



MT113

SINUMERIK HANDBOOK

Subprogram call and repetition

This document shows how to call and repeat a subprogram within a main program with a Milling application example.

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Description of the document:

Method for calling and repeating subprograms within a main program, multiple times.

- Benefits of subprogram call
- Functions and Syntax with meaning

Applicability:

- Technology
- SINUMERIK controllers

Turning and Milling

802Dsl, 810D, 840D powerline,
808D, 828D, 840Dsl & SINUMERIK ONE

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Subprogram call and repetition

Subprograms are a really convenient as one could have an incremental program and call it in multiple times. They ensure:

- Easy in repeating the subprograms
- Shorten programs
- If required, they can also be called at different positions in a main program.

Function: Subprograms can be executed n number of times in a main program

Syntax: Subprogram_name Pn ; e.g. **SUB_TEST P4**

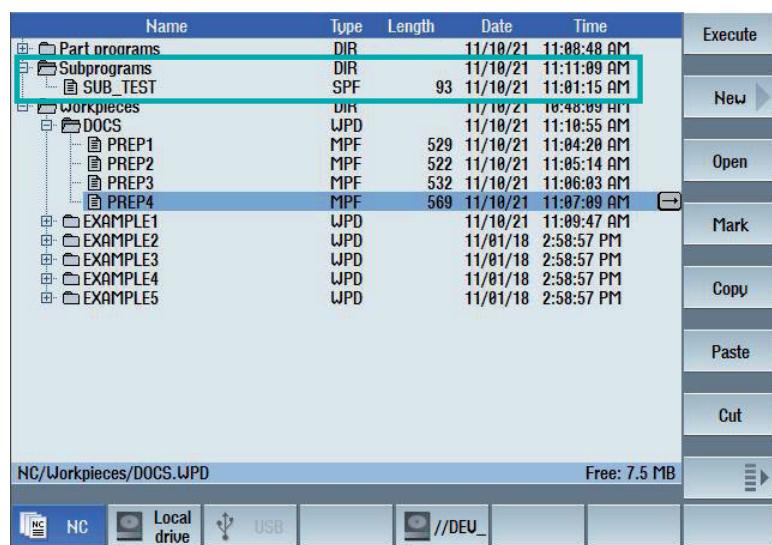
Definition:

Subprogram_name - Name of the subprogram file (It is recommended to make the subprogram under the subprogram folder)

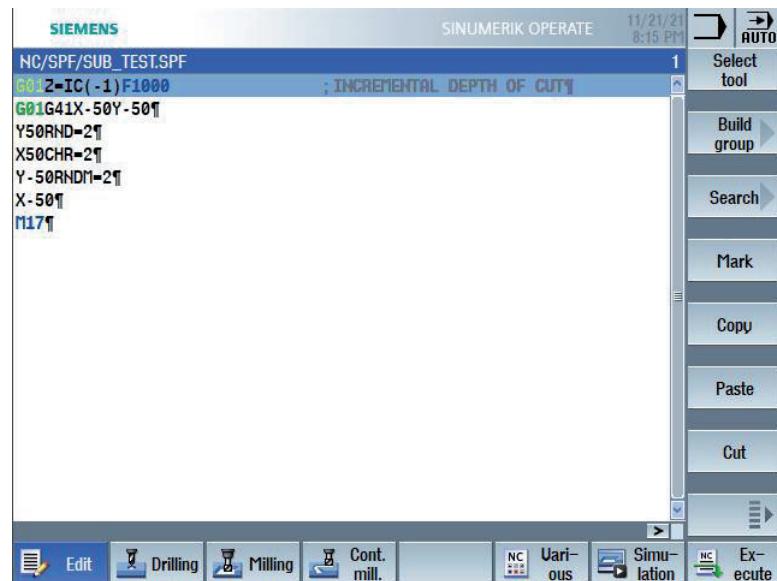
Pn - Subprogram repetition n times (e.g. If we want to call subprogram 10 times, mention P10)

Procedure:

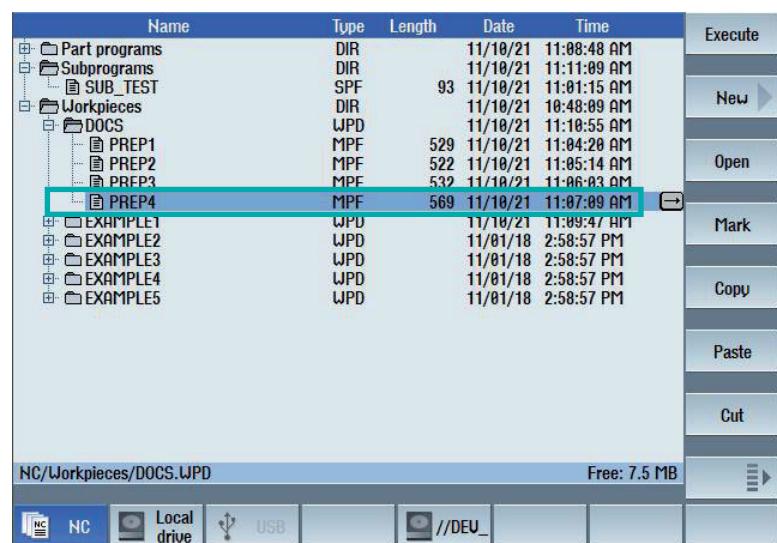
1. Create subprograms under **SUBPROGRAMS** folder. Example: **SUB_TEST**



2. Write the subprograms based on your requirement



3. Create the Main program in part programs or in workpieces directory.



Example: PREP4.MPF

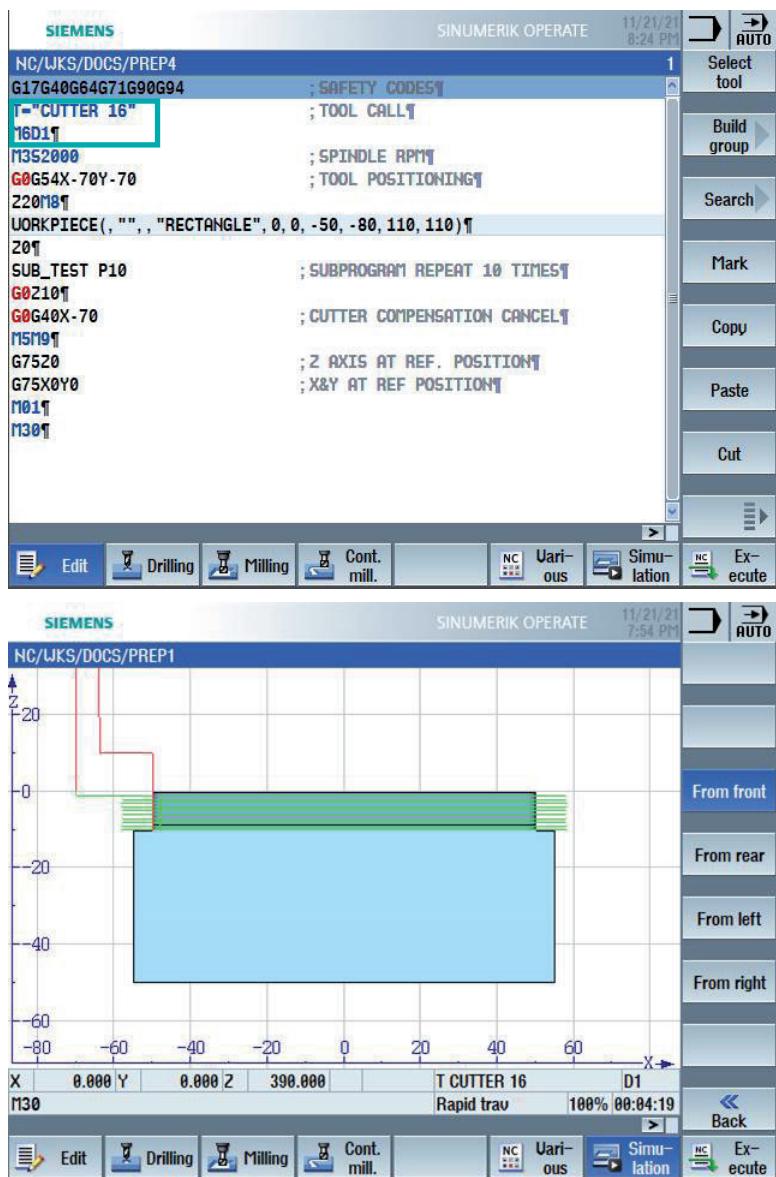
4. Write the main program and call the subprogram in the required block and define the no. of repetitions.

Example: If the subprogram has to be repeated 10 times then mention:

SUB_TEST P10

Note: Space is mandatory between program name and repetition

Result :



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