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Optimized Contour Milling

TNC 640
Option #167

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CONTENT

1. Overview of possible applications
2. Optimized Contour Milling
3. Programming
4. Examples of use

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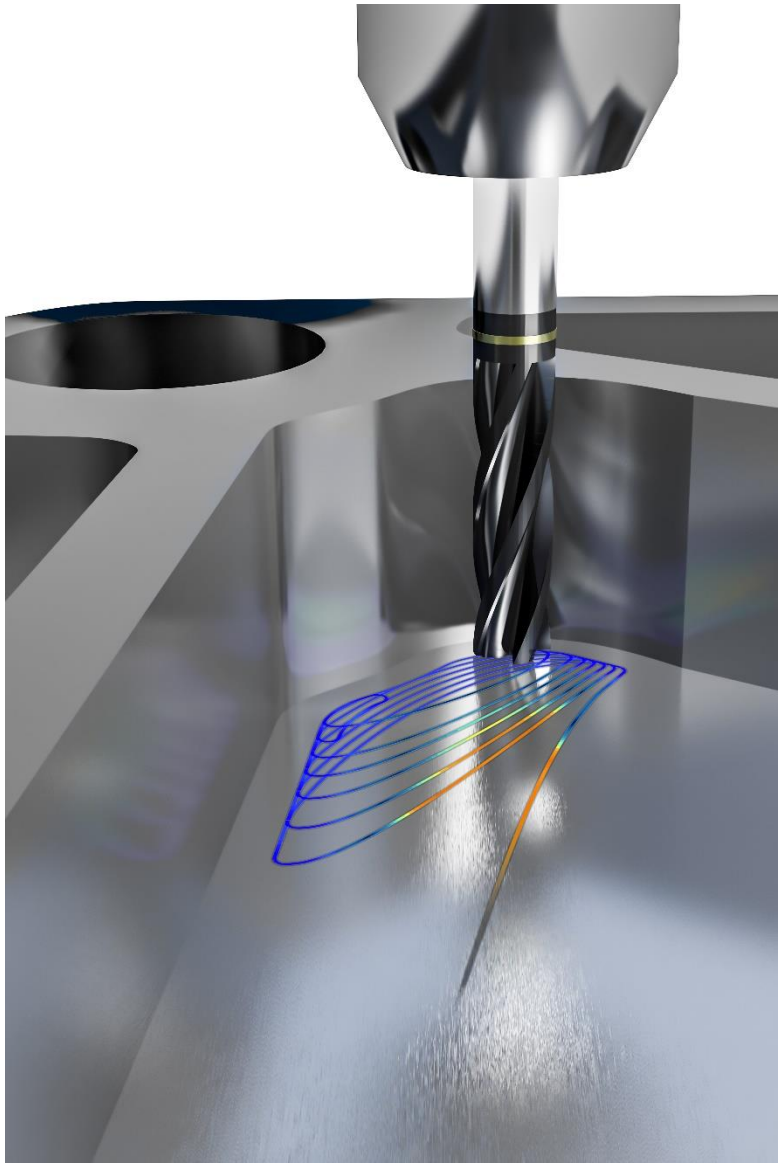
1 Application possibilities
at a glance

Application possibilities at a glance

- Workshop-oriented programming of any pockets and islands
- Uniform engagement conditions allow significantly increased cutting parameters
- Particularly precise maintenance of the web overlap - even at inside corners



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2 Optimized Contour Milling
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Optimized Contour Milling
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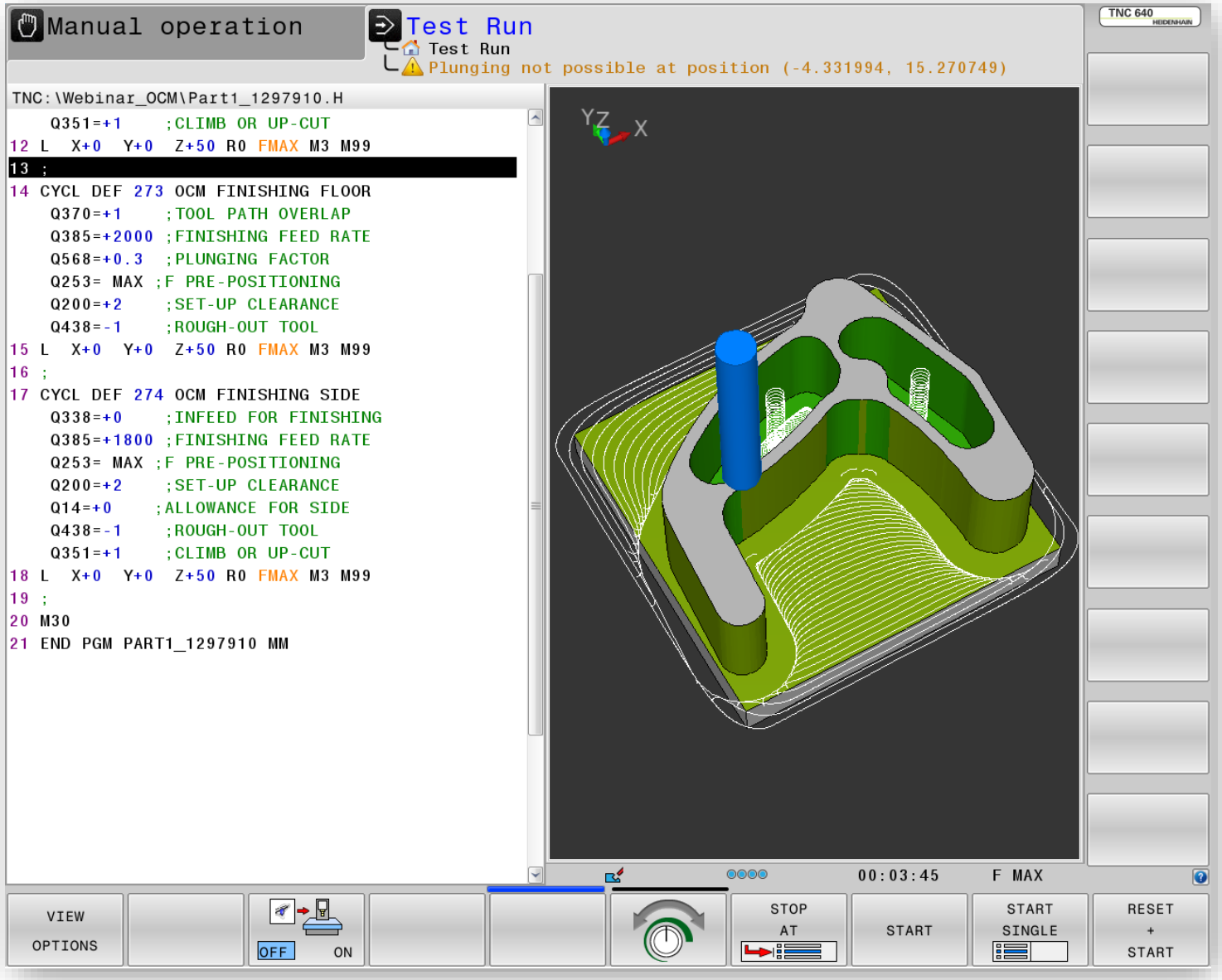
- Easy programming
- Open, closed or partially open

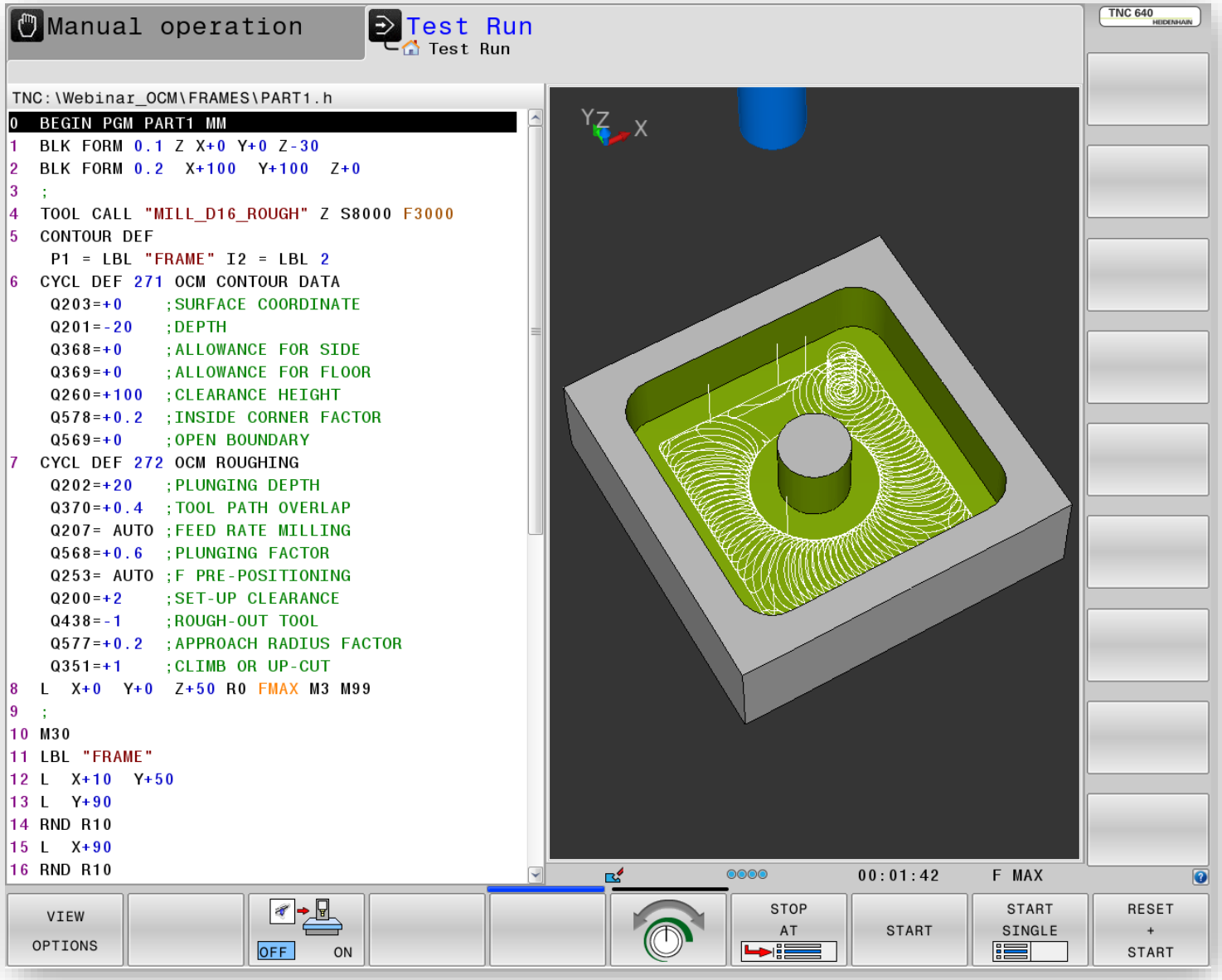
  Outer frame
- Constant pressure angle
- Residual material detection



