

UE80 CG

Graphic User Interface for CNC Cylindrical grinder

<Application : MITSUBISHI M80 Series CNC Controller,
Display Panel: 8.4-type or 10.4-type LCD TFT>

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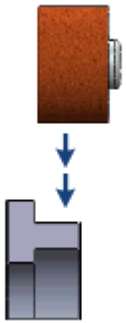
Email:taichung@usync.com.tw

GUI name : UE80 GUI

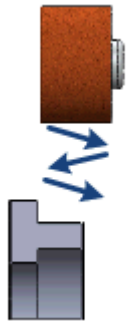
- Function : 1. 20 Schedule(program edit) and 36 steps in each schedule
2. 8 Grinding cycles:
OD Grinding:
(1) Plunge (2) Oscillation (3) Traverse (4) Traverse taper
(5) Plunge-traverse
END Grinding:
(6) Plunge (7) Oscillation (8) Traverse
3. 3 Dressing mode:
(1) Dressing in Grinding (2) Dressing (3) Dressing counter
4. Probe: Updating of work offsets for accurate component positioning
5. Free edit: Edit G or M code in this function
6. Coordinate: (1)Work-piece (2)Dresser (3)Probe

- Grinding : 4 classes in every Grinding cycle (rough, middle, fine and spark-out)
- Option : 1. Gauge :Automatic In-process Gauge.
2. Gap: Rapid approaching work-piece surface.
3. Linear velocity: According wheel diameter, keep linear velocity.

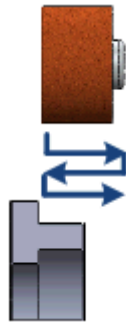
8 Grinding cycles



**OD-
Plunge**



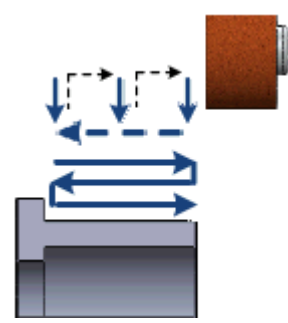
**OD-
Oscillation**



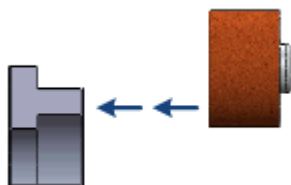
**OD-
Traversal**



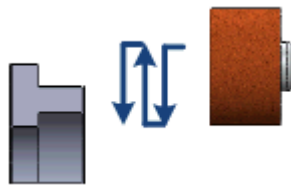
**OD-
Trav.Taper**



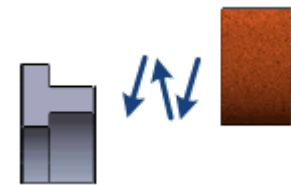
**OD-
Plunge Trav.**



End-Plunge



End-Oscillation



End-Traversal

Dressing:

Status: Ready Sch. No. 5 UE80 GUI

[Step] 2/4

- 10 Dressing
- 11 Dressing-wk
- 12 Probe
- 13 Free edit
- 14
- 15
- 16
- 17
- 18

G.W

0:Dressing-in
1:Dressing
2:Dressing-wk.

Dressing mode: Dressing

Contour Set: Contour B

X axis amount: 0.0010

Z axis amount: 0.0000

X Dressing speed: 20.00

Z Dressing speed: 500.00

Dressing Frequency: 3

1/2

\$1 RDY 16:05

Monitor Schedule Edit Return Step Wheel Contour

H=0, shaped wheel
H=1, original wheel

Sch. No. 5 UE80 GUI

Wheel shape: 1

H=1

H=0

0:Already formed
1:from straight to form-shape

2/2

\$1 RDY 16:05

Monitor Schedule Edit Return Step Wheel Contour

Specification(Probe)

- Probe:**
1. Step by step in standard work-piece
 2. Offset Z error in work-piece

