

Process assignment and smart parameters

CAD-042 / REV A / 2026.09.01

Turn manufacturing choices into validated parameters and properties with a clear dependency order. Work on a copy first. Record application version, units and active document/configuration. Names below identify the catalogued workflow; they do not claim a particular button layout or verified implementation.

STATUS	Recovered/Partial
CLASSIFICATION	CAD
MATERIAL	CAD / AUTOMATION
DISPOSITION	PUBLIC / RECOVERED/PARTIAL
CATEGORY	CAD / Scanning / Automation
RECORD TYPE	how-to

TECHNICAL NOTES

Turn manufacturing choices into validated parameters and properties with a clear dependency order.

GOAL

Run the first test described in this guide and record the result for process assignment and smart parameters.

SOURCE STATE

Operational reference/specification; original rule or add-in source not inspected

PREPARATION / NOTES

Work on a copy first. Record application version, units and active document/configuration. Names below identify the catalogued workflow; they do not claim a particular button layout or verified implementation.

EQUIPMENT

- CAD / automation tool
- Representative test model
- Measurement or inspection method

METHOD / STEPS

1. Define allowed process names and which parameters each process requires.
2. Read document type, material and thickness; flag missing inputs instead of selecting a process silently.
3. Apply formulas with units, update dependent dimensions and write the process property only after validation.
4. Show or log what changed and identify manual overrides that remain in effect.

THINGS TO WATCH FOR

Circular dependencies and unitless values can produce convincing but wrong geometry. Do not infer a fabrication route solely from a filename.

FIRST TEST / WHAT TO RECORD

Changing the process on a copied part updates only the documented dependent fields and leaves a valid model.

RESULT / WHERE THIS STANDS

Changing the process on a copied part updates only the documented dependent fields and leaves a valid model.

TROUBLESHOOTING

- Circular dependencies and unitless values can produce convincing but wrong geometry. Do not infer a fabrication route solely from a filename.

SPECIFICATION

TOOL PATH	CAD / automation tool
DELIVERABLE	HOW-TO
VALIDATION	Representative model / known dimension
STATUS	Recovered/Partial

DEVELOPMENT HISTORY

2026.09.01 / Rev A

Imported as an independent manifest record; public copy keeps uncertainty visible.

REFERENCE NOTES

Autodesk reference (<https://aps.autodesk.com/developer/overview/inventor-api>).

HOW-TO SOURCES

Autodesk reference

<https://aps.autodesk.com/developer/overview/inventor-api>

RELEASED MATERIAL / SOURCE LINKS

cad-042-public-summary.txt

PUBLIC SUMMARY / RECOVERED NOTES

<https://u225x.com/downloads/manifest-records/cad-042-public-summary.txt>

RETURN TO THE LIVING RECORD

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This PDF preserves the public notes at this revision. Visit the record for updates and attached images.

<https://u225x.com/record/CAD-042>