



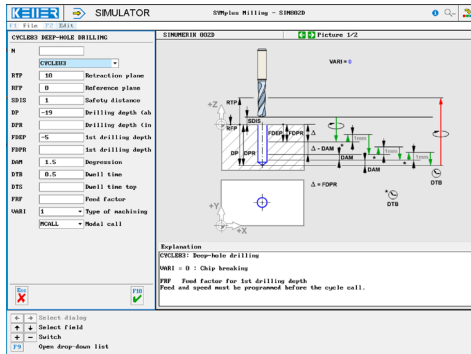
CONTROLS

Control simulator SINUMERIK 802D (milling)

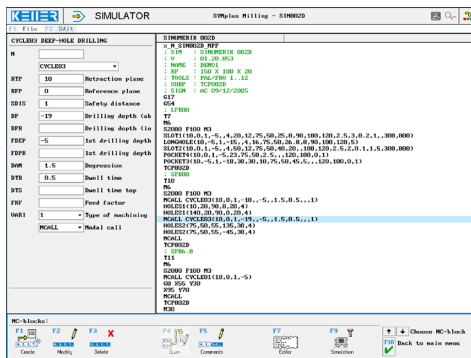


The control related simulator is an additional module for SYMplus. This simulator is used to learn the control system programming. A program generated by a postprocessor can also be edited and simulated.

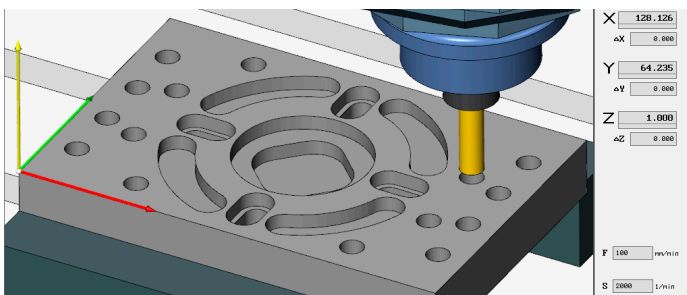
Help pictures and texts (for all input dialogues)



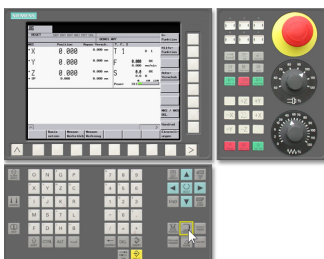
NC editor incl. input dialogue and syntax control



3D simulation with freely adjustable perspective, including continuous display of NC blocks



Keyboard information system: Getting familiar with the meaning of all keys of the control system by moving the mouse cursor over the keys



COMMANDS/ FUNCTIONS/CYCLES

G0	Rapid traverse
G1	Line
G2	Arc, clockwise
G3	Arc, counter-clockwise
G4	Dwell time
G17	Plane
G33	Thread cutting
G40/G41/G42	Radius compensation
G53-G57	Zero offset
G60/G64	Exact posit./Smooth. Corners
G75	Approach to fixed point
G90/G91	Exact positioning
G94	Feed in mm/min.
G110/G111/G112	Stipulation of pole
CFC/CFTCP	Feed compensation
Comment	Explanations
MSG	Message
UP-CALL	Sub-program call
LABEL	Set
REPEAT	Program part repetition
T	Tool call
MIRROR	Mirroring
ROT/AROT	Rotation absolute/incremental
SCALE	Scaling
TRANS/ATRANS	Zero offset absolute/incremental
CYCLE81	Drilling/centering
CYCLE82	Drilling/countersinking
CYCLE83	Deep-hole drilling
CYCLE84	Tapping without
CYCLE840	Tapping with
CYCLE85...89	Reaming 1...5
HOLES1	Holes on a line
HOLES2	Holes on a circle
CYCLE801	Holes on matrix
LONGHOLE	Long-holes on a circle
SLOT1	Slots on a circle
SLOT2	Circular slots on a circle
POCKET3	Rectangular pocket
POCKET4	Circular pocket
MCALL	Modal deselection
X/Y/Z/F/S/M	Modal commands



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%_N_SIN802D_MPF
; RP      : 150 X 100 X 20
; TOOLS  : PAL/PRO 1..12
; SUBP   : TCP802D
G17
G54
; LFR08
T7
M6
S2000 F100 M3
SLOT1(10,0,1,-5,,4,20,12,75,50,25,0,90,100,120,2.5,3,0.2,1,,300,800)
LONGHOLE(10,-5,1,-15,,4,16,75,50,26.8,0,90,100,120,5)
SLOT2(10,0,1,-5,,4,50,12,75,50,40,20,,100,120,2.5,2,0.1,1,5,300,800)
POCKET4(10,0,1,-5,23,75,50,2.5,,,120,100,0,1)
POCKET3(10,-5,1,-10,30,30,10,75,50,45,5,,,120,100,0,1)
TCP802D
; SPB08
T10
M6
S2000 F100 M3
MCALL CYCLE83(10,0,1,-10,,-5,,1.5,0.5,,,1)
HOLES1(10,20,90,0,20,4)
HOLES1(140,20,90,0,20,4)
MCALL CYCLE83(10,0,1,-19,,-5,,1.5,0.5,,,1)
HOLES2(75,50,55,135,30,4)
HOLES2(75,50,55,-45,30,4)
MCALL
TCP802D
; SPB6.8
T11
M6
S2000 F100 M3
MCALL CYCLE81(10,0,1,-5)
G0 X55 Y30
X95 Y70
MCALL
TCP802D
M30

%_N_TCP802D_SPF
; FN : MOVE TO TCP
G0 Z200 M9
G0 X150 Y150
M17

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