Moving distance

Probing speed 1

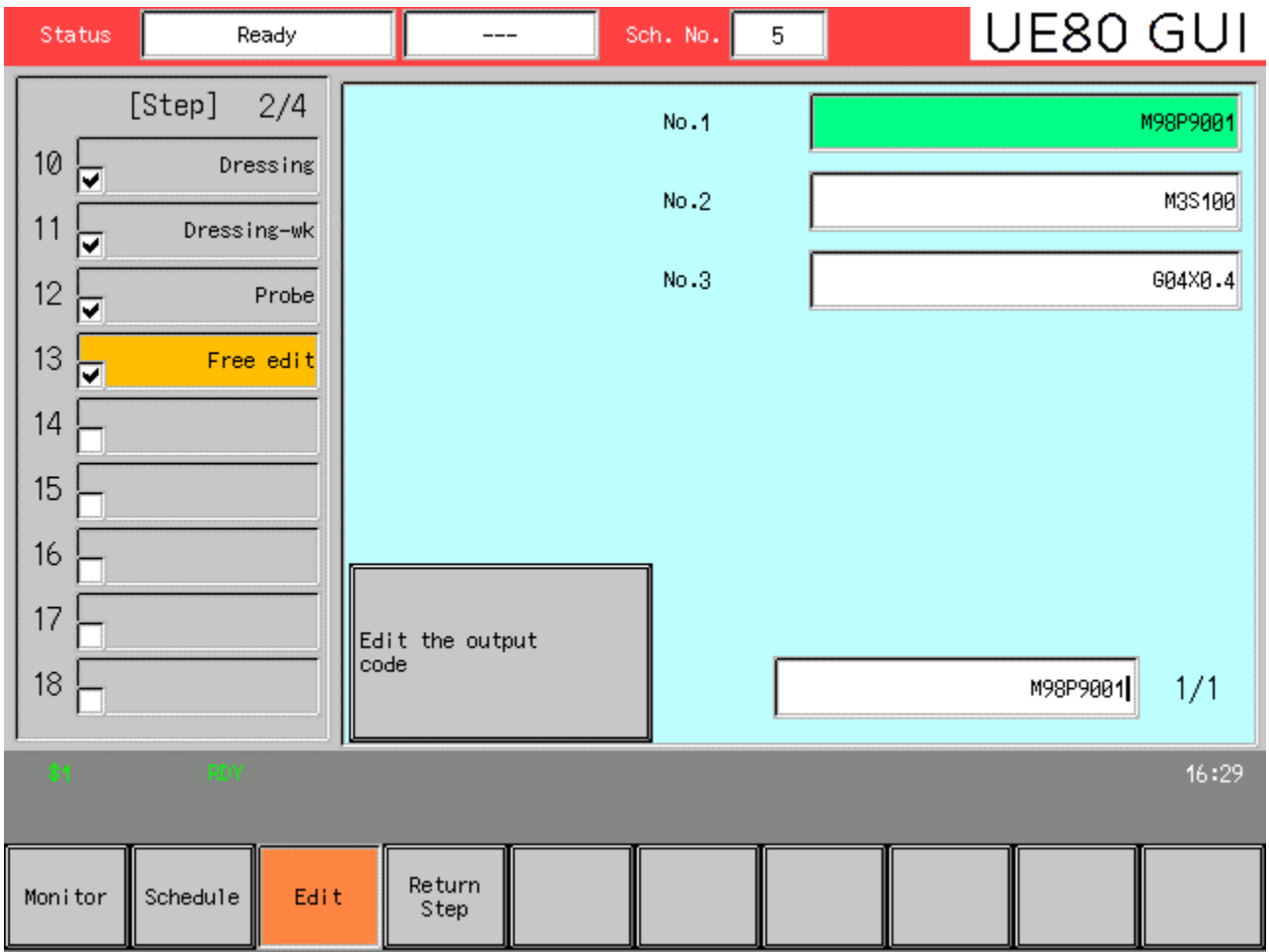
Probing speed 2

Range: -9999.9999 ~ 9999.9999

	X	Z
Machine	<input type="text" value="0.0000"/>	<input type="text" value="0.0000"/>
Standby posn.		<input type="text" value="0.0000"/>
Probing Speed 1		<input type="text" value="0.00"/>
Probing Speed 2		<input type="text" value="0.0000"/>