3 Programming

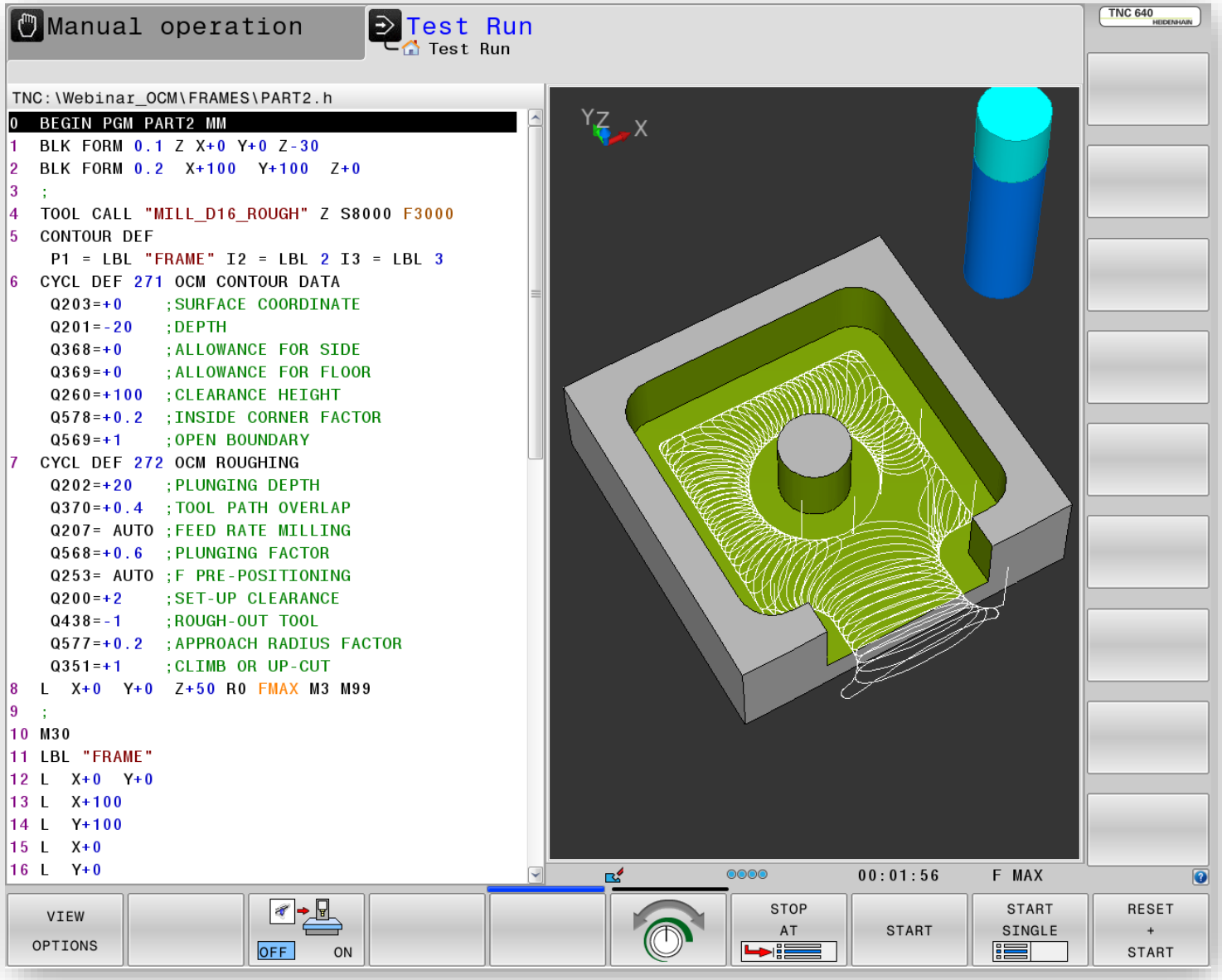
Programming

- Set contours, e.g.
  - Closed frame
  - Island



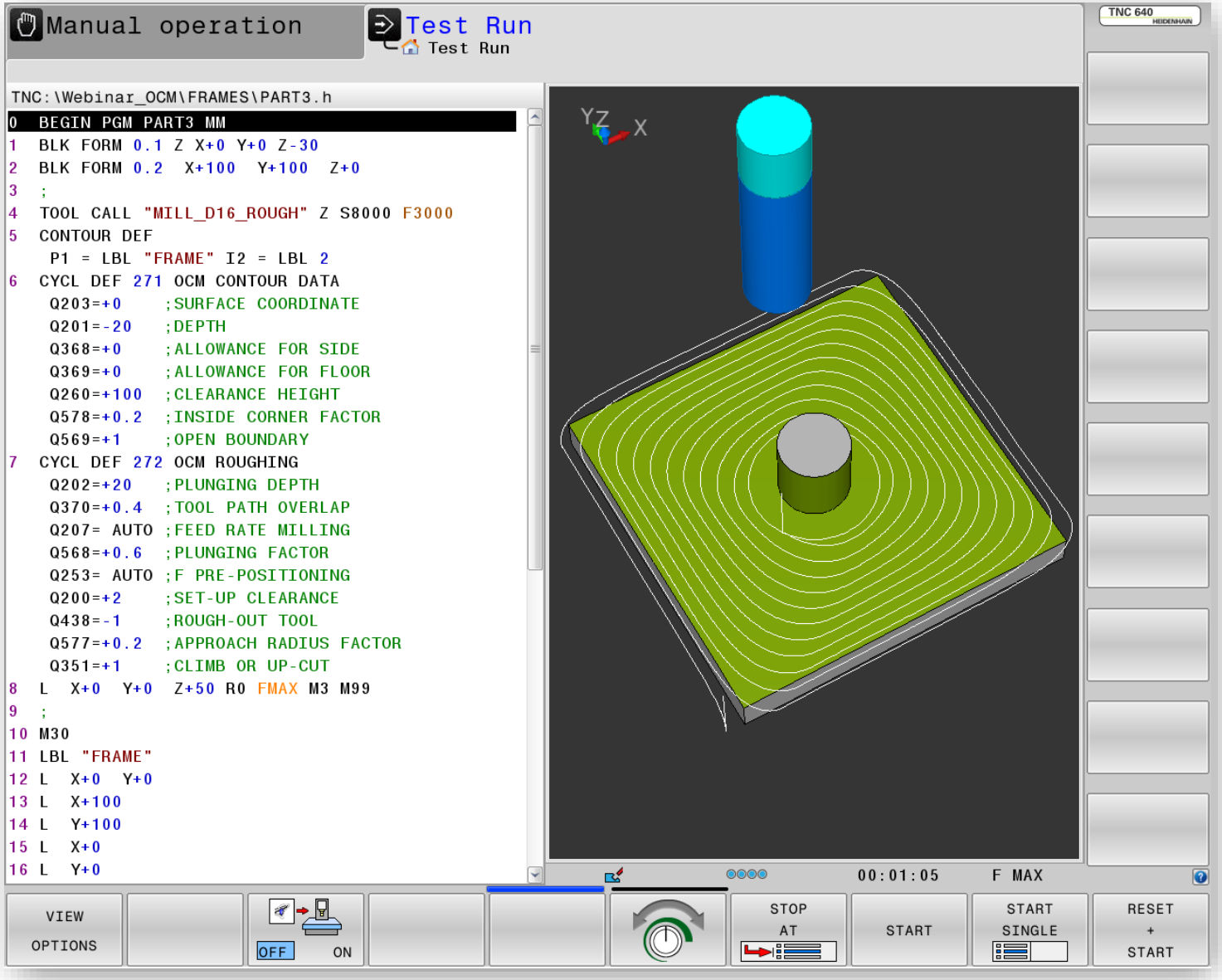
Programming

- Set contours, e.g.
  - Partially opened frame
  - Island



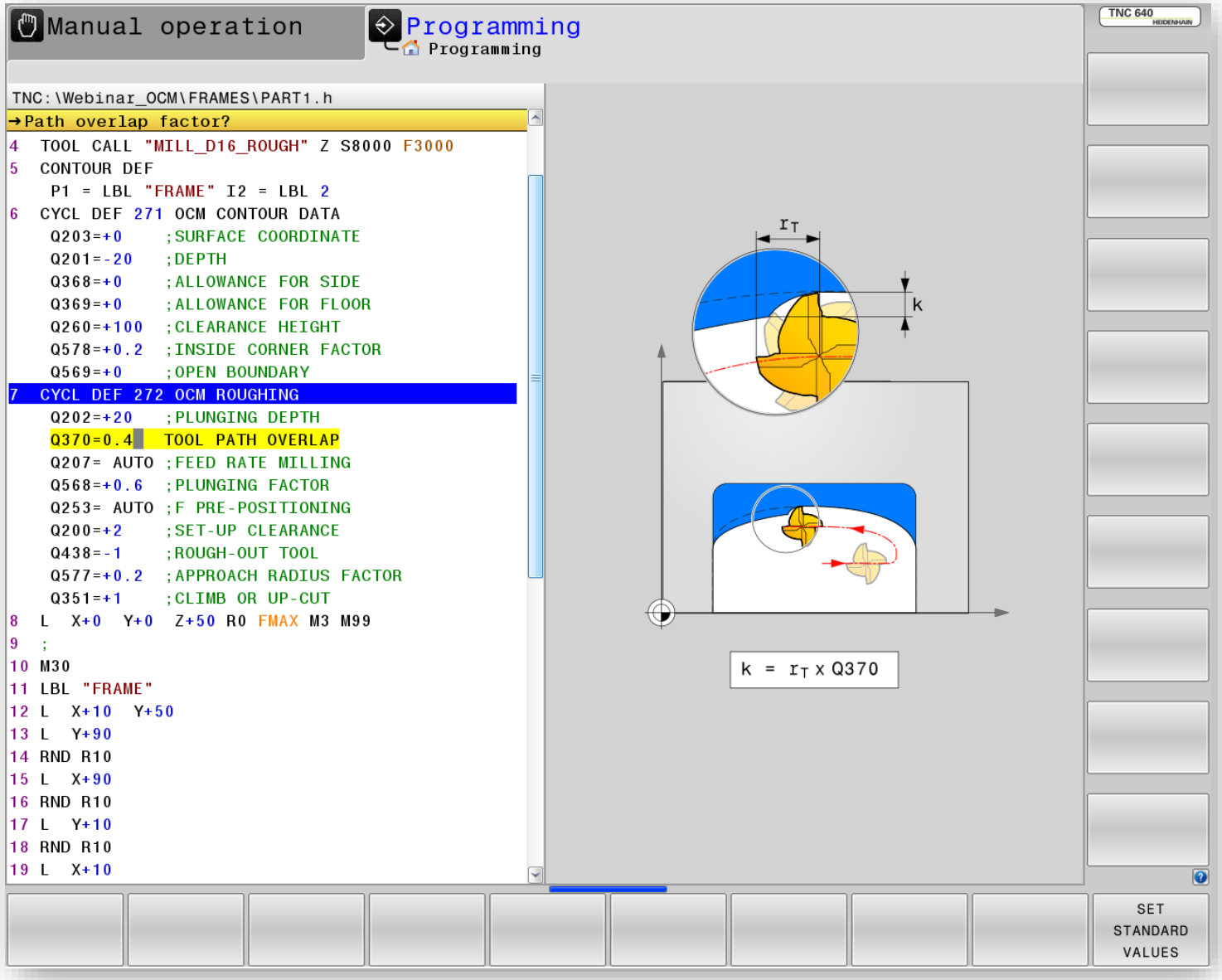
Programming

- Set contours, e.g.
  - Open frame
  - Island



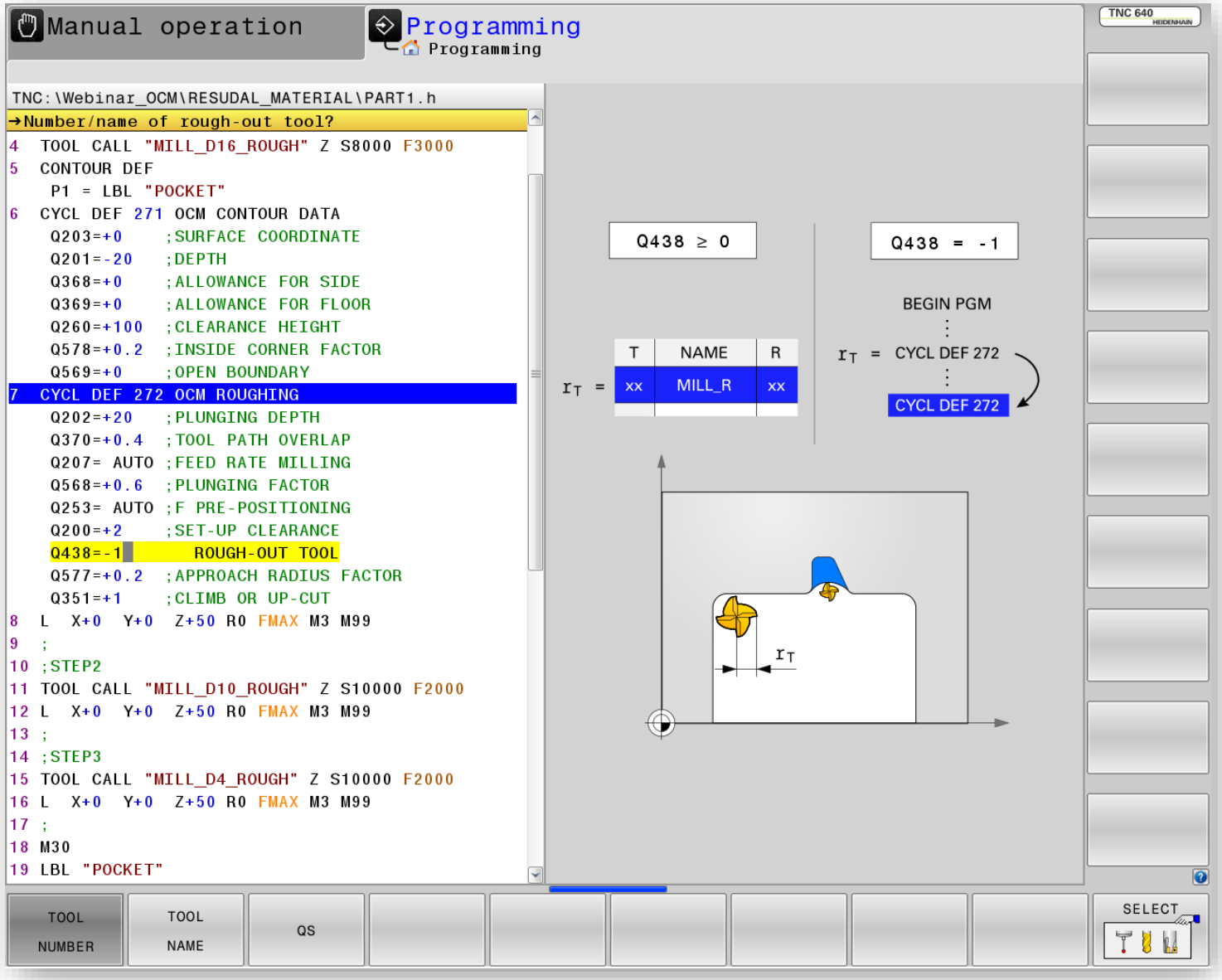
Programming

- Roughing
  - Path overlap (constant pressure angle on the tool)



