

Instructions

Roles

Here is a list of all the roles involved in this performance measure.

- **Trainee:** The individual completing the performance that will be assessed.
- **Operator:** The qualified CNC machine operator who runs the programs written by the Trainee. The Operator and Evaluator may be the same individual, but the Trainee **cannot** run their own programs.
- **Evaluator:** The individual who inspects the parts created by running the Trainee's programs and submits the affidavit online. An organization may choose to use their Trainer as the Evaluator, as an alternative to having a separate Evaluator. Physical part inspection and online affidavit submission, however, must be done by those who are allowed to inspect NIMS parts (MET-TECs or a Trainer with the Inspector credential).
- **Trainer:** The individual who trains the Trainee.

Performance Process

1. Evaluator provides Trainee with items listed under [Deliverables to Trainee](#).
2. Trainee completes programming and all documentation (listed under [Submission Components](#)), then submits files to the Evaluator.
3. Evaluator uses the provided NIMS checklists (listed in [Evaluation Resources](#)) to determine if all needed information is on the documents.
4. Evaluator provides Operator all files, tool lists, setup sheets, and process plan. The parts may not be run without all the necessary documentation.
5. Operator reviews program and documentation. If any required element is missing, the Operator rejects the submission and returns it to the Evaluator without a specific explanation about what is wrong.
6. Operator runs the parts as programmed by the Trainee. **Only speed, feed, and minor offset adjustments for fine tuning** can be made by the Operator to bring the parts into specification. No geometry, workholding changes, or markups on documentation are allowed. If a machine crash is imminent, the Operator stops immediately, rejects the submission and returns it to the Evaluator without providing a specific explanation about what is wrong.
7. If parts cannot be completed due to deficiencies in documentation or programs, Evaluator may return submission to Trainee for additional attempts according to policy and time tolerance established by the organization.
8. The parts are inspected by the Evaluator.
9. The Evaluator reviews all documents listed under [Affidavit Submission](#), collects files for upload (scans/edited PDFs are recommended), and submits the affidavit online to NIMS.

Deliverables to Trainee (Project)

These items must be provided to the Trainee.

- Instructions
- Cap STEP file (missing drilled spanner holes)
- Cap print
- Spool STEP file (missing ratchet teeth, gripper grooves, and cross holes)
- Spool print
- Resource list (Provided by Organization, see Infrastructure Requirements)

Submission Components

The Trainee must submit the following items for evaluation to fully complete the official performance measure for CAM Turning Programmer. Incomplete and/or failing submissions will NOT result in a credential.

- Process plan
- STEP files for all parts
- NC program files for all parts
- Tool list(s) for all parts
- Setup sheet(s) for all parts

Evaluation Resources (Delivery)

The Evaluator must use the following checklists to evaluate the documents and files submitted by the Trainee. Parts may not be run without all the necessary documentation.

- Tool List Checklist
- Process Plan Checklist
- Setup Sheet Checklist
- Model Checklist
- STEP files for all parts (Evaluation Models for Comparison)

NIMS also provides an optional (but strongly recommended) tool for data entry for each defined feature on the CAM Turning Programmer project. Use of this tool will provide more insight to both the Trainee and Trainer about the evaluation of the performance. Contact NIMS at support@nims-skills.org to get a link to this data tool.

Affidavit Submission

The Evaluator should be prepared to upload the following documents to complete the affidavit online:

- Process plan and process plan checklist (PDF and .zip files accepted)
- STEP files for all parts (.zip files accepted)
- NC program files for all parts (.zip files accepted)
- Tool list(s) and tool list checklist(s) (PDF and .zip files accepted)
- Setup sheet(s) and setup sheet checklist(s) (PDF and .zip files accepted)