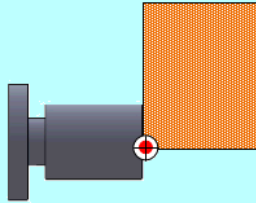
Probe

Free edit: Edit G or M code in the function




Coordinate:

	X	Z
Machine	0.0000	0.0000
Work Home	-56.1230	-333.3330
Standby posn.	-20.0000	-334.8370



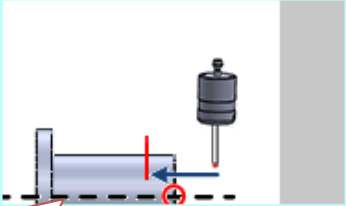
Work Home

	X	Z
Machine	0.0000	0.0000
Dressing Home set	0.0000	0.0000
Absolute safe point	-20.0000	-334.8370
Tip Orientation	0	
Nose R	0.0000	



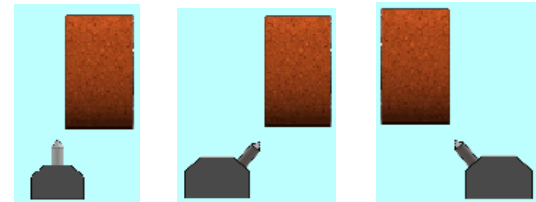
Dressing Home

	X	Z
Machine	0.0000	0.0000
Standby posn.	0.0000	
Probing Speed 1	0.00	
Probing Speed 2	0.0000	

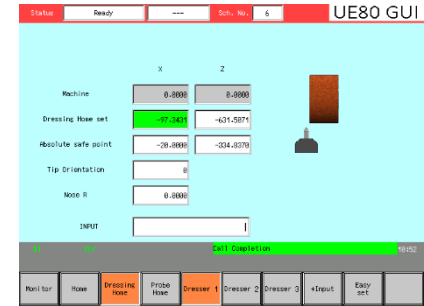
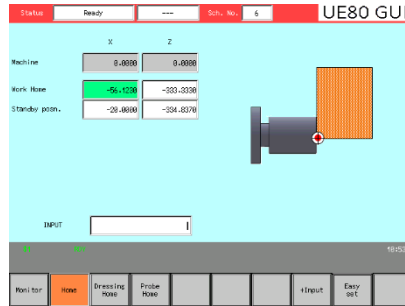
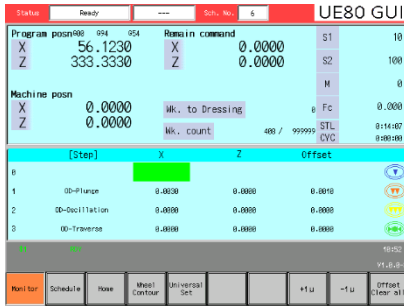


Probe Home

3 directions of dresser



Setting before cycle start



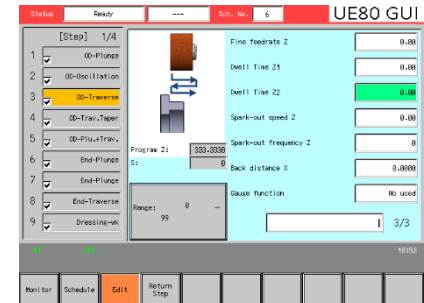
Start up to UE80CG

[Work Home] Position

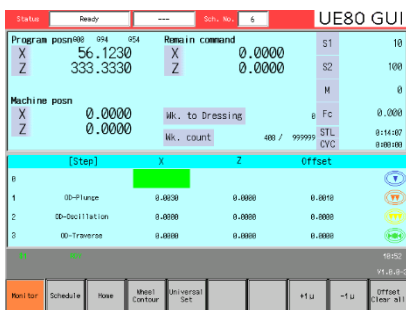
[Dressing Home] Position

Setting Complete

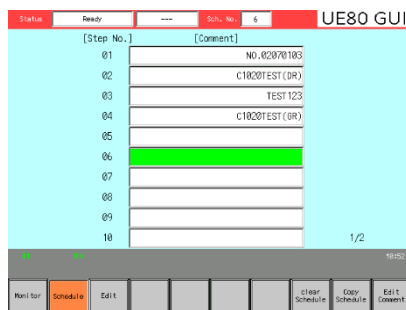
Prepare the Grinding Para.