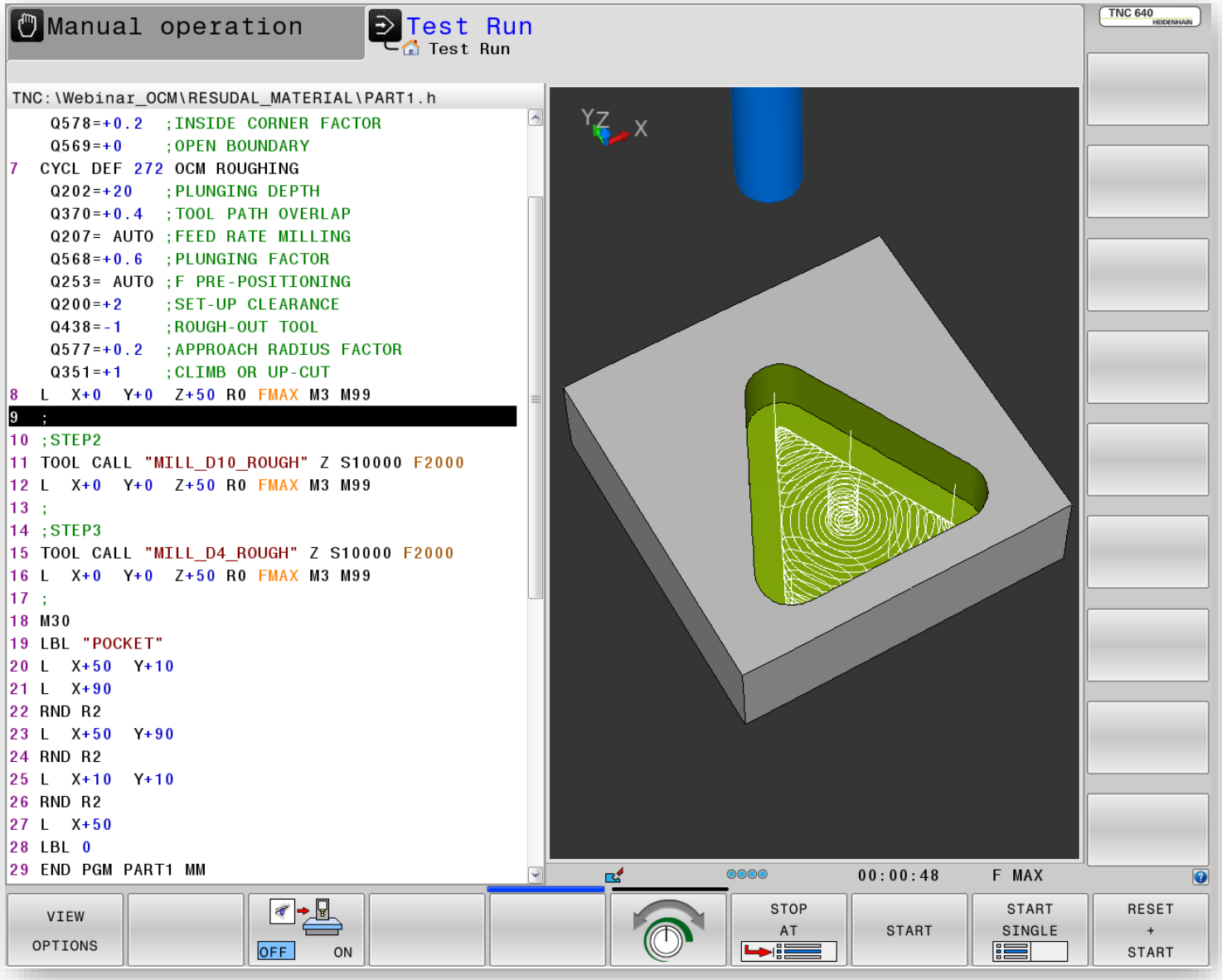
Programming

- Roughing (rest material)
  - Q438=-1 The tool radius is taken from Cycle 272



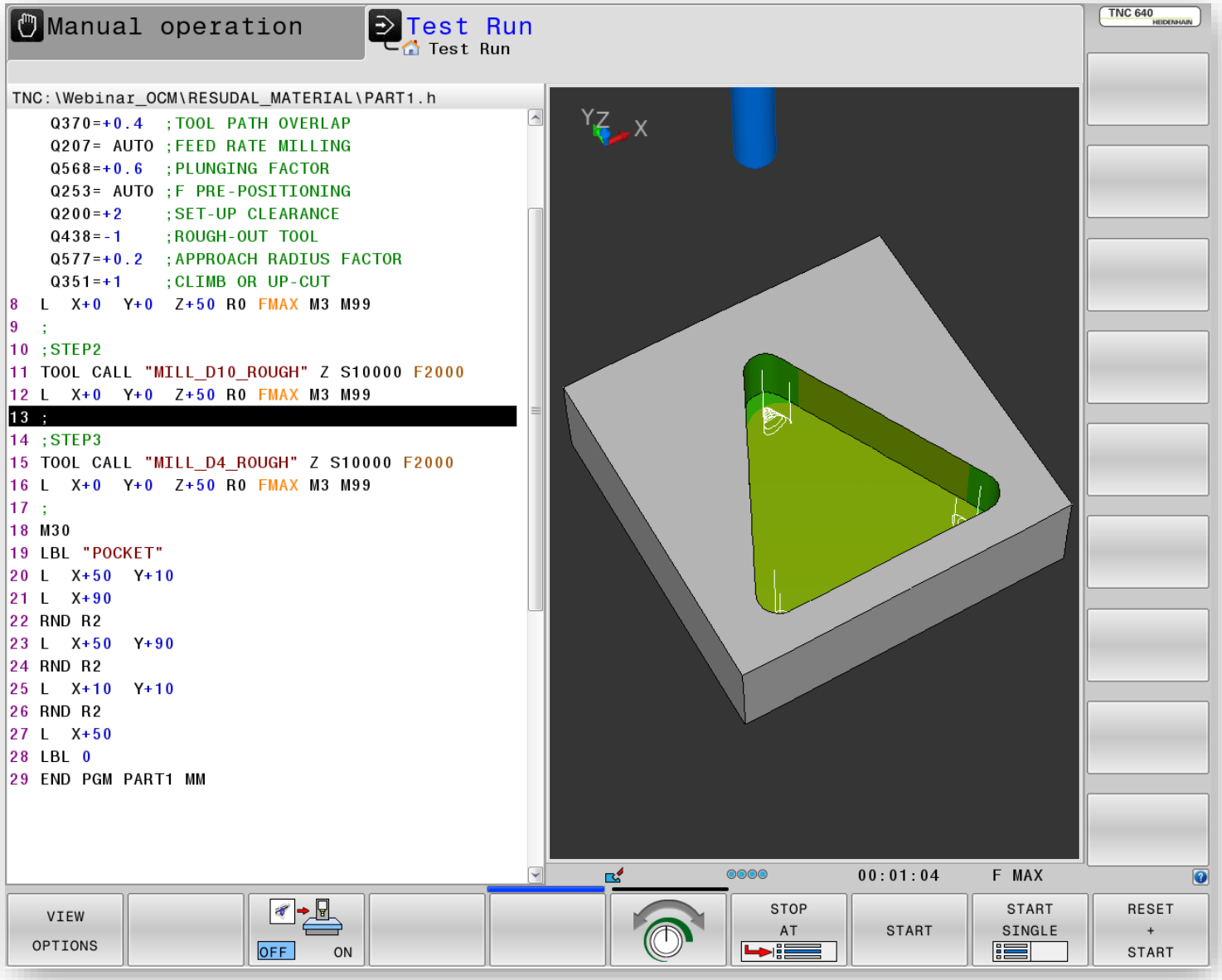
Programming

- Roughing (rest material)
  - Q438=-1 The tool radius is taken from Cycle 272
  - Tool end mill D16



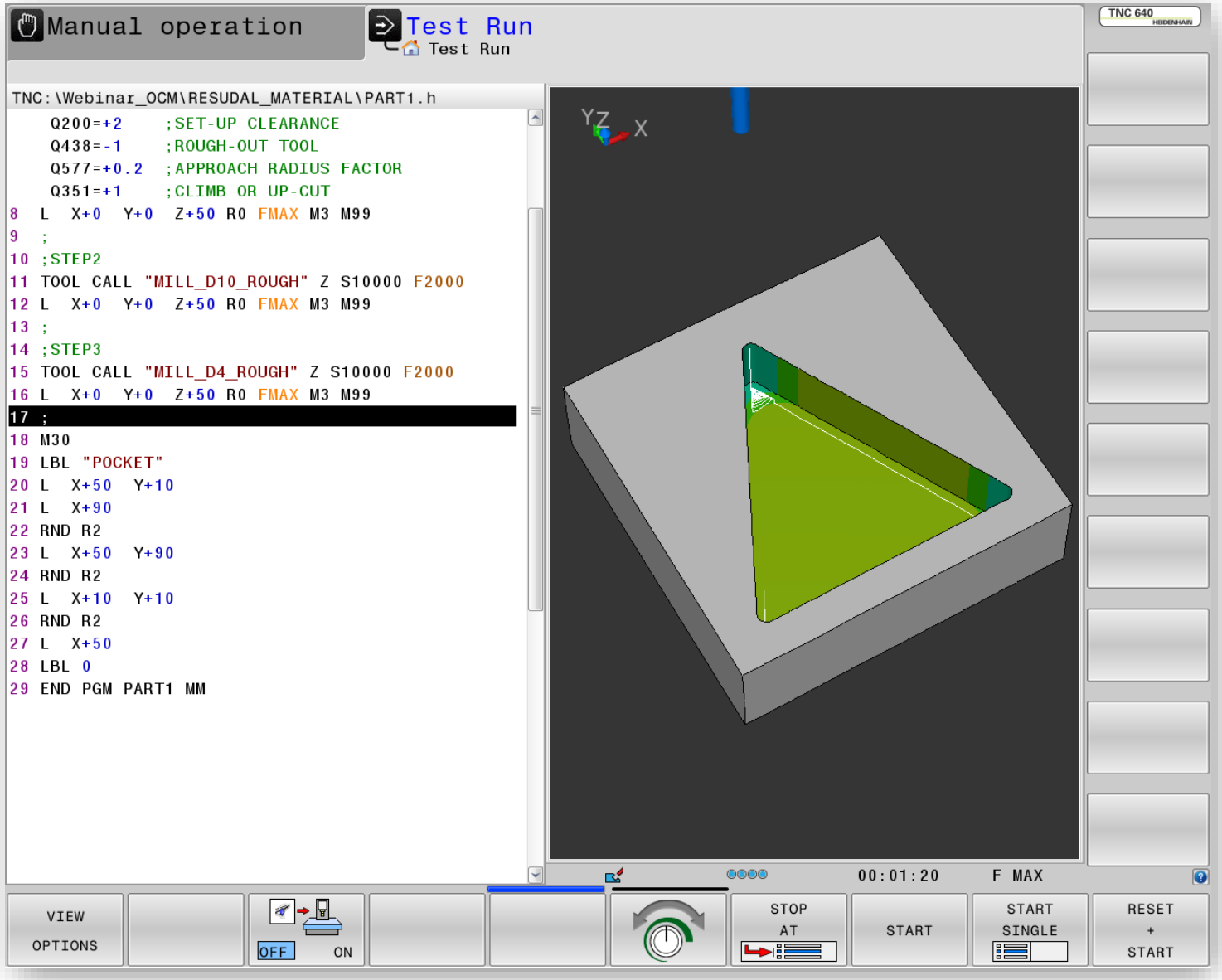
Programming

