesh the Geometry** 

#### **Geometry Detail's:**

- Mesh the cylindrical PIPE as per the given instructions
- Dimension for PIPE
- 1. Diameter of pipe= 60mm
- 2. Length of pipe= 300mm

#### • Meshing Details:

- Meshing Methods= Tetrahedrons (Patch Conforming)
- 2. Body Sizing
- 3. Element Size= 2mm