

**Politechnika
Warszawska**

Zakład Podstaw Konstrukcji

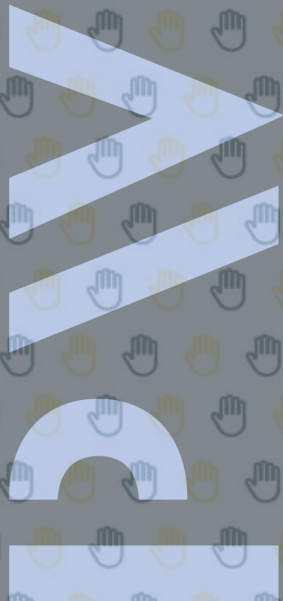
Wprowadzenie do PTC Creo

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Wersja 1.2



Etapy procesu wytwarzania

1. stworzenie obrabianego modelu,
2. definicja środowiska gdzie odbywa się proces wytwarzania (typ obrabiarki, uchwyty, narzędzia, baz),
3. stworzenie ścieżek NC (wybór konkretnego narzędzia do geometrii),
4. przeniesienie ścieżek na urządzenie.

Manufacturing

New

Type

- ☐ Layout
- ☐ Sketch
- ☐ Part
- ☐ Assembly
- ☒ Manufacturing
- ☐ Drawing
- ☐ Format
- ☐ Notebook

Sub-type

- ☒ NC assembly
- ☐ Expert machinist
- ☐ CMM
- ☐ Sheetmetal
- ☐ Cast cavity
- ☐ Mold cavity
- ☐ Harness
- ☐ Process plan
- ☐ Additive Manufacturing

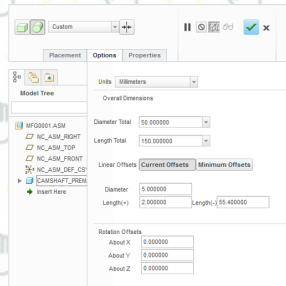
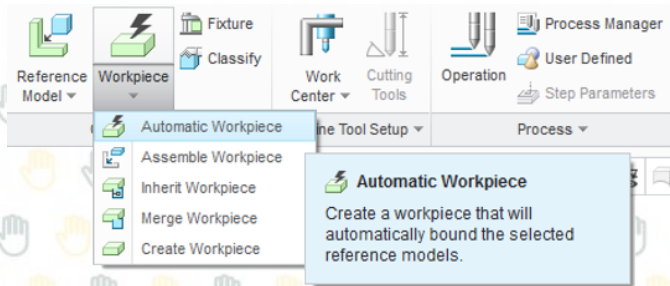
Name: mfg0002

Common name:

☒ Use default template

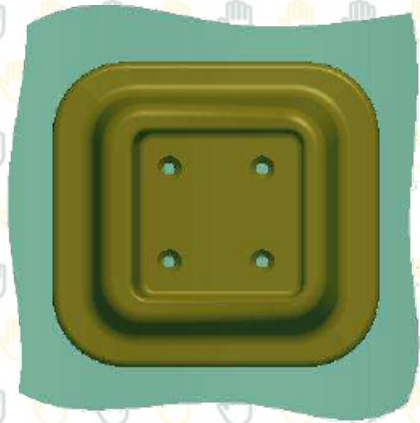
OK Cancel

Workpiece

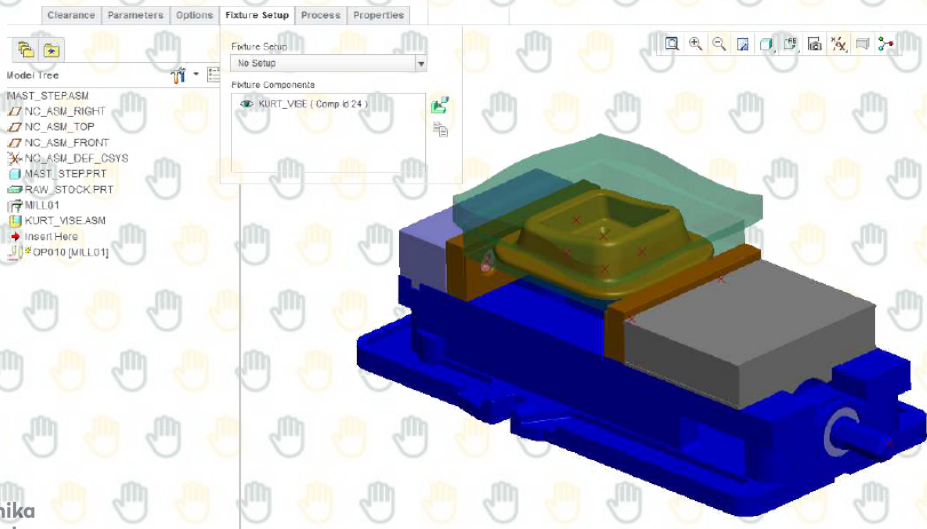


Create: Rectangular Workpiece
Choose Csys

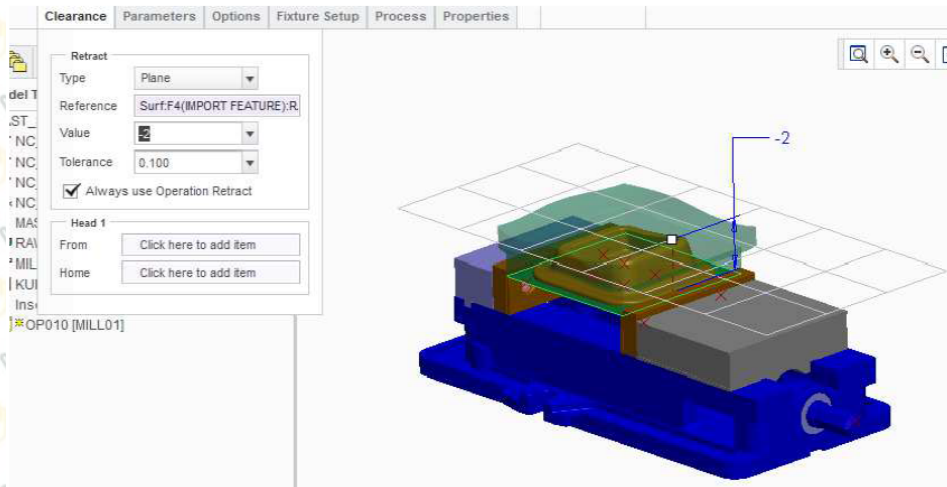
Workpiece



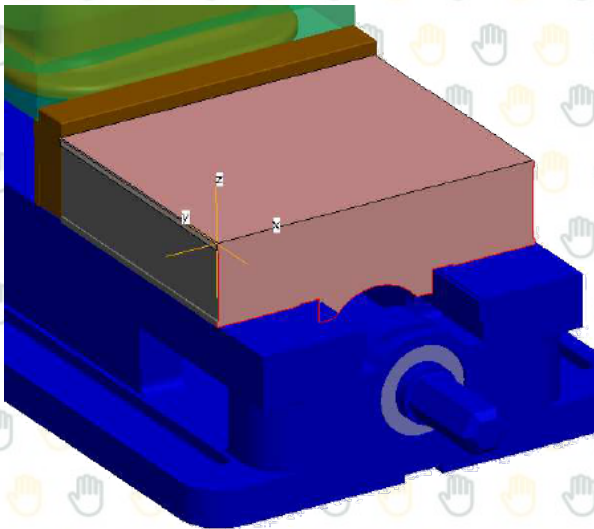
Fixture



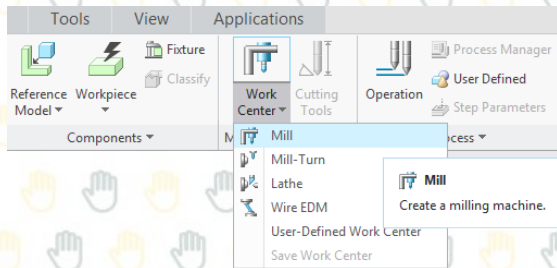
Clearance



Coordinate system for mill



Work Center Configuration



Milling Work Center

Name: MILL01

Type: Mill

CNC Control: -

Post Processor: UNCX01 ID 1

Number of Axes: 3 Axis ☐ Enable probing

Output: Tools Parameters Assembly Travel Cycles Properties

Commands

FROM: Do Not Output

LOADTL: Modal

COOLNT/OFF: Output

SPINDL/OFF: Output

Cutter Compensation

Output Point: Tool Center

Safe Radius: 0.05

Adjust Corner: Straight


Spline Output:

Probe Compensation


Output Point: Stylus Center

Pause OK Cancel

Operations

MILL01  ACS0:F9(CSYS)

Clearance	Parameters	Options	Fixture Setup	Process	Properties
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MILL01  NC_ASM_DEF_CSYS:F4(CSYS) ID=8

Clearance	Home Point	Parameters	Options	Fixture Setup	Process	Properties
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Mode