- Roughing (rest material)
  - Q438=-1 The tool radius is taken from Cycle 272
  - Tool end mill D10
    Remaining material from the D16 is removed



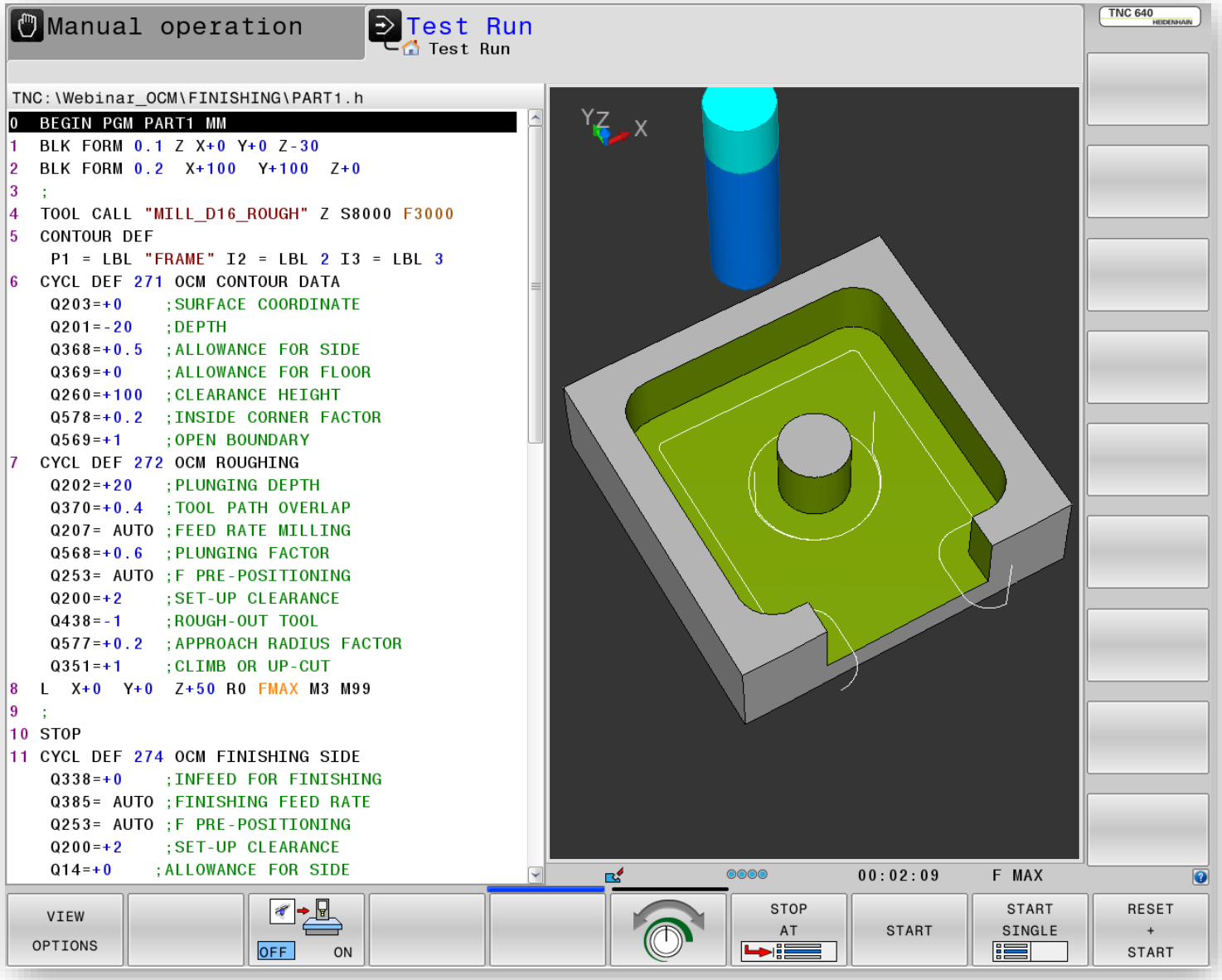
Programming

- Roughing (rest material)
  - Q438=-1 The tool radius is taken from Cycle 272
  - Tool end mill D4
    Remaining material from the D10 is removed



