CNC EXPERT STANDARDS

PROJECT: TITAN-6M
CERTIFICATION: CAM

OVERVIEW:

Successfully demonstrated comprehension of the TITAN-6M CAM performance standard. Create an accurate and fully defined NC program using the TITAN-6M solid model, CAM software, and part documentation.

MATERIALS:

- TITAN-6M part print
- TITAN-6M setup sheet
- Computer with CAM software

SKILLS DEMONSTRATED:

SETUP

- **Orientation:** Define axis orientation for work coordinate system.
- **Origin:** Define axis origin for work coordinate system.
- **Stock:** Define raw stock dimensions for machining operations.

2D TOOLPATHS

- **Facing:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for 2D facing operation.
- **2D Contour:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for 2D contour operation.
- **2D Chamfer:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for 2D chamfer operation.

HOLEMAKING

- **Chamfering:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for chamfering operation.
- **Drilling:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for drilling operation.
- **Tapping:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for tapping operation.

3D TOOLPATHS

- **Adaptive Clearing:** Set tool parameters, machining geometry, clearance/cutting heights, and other toolpath parameters for 3D adaptive clearing.

ACTIONS

- **Simulate:** Previews and simulates toolpaths and stock material removal.

MANAGE

- **Tool Library:** Manage tool library.