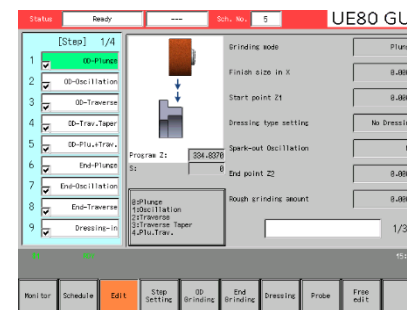
The procedure of programming



Press Schedule button and Into Schedule Page



Select Schedule No. and Press Edit Button

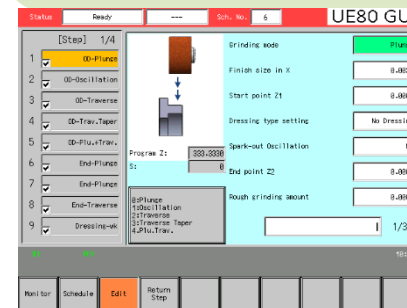
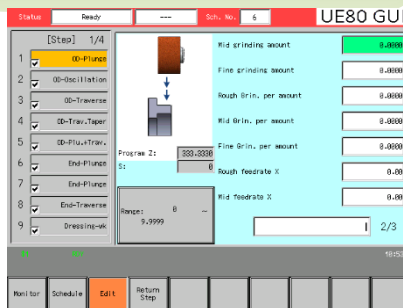


Into Edit Page

Complete

Setting Parameters

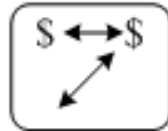
Arrange Steps of Cycle



Press the



+



key into the UE80 GUI.

Status

Schedule number

Status Ready --- Sch. No. 6 UE80 GUI

Program posn		000	094	054	Remain command		S1	10
X	56.1230	X	0.0000				S2	100
Z	333.3330	Z	0.0000				M	0
Machine posn							Fc	0.000
X	0.0000	Wk. to Dressing					STL	0:14:07
Z	0.0000	Wk. count		408 / 999999			CYC	0:00:00

[Step]	X	Z	Offset	
0				⏏
1	0.0030	0.0000	0.0010	⏏
2	0.0000	0.0000	0.0000	⏏
3	0.0000	0.0000	0.0000	⏏

\$1
RDY
10:52

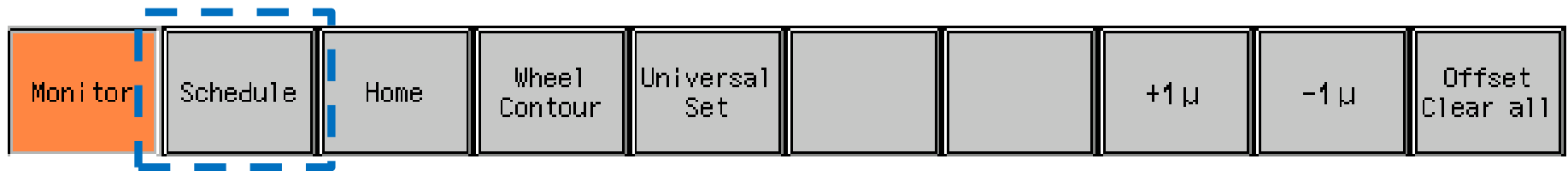
V1.0.0-3

Monitor
Schedule
Home
Wheel Contour
Universal Set
+1μ
-1μ
Offset Clear all

Working step No.

