



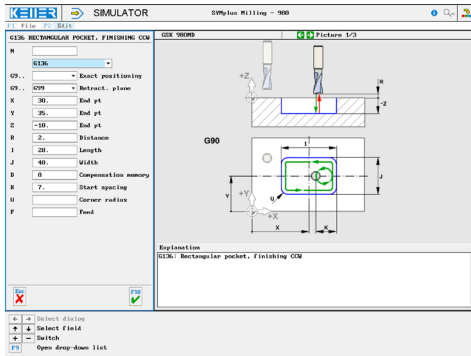
CONTROLS

Control simulator GSK 980MD (milling)

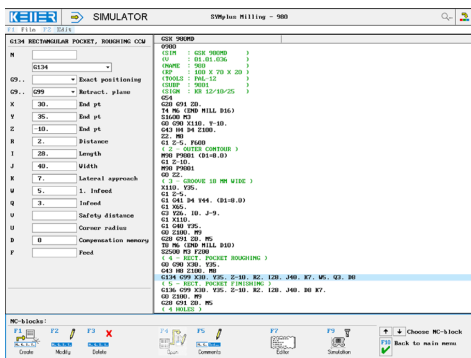


The control related simulator is an additional module for SYMplus. This simulator is used to learn the control system programming. A program generated by a postprocessor can also be edited and simulated.

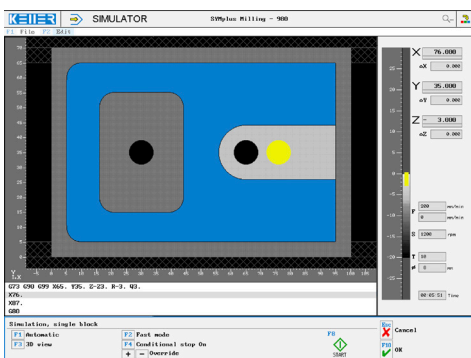
Help pictures and texts (for all input dialogues)



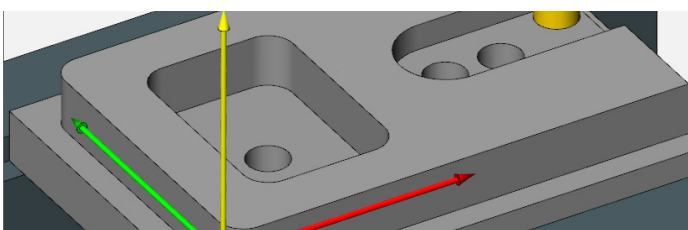
NC editor incl. input dialogue and syntax control



Perfect control due to simulation with position indicator (real time, fast mode, single block with path preview, measurement function, ...)



3D simulation with freely adjustable perspective



COMMANDS/ FUNCTIONS/CYCLES

G00	Rapid traverse
G01	Line
G02	Arc, clockwise
G03	Arc, counter-clockwise
G04	Dwell time
G28	Approach reference point
G29	Retract. Of reference point
G40/G41/G42	Radius compensation
G43/G44/G49	Length compensation
G54...	Workpiece coordinate system
G73	Deep-hole drilling
G74	Tapping left
G80	Terminate canned cycle
G81	Spot drilling
G82	Countersink
G83	Deep-hole drilling
G84	Tapping
G85	Drilling
G86	Drilling
G88	Special drilling cycle
G89	Drilling
G90/G91	Exact positioning
G92	Set zero point
G94	Feed
G110/G111	Circular pocket, roughing ccw/cw
G112/G113	Circular pocket, finishing ccw/cw
G114/G115	Circular pin, finishing ccw/cw
G134/G135	Rectangular pocket, roughing ccw/cw
G136/G137	Rectangular pocket, finishing ccw/cw
G138/G139	Rectangular pin, finishing ccw/cw
XYZ	End point (modal)
T	Tool call
M98	Sub-program call
M	Additional function
Comment	Explanations



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O980
(RP      : 100 X 70 X 20)
(TOOLS  : PAL-12)
(SUBP   : 9801)
G54
G28 G91 Z0.
T4 M6 (END MILL D16)
S1600 M3
G0 G90 X110. Y-10.
G43 H4 D4 Z100.
Z2. M8
G1 Z-5. F600
( 1 - OUTER CONTOUR )
M98 P9801 (D1=8.0)
G1 Z-10.
M98 P9801
G0 Z2.
( 2 - GROOVE 18 MM WIDE )
X110. Y35.
G1 Z-5.
G1 G41 D4 Y44. (D1=8.0)
G1 X65.
G3 Y26. I0. J-9.
G1 X110.
G1 G40 Y35.
G0 Z100. M9
G28 G91 Z0. M5
T8 M6 (END MILL D10)
S2500 M3 F200
( 3 - RECT. POCKET ROUGHING )
G0 G90 X30. Y35.
G43 H8 Z100. M8
G134 G99 X30. Y35. Z-10. R2. I28. J40. K7. W5.
Q3. D8
( 4 - RECT. POCKET FINISHING )
G136 G99 X30. Y35. Z-10. R2. I28. J40. D8 K7.
G0 Z100. M9
G28 G91 Z0. M5
( 5 - 4 HOLES )
T10 M6 (TWIST DRILL D8)
F200 S1200 M3
G0 G90 X30. Y35.
G43 H10 Z100.
G0 Z2. M8
G73 G90 G98 Z-23. R-8. Q3.
G0 Z2.
G73 G90 G99 X65. Y35. Z-23. R-3. Q3.
X76.
X87.
G80
G0 Z100. M9
G28 G91 Z0. M5
M30

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O9801
( SUBPROGRAM FOR 980 )
G1 G41 Y5.
G1 X5. C5.
G1 Y65. C5.
G1 X95.
G1 Y-10.
G1 G40 X110.
M99

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