

CNC EXPERT STANDARDS

PROJECT: TITAN-89L
CERTIFICATION: CAD

OVERVIEW:

Successfully demonstrated comprehension of the TITAN-89L CAD performance standard. Create an accurate and fully defined TITAN-89L solid model using CAD software and part documentation.

MATERIALS:

- TITAN-89L part print
- Computer with CAD software

SKILLS DEMONSTRATED:

SKETCHING (2D)

- **Circle (Center Diameter Circle):** Creates a circle using a center point and diameter.
- **Constraint (Collinear):** Constrains two or more objects so that they share a common line.
- **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.
- **Revolve:** Revolves a sketch profile or planar face around a selected axis.