

# CNC EXPERT STANDARDS

PROJECT: TITAN-90L  
CERTIFICATION: CAD

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## OVERVIEW:

Successfully demonstrated comprehension of the TITAN-90L CAD performance standard. Create an accurate and fully defined TITAN-90L solid model using CAD software and part documentation.

## MATERIALS:

- TITAN-90L part print
- Computer with CAD software

## SKILLS DEMONSTRATED:

### SKETCHING (2D)

- **Circle (Center Diameter Circle):** Creates a circle using a center point and diameter.
- **Constraint (Equal):** Constrains similar objects so that their sizes are equal.
- **Constraint (Horizontal/Vertical):** Constrains a single line, or two points, to lie on either the vertical or horizontal axis.
- **Construction Plane:** Selects sketch plane on which to construct part features.
- **Create Sketch:** Enters sketch mode and creates a new sketch on a selected plane or face.
- **Dimensioning:** Assigns dimension values to sketch geometries and/or modifies previously assigned dimensions.
- **Fillet:** Places an arc of a specified radius at the intersection of two lines or arcs.
- **Line:** creates lines and arcs.

## MODELING (3D)

- **Chamfer:** Applies a bevel to one or more edges.
- **Fillet:** Adds fillets or rounds to one or more edges, faces or features.
- **Revolve:** Revolves a sketch profile or planar face around a selected axis.