Programming

- Finishing
  - Optimum approach and departure movements



4 Application example

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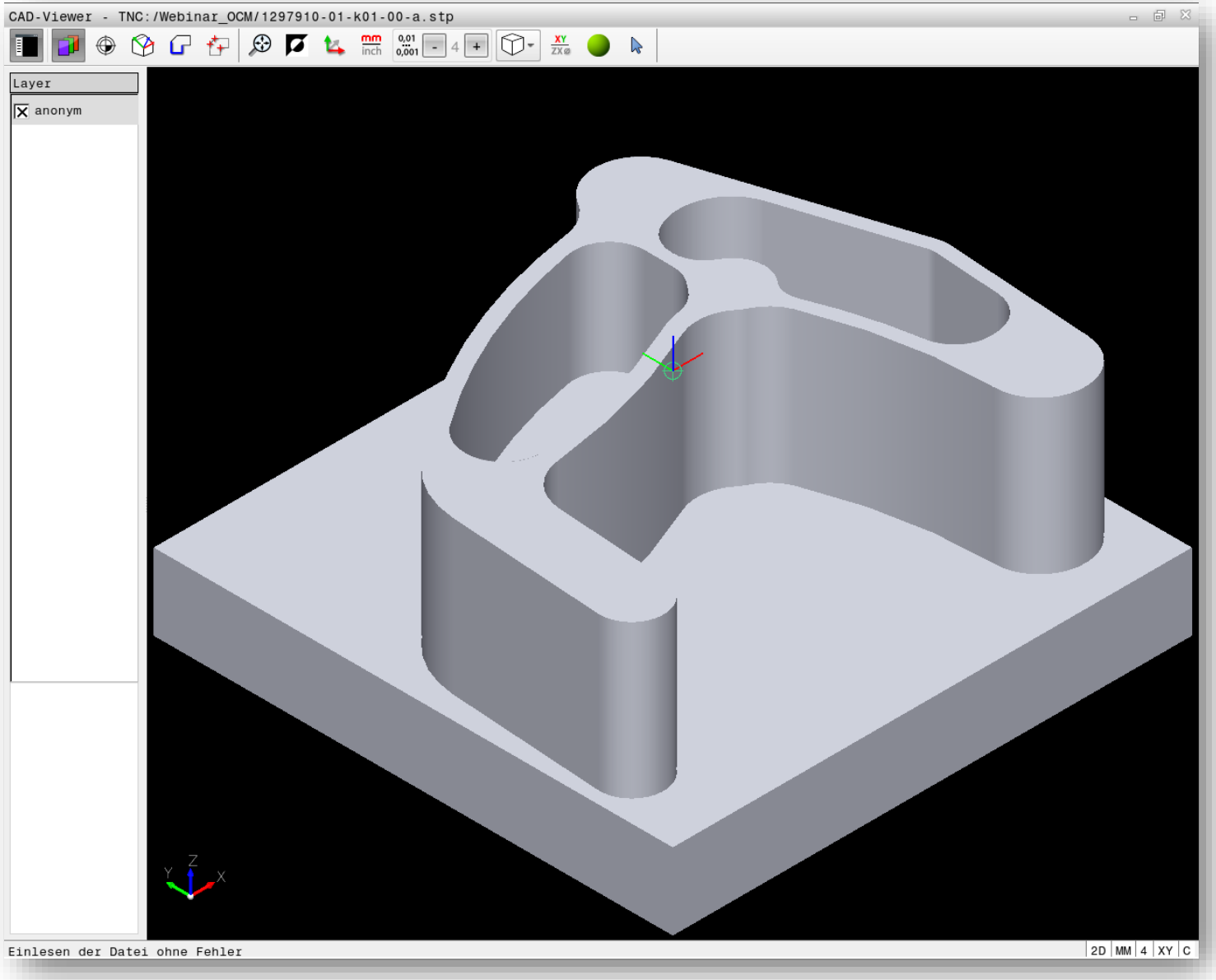
Application example

- Select contours
- Roughing T D16
- Residual material T D10
- Finishing



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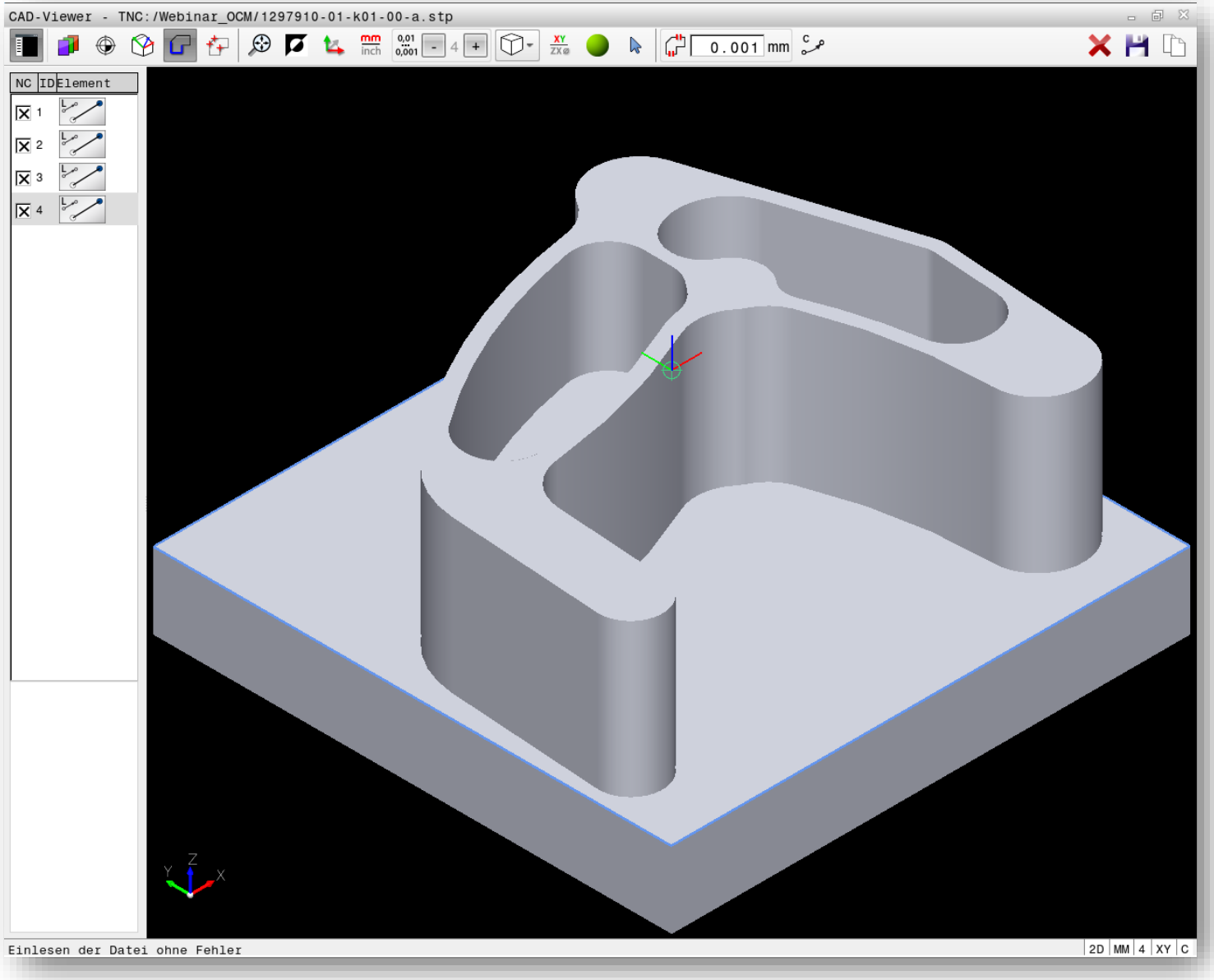
Application example

- Select contours

  External contour FRAME
- Roughing T D16
- Residual material T D10
- Finishing



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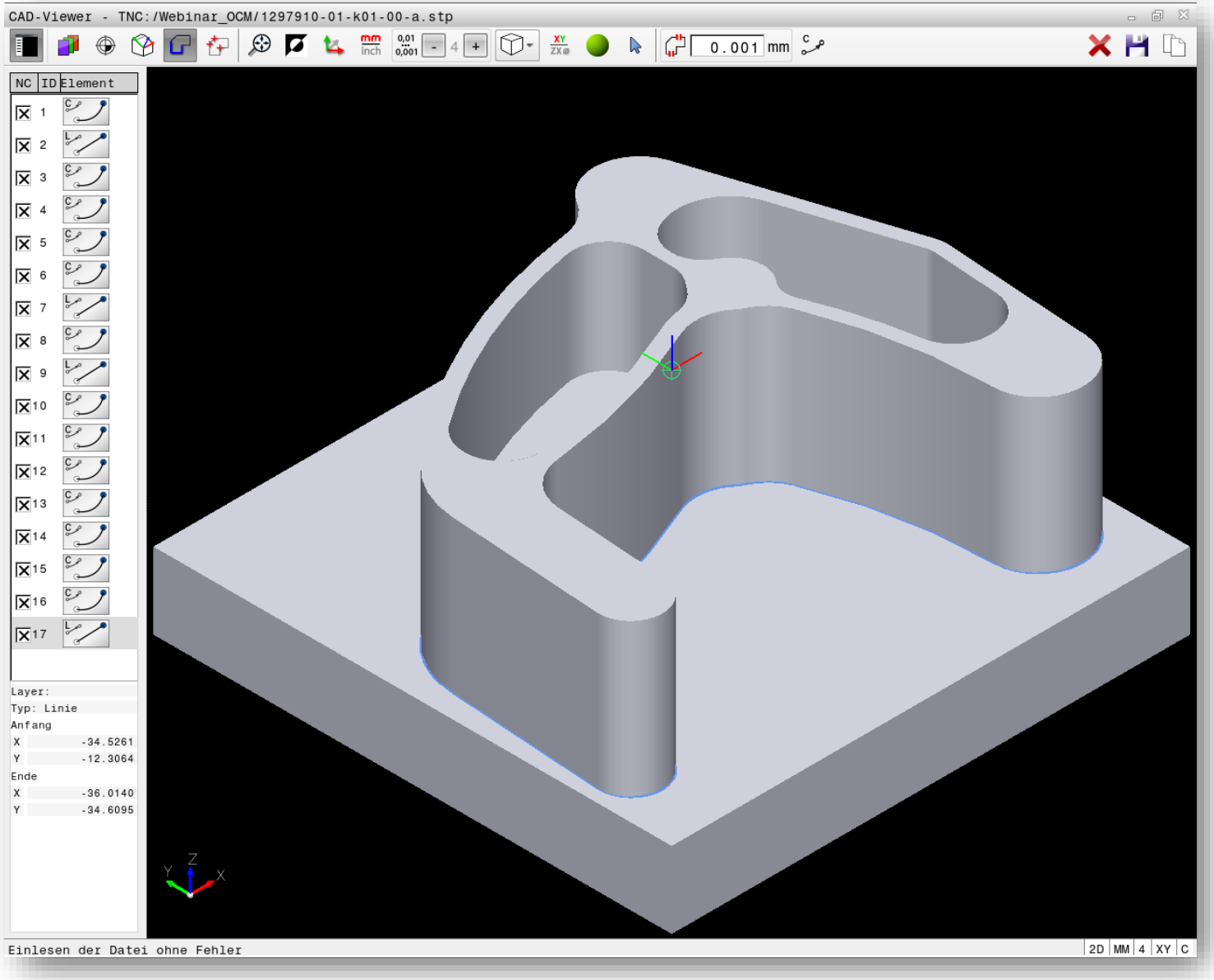
Application example