Model

MFG0

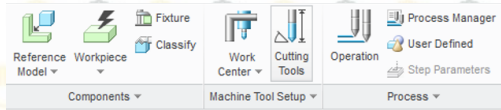
Type:

Reference:

Tolerance:

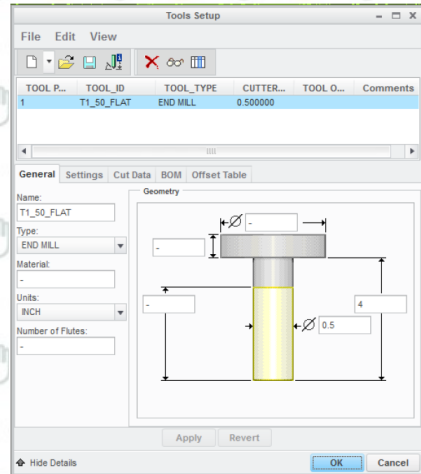
☒ Always use Operation Retract

Cutting Tools

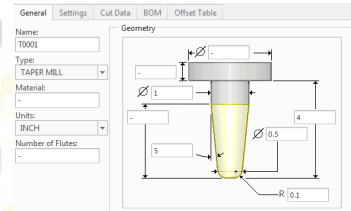
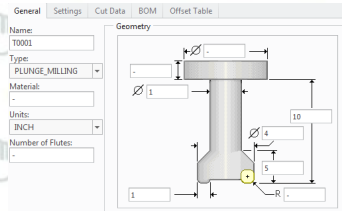
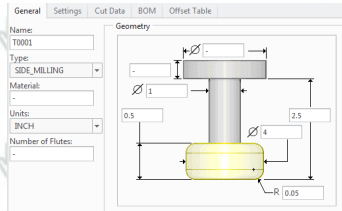
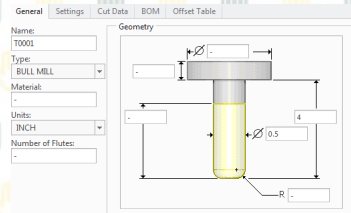
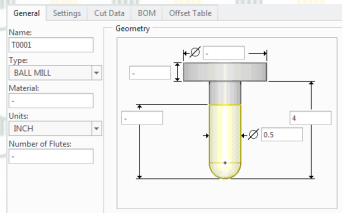
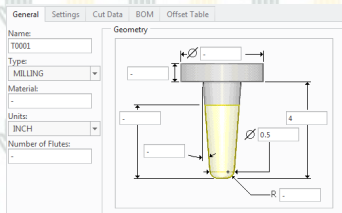


Cutting Tools

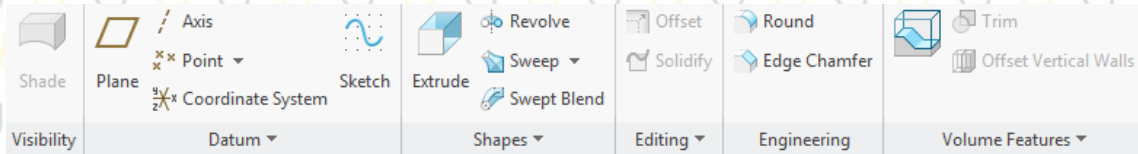
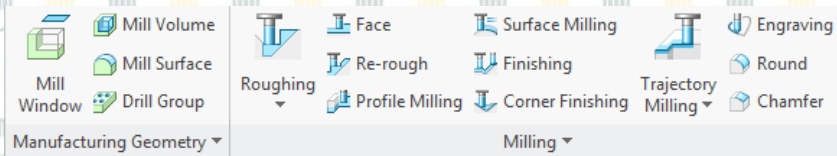
Edit the set of cutting tools available on the machine tool for the active operation.



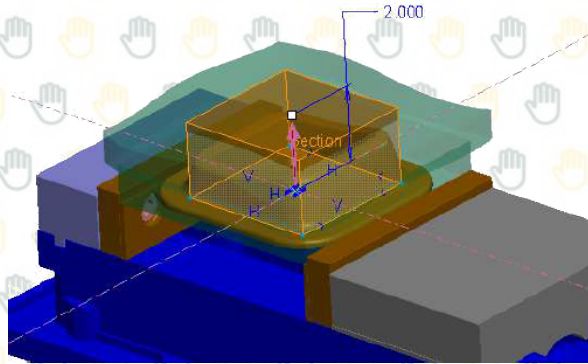
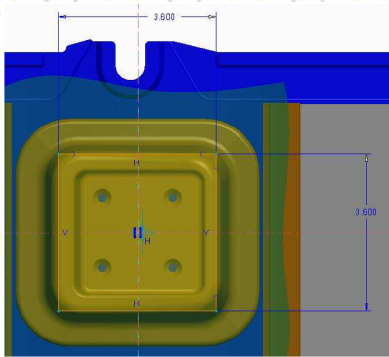
Cutting Tools