Auxiliary code

Grinding status



UE80 GUI

Status: Ready Sch. No.: 6

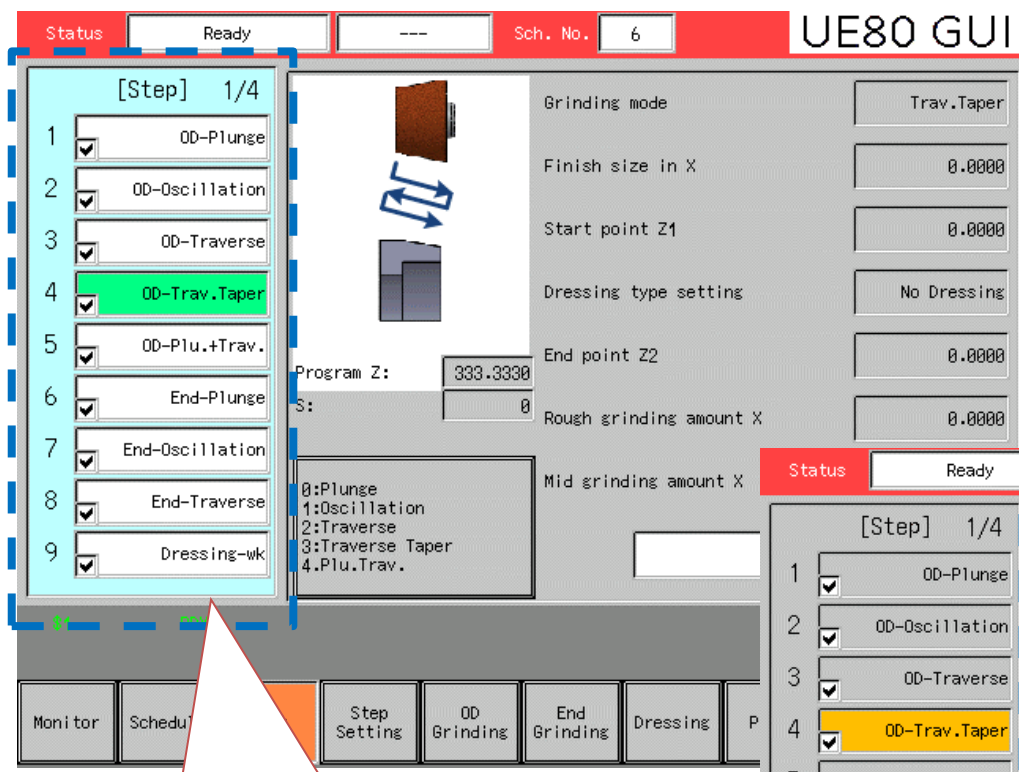
[Step No.]	[Comment]
01	NO.02070103
02	C1020TEST(DR)
03	TEST123
04	C1020TEST(GR)
05	
06	
07	
08	
09	
10	


1/2


\$1 RDY 18:52

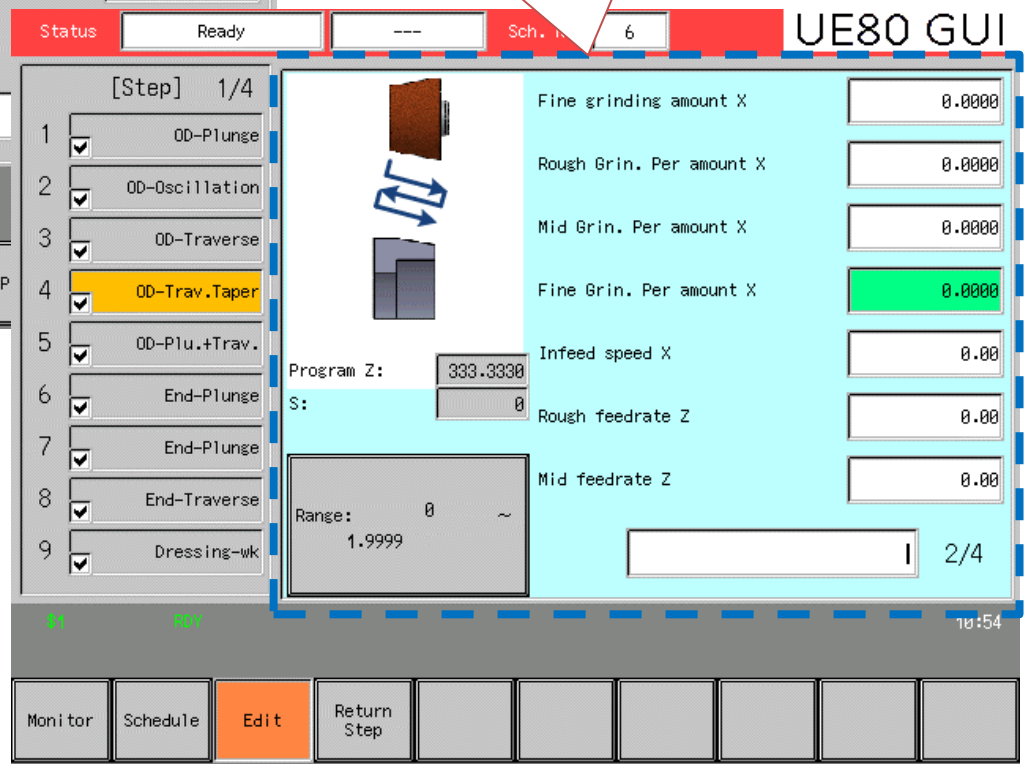
Monitor **Schedule** Edit clear Schedule Copy Schedule Edit Comment