- Select contours

  Island contour ICELAND
- Roughing T D16
- Residual material T D10
- Finishing



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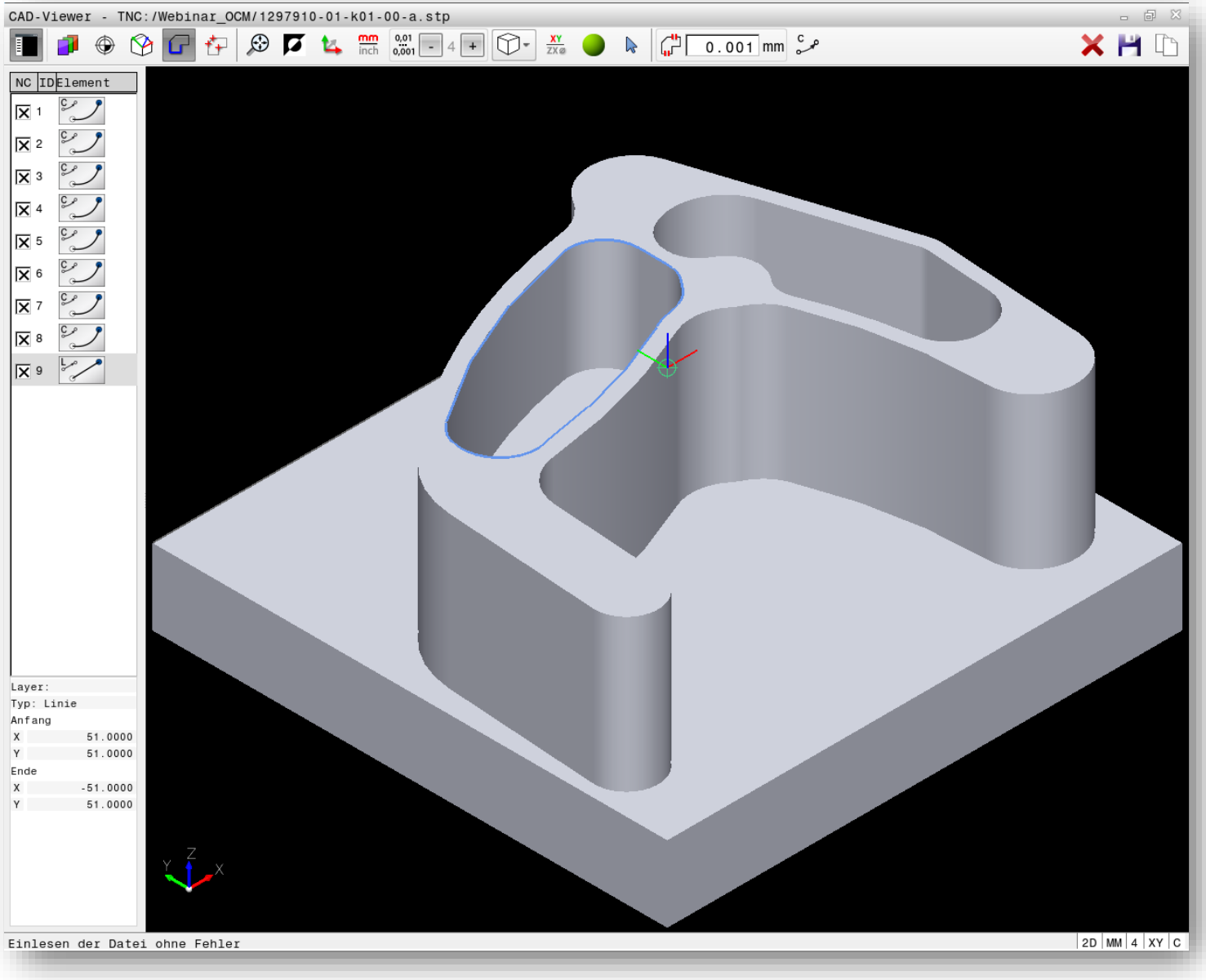
Application example

- Select contours

  Bag 1
- Roughing T D16
- Residual material T D10
- Finishing



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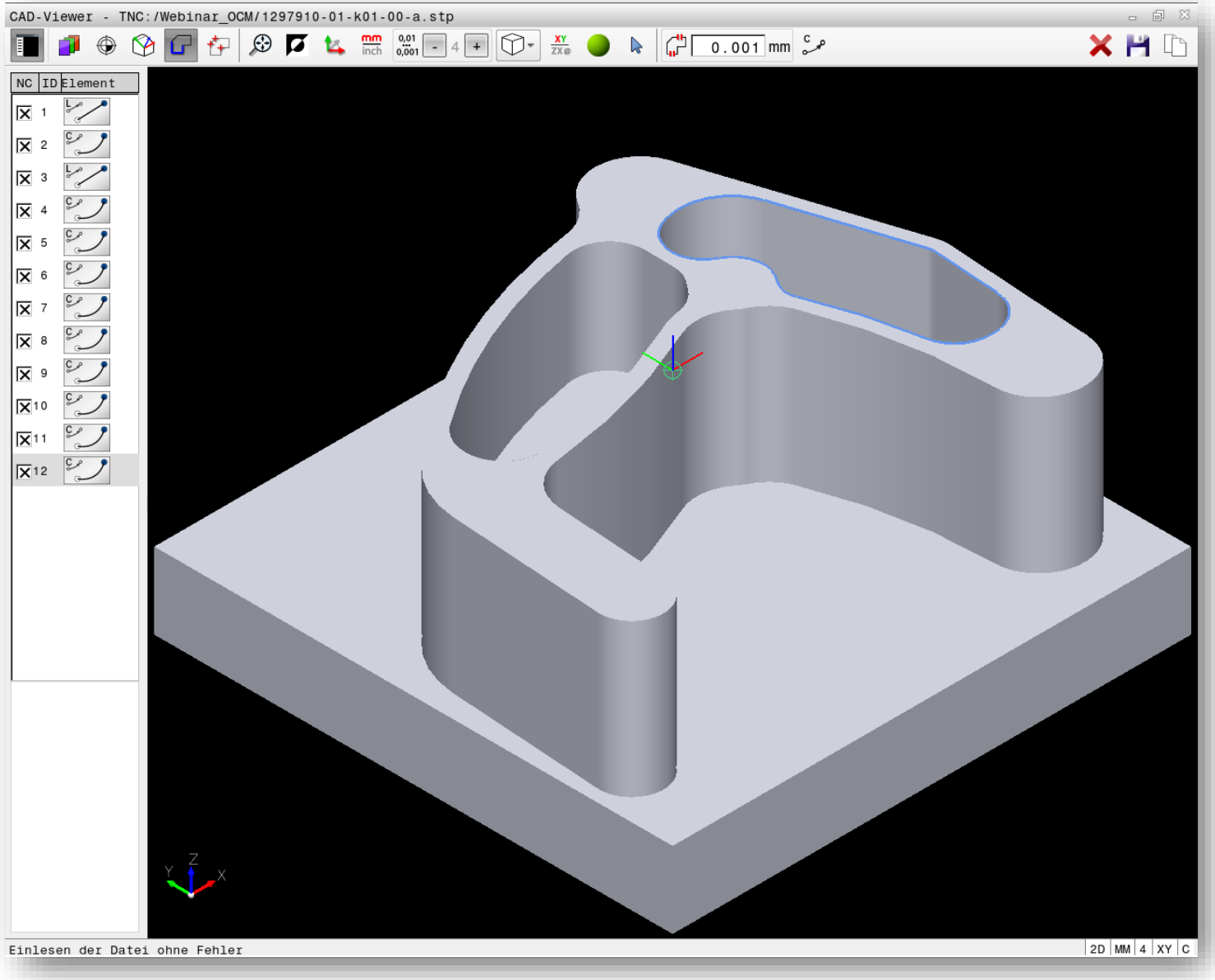
Application example