Volume Milling



Cutting Tools



Local Milling

The screenshot displays a CAD software interface with the following menu structure:

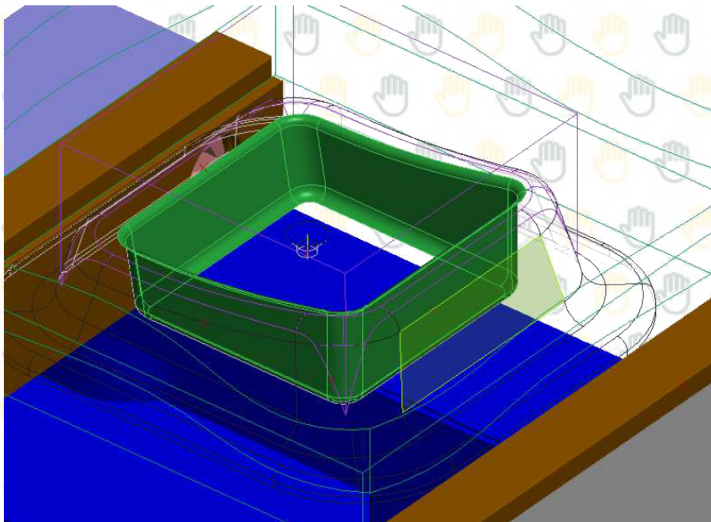
- View**
- Applications**
- Mill**
 - Roughing**
 - Face
 - Re-rough
 - Profile Milling
 - Surface Milling**
 - Finishing
 - Corner Finishing
 - Trajectory Milling**
 - Engraving
 - Round
 - Chamfer
 - Standard**
 - Pecking
 - Boring
 - Reaming
 - Web
 - Countersink
 - Face
 - Tapping
 - Custom
 - Holemaking Cycles**

The **Milling** menu is expanded, showing the following options:

- Cut Line Milling
- Thread Milling
- Manual Cycle
- Plunge Rough
- Pocketing
- Swarf Milling
- Pencil Tracing
- Local Milling** (selected)
- Rest Finish


A tooltip for the **Previous Step** option is displayed, stating: "Insert a local milling step that references another step."


Surface Milling




Bibliografia


 **T. Kucharski.** *Mechanika ogólna: rozwiązywanie zagadnień z MATHCAD-em.* [Wydawnictwa Naukowo-Techniczne, 2015.](#) isbn: 9788379262953.

 **L. W. Kurmaz and O. L. Kurmaz.** *Podstawy konstruowania węzłów i części maszyn: podręcznik konstruowania.* [Samodzielna Sekcja "Wydawnictwo Politechniki Świętokrzyskiej", 2011.](#) isbn: 9788388906343.

 **E. Lisowski.** *Integracja modelowania 3D, kinematyki i wytrzymałości w programie Creo Parametric.* [Wydawnictwo PK, 2013.](#) isbn: 9788372427380.

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 **E. Mazanek, A. Dziurski, and L. Kania.** *Przykłady obliczeń z podstaw konstrukcji maszyn: Połączenia, sprężyny, zawory, wały maszynowe. tom 1.* [WNT, 2005.](#) isbn: 9788320435528.

 **E. Winter.** *Using Pro/Weld in Creo 2.0.*



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ARIGATO
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JUSPAXAR
DANKSCHEEN
TASHAKKUR ATU
YAQHANYELAY
SUKSAMA
EKHMET
GRAZIE
MEHRBANI
PALDIES
YOU
BOLŽIN
MERCI
THANK
BI'YAN
SHUKRIA
TINGKI
SPASIBO
SNACHALMUYA
MURUM
CHALTU
WABEJJA
MAYTEKA
YUSPISAGATAN
HUI
UNALCHESIN
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HERASTAWNY
GAEJTHO
GOZAIMASHITA
EFCHARISTO
ACAYJE
FAKAAUE
BAKKA
TAVYAPUCH
MEDAWAGSE
SPASIBO
DEHNAUJA
NEHACHALNYA
SHOMO
MAKETAU
HEBMONK HAR