# 3D Part Viewer Feature Update\_2

Listed below features should support following formats: STEP/STP, STL, IGES/IGS, OBJ

- 1. **Measurement** (Like Grabcad reference)
  - Measuring Unit: mm (default), inch, cm, meter, feet, feet-inch
  - · Length: Line, Arc
  - Radius & Diameter: Arc, Circle
  - Angle: between three Points, between two Lines, between two Faces
  - Distance: between Points (Snap points), between Lines, between Faces
  - Snap Points: End point, Mid-point & Center point: Line, Arc, Circle

## 2. Bounding Box/Cylinder

- Box Maximum = Length \* Width \* Height
- Cylinder Maximum = Diameter \* Length (with Selectable X/Y/Z axis)

## 3. Values

- Surface Area of (Selected Surface & Total Surfaces)
- Total Volume of Model

#### 4. Material Calculation

- Select Material grade from list (contains Material Name & Density)
  - Preloaded standard materials
  - Create custom material and add to the list
- Select Offset Value (Adding distance on each side to bounding box)
  - Box stock (Length, Width & Height offset)
  - · Cylinder stock (Diameter & Length offset)
- Finish part weight = Total volume of model \* material density value
  - Total Volume (from model)
  - Material density (Detect from Material grade)
- Raw material Weight = Bounding box volume with offset value \* Material density value
  - · Bounding box value with offset value
  - Material density (Detect from Material grade)

## 5. References

• Measurement is similar to: <a href="https://grabcad.com/library/cbp-100">https://grabcad.com/library/cbp-100</a>22023-cad-practice-1

# 6. Project Terms

- You will receive existing code files of project on start.
- 3D Part Viewer should be Responsive and support on all devices (Desktop, Mobile) and Browsers.
- Payment will be released after completion of project.
- When the project is finished, it should be live, and all project-related files and source code should be delivered.
- Project must not contain any copyright content like codes or assets.
- All work you do for this project is considered confidential and falls within our exclusive rights. You may not
  reveal any details about his project to any third party or present or future client who is may or may not be
  interested in the same project.