- Select contours

  Bag 2
- Roughing T D16
- Residual material T D10
- Finishing

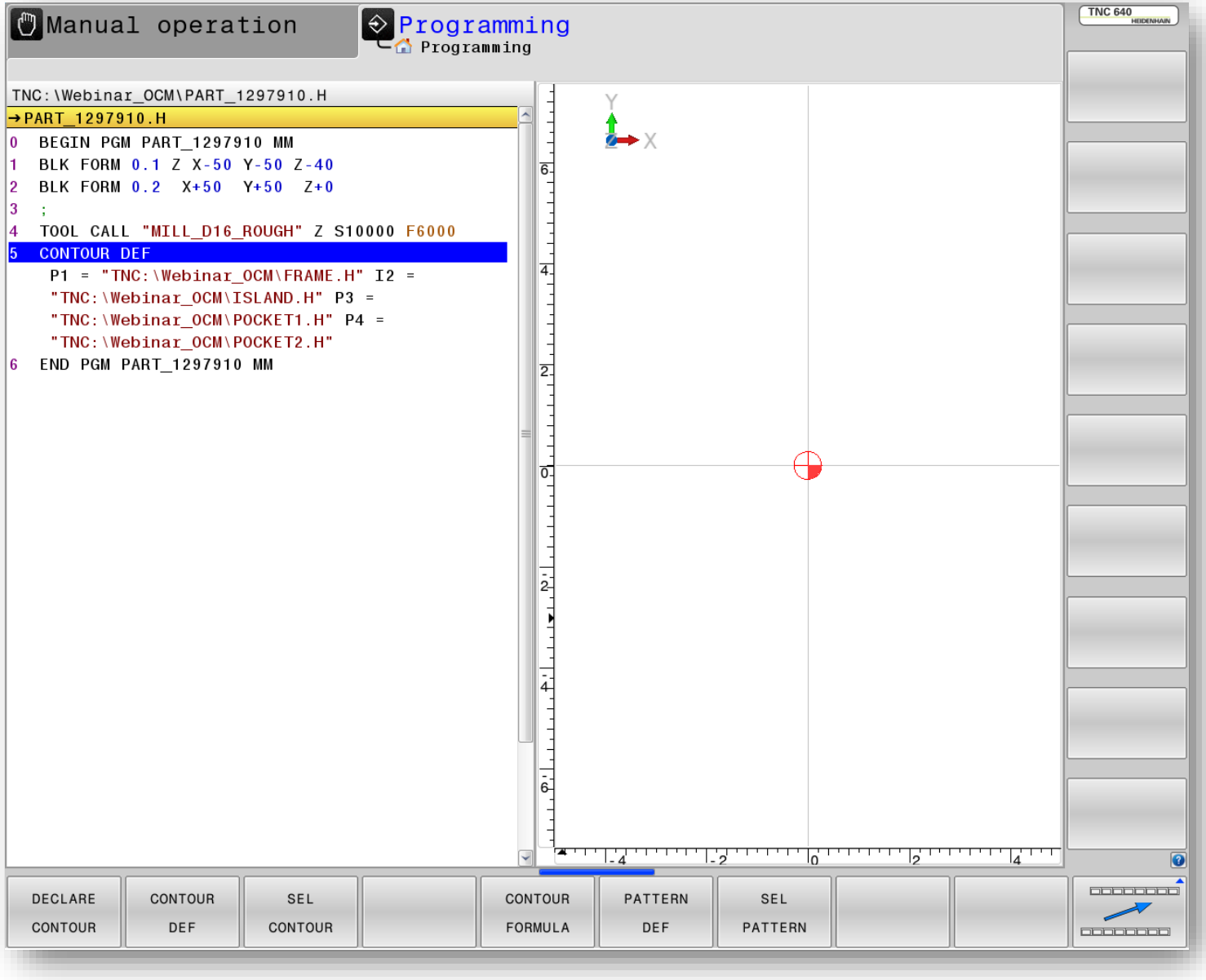


Application example

- Select contours

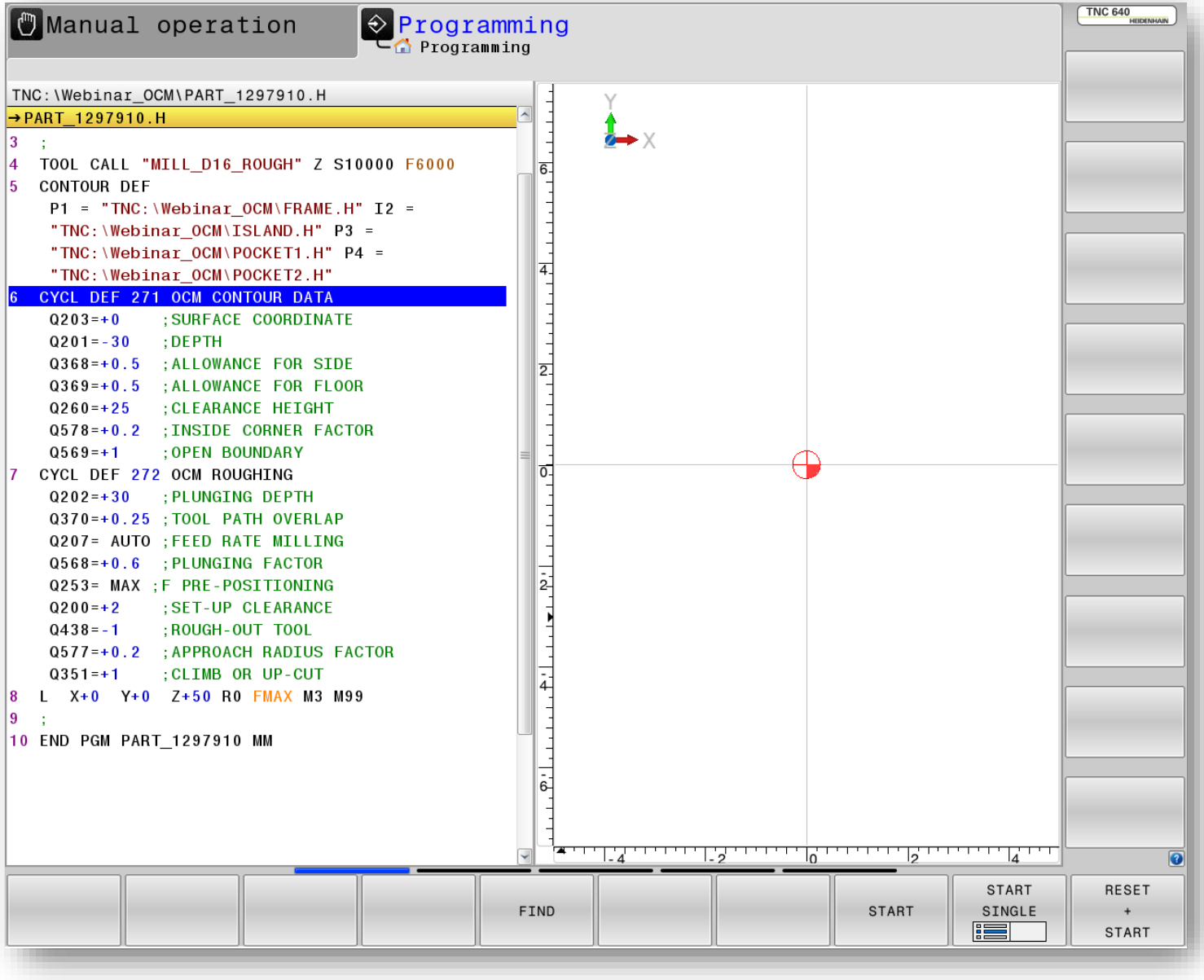
  Contour Def

  Combining four contours
- Roughing T D16
- Residual material T D10
- Finishing



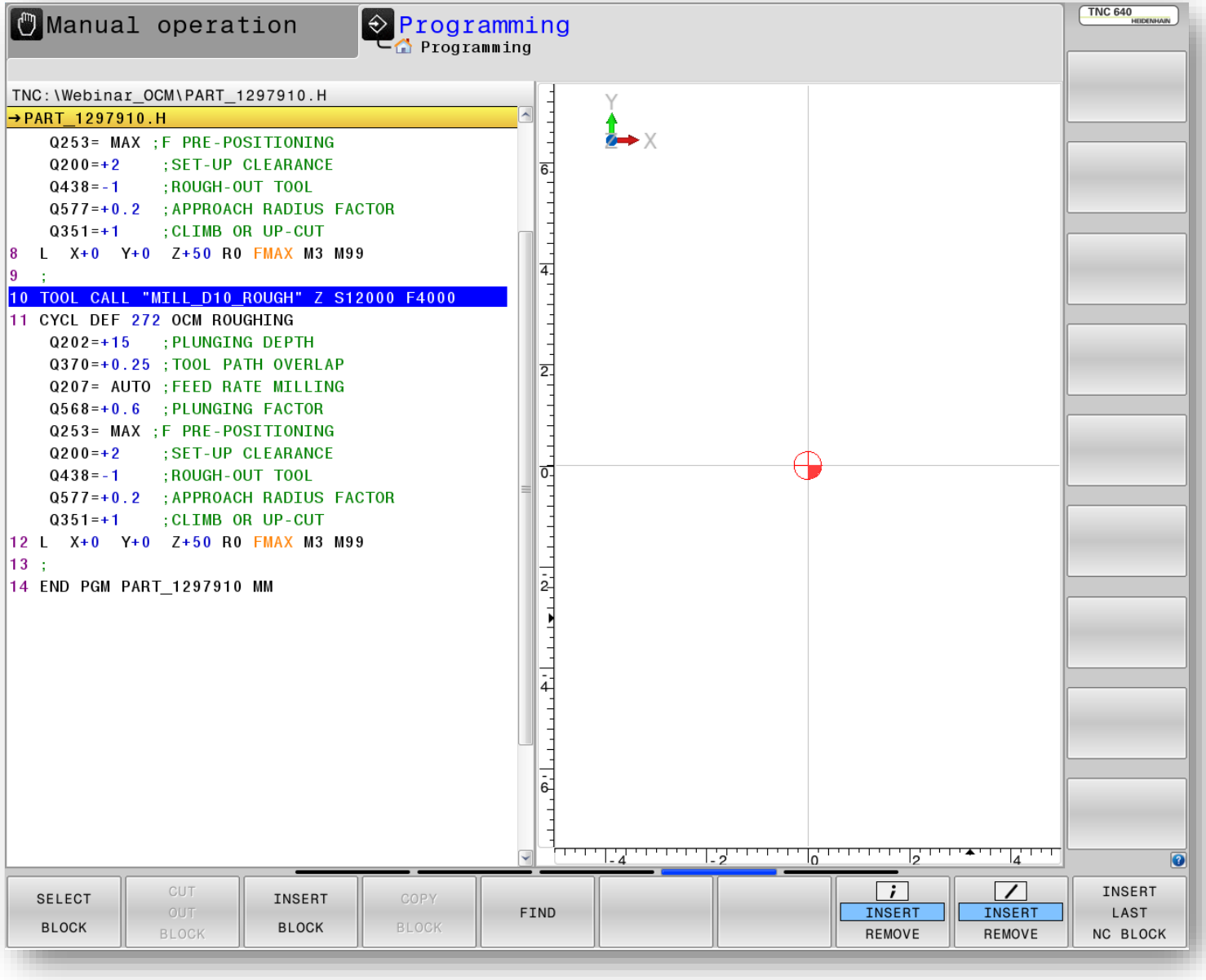
Application example

- Select contours
- **Roughing T D16**
- Residual material T D10
- Finishing



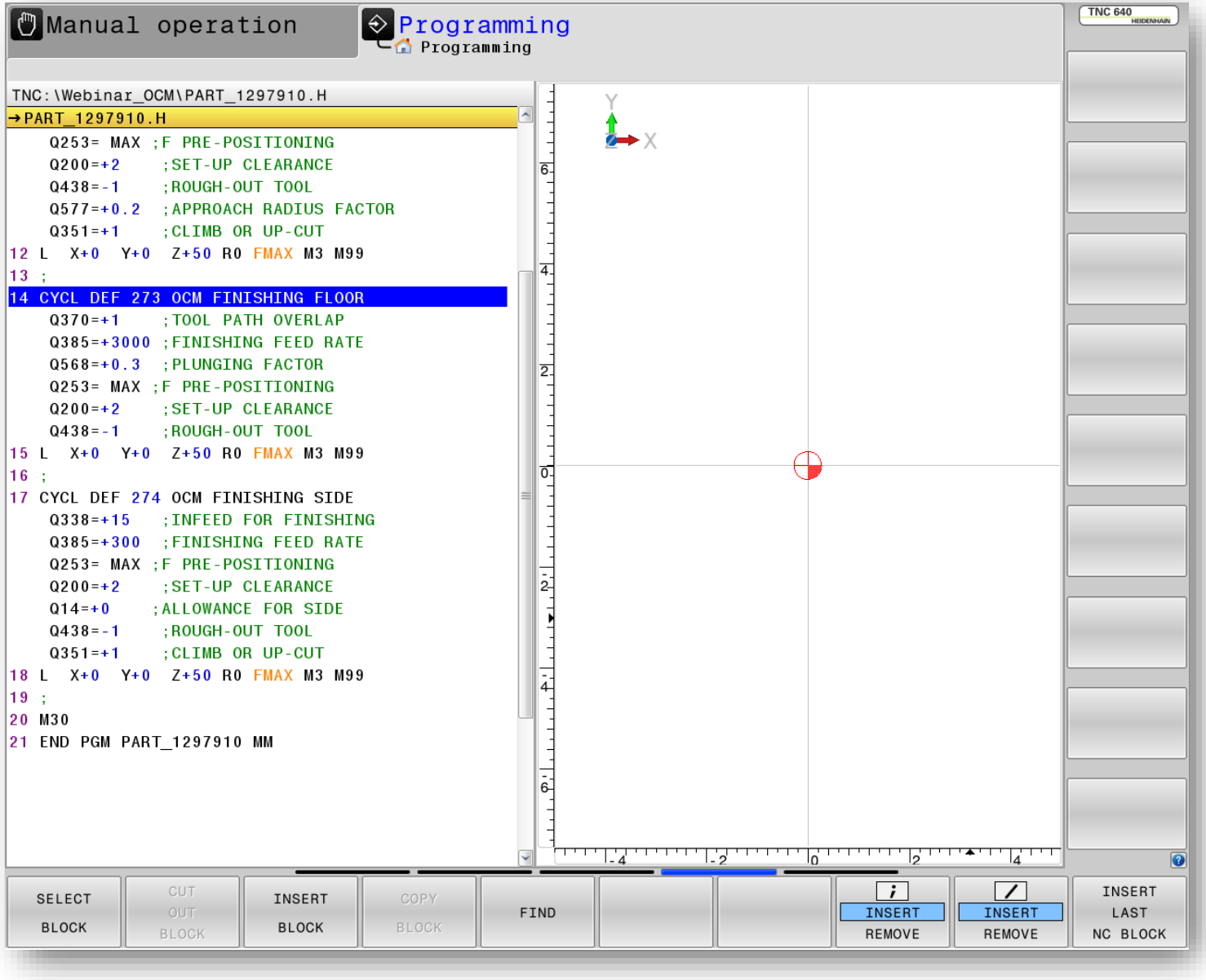
Application example

- Select contours
- Roughing T D16