Select schedule No. and press "Edit" or "Input" button into the step setting.

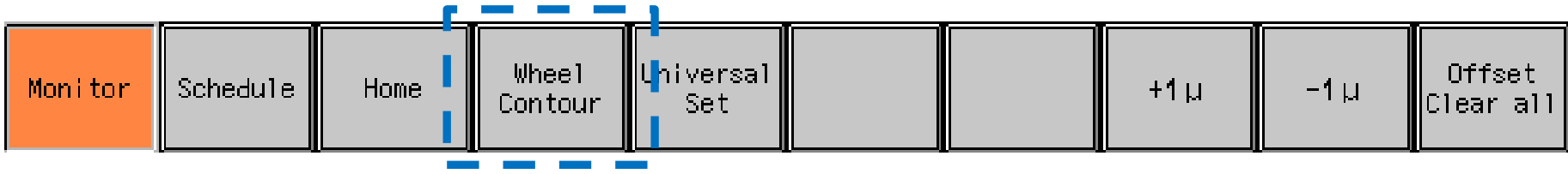


According to description , set value.
Press "Return step" or " " to switch step area.

Arrange steps of cycle.(grinding, dressing, probe and free edit)
Press "Input" or " " to switch setting area.



Wheel Contour



Status Ready --- Sch. No. 6 UE80 GUI

	Contour A	Contour B	Contour C
Dress No.	1	2	3
Wheel side	Right	Left	Right
Path Number	Path 2	Path 2	Path 2
Wk. comp rate	100%	100%	0%
Infeed axis	X axis	X axis	X axis

INPUT

0:No Dressing
1^3 :Dresser number

\$1 RDY 10:56

Monitor Wheel Contour Profile Setting

Two path setting.
Path 1 : Standard wheel contour.
Path 2 : Customize wheel contour.

Path 1 and path 2

Status: Ready --- Sch. No. 6 UE80 GUI

Contour Size A: -10.0000
 Contour Size B: 2.0000
 Radius R: 0.0000

Contour B-Path 1-Left

OD-feeding: Close

Path 2 : Customize wheel contour.

INPUT

Range: -9999.9999 ~ 9999.9999

\$1 RDY

Previous OD-feeding

Path 1 : Standard wheel contour.

Status: Ready --- Sch. No. 5 UE80 GUI

Contour A - Right

Type	X	Z	R/C
1	P (ABS)	0.0000	0.0000
2	P (INC)	0.0000	10.0000
3	P (INC)	4.0000	0.0000
4	A (CW) (INC)	3.0000	3.0000 R 3.0000
5	P (INC)	0.0000	6.0000
6	P (INC)	3.0000	3.0000 R 3.0000
7	P (INC)	0.0000	10.0000
8	P (INC)	0.0000	0.0000
9			
10			

INPUT

Prg:9911

\$1 RDY 16:02

Previous Point (ABS) Point (INC) ARC (CW) ARC (CCW) R/C Insert Line Del Line Clear

Thank you !