- **Residual material T D10**
- Finishing



Application example

- Select contours
- Roughing T D16
- Residual material T D10
- **Finishing**



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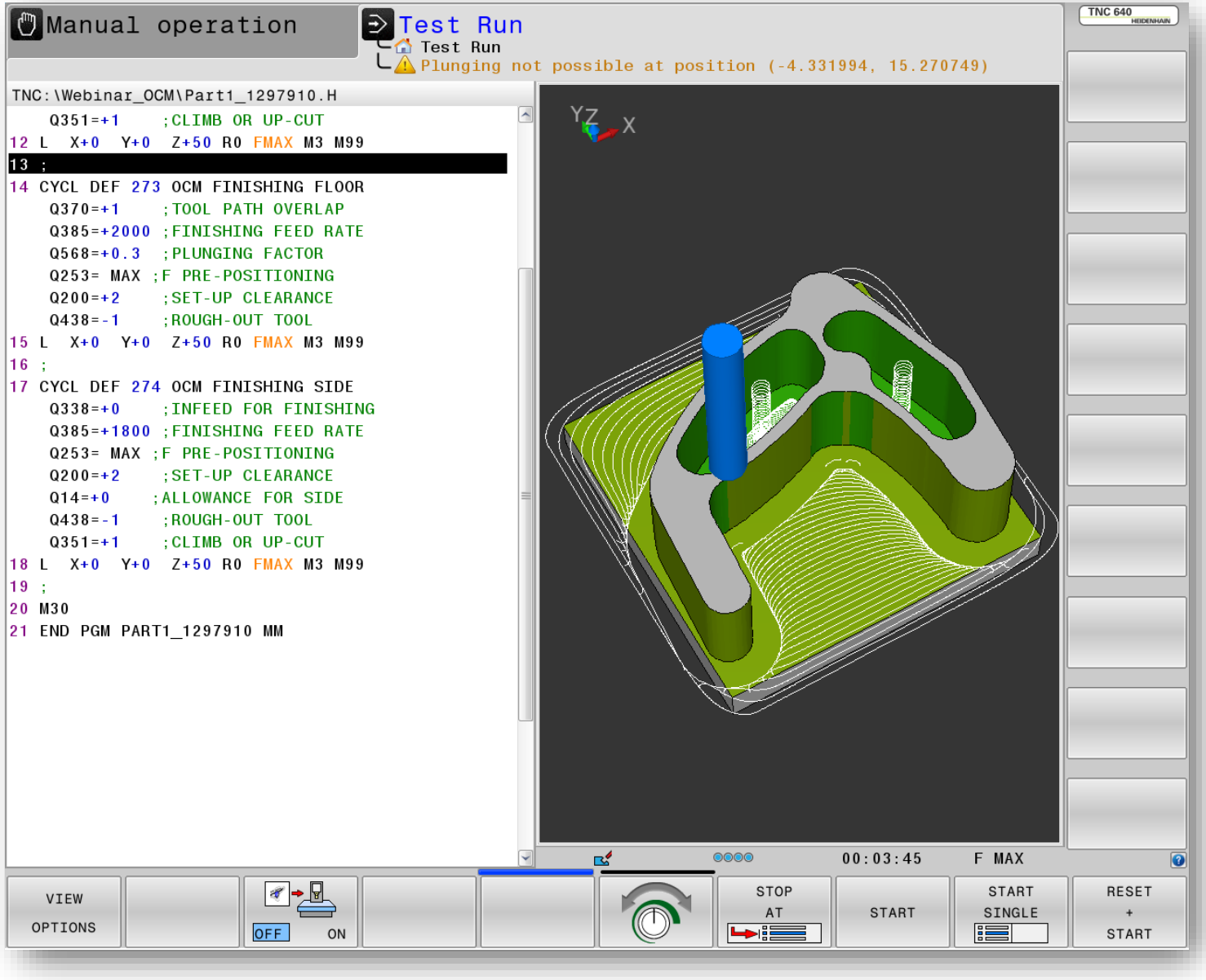
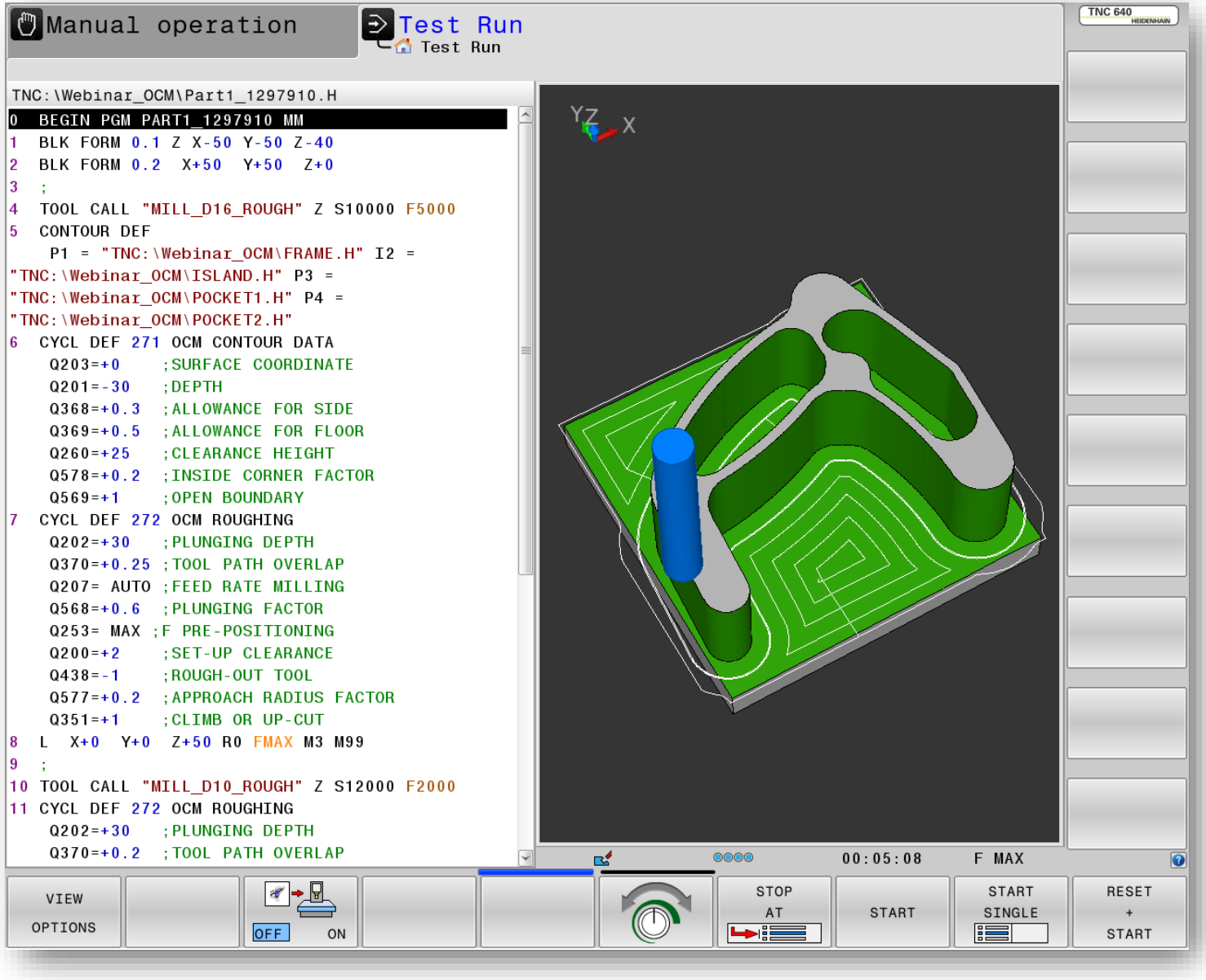
Application example

- Select contours
- **Roughing T D16**
- **Residual material T D10**
- Finishing



Application example

- Select contours
- Roughing T D16
- Residual material T D10
- **Finishing**



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