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VAROGuide

User Manual





PART

\triangle	VAROGuide Components
В	VAROGuide Preparation
\bigcirc	Implant Planning
\square	VAROGuide Fabrication
	Surgery



VAROGuide Components

VAROGuide Components

VAROGuide consists of the following components.



- PreGuide : PreGuide is an impression frame to be finalized as a VAROGuide
- VARO Plan : VARO Plan is an implant planning S/W dedicated for VAROGuide
- VARO Mill : VARO Mill is a Milling machine, dedicated for VAROGuide
- VAROGuide Kit : VAROGuide Kit is surgical kit, dedicated for VAROGuide Surgery

PreGuide

1) PreGuide overview



• PreGuide is an impression frame to be finalized as a VAROGuide

• VAROGuide is completed by taking an intraoral impression with PreGuide and placing it on the milling machine, and then milling the hole at the implant location directly on the PreGuide

2) PreGuide components



(1) PreGuide Tray :

This is a digital tray that takes an intraoral impression, aligns with the CT, and precisely connects to the specified position of the milling machine.

For these functions, the PreGuide Tray is equipped with marker, jig holder, stopper, and handle.

- ① Marker : As a number of radiopaque ball located on the lingual and buccal sides of the occlusal surface, they are used as markers to match the PreGuide position on the CT and the PreGuide library on the implant planning S/W.
- ② Jig holder : PreGuide is precisely connected to the specified position of the jig of the milling machine. It is made in a shape corresponding to the jig.
- ③ Stopper : A protrusion located at the bottom of the buccal side of the tray. It has the function of checking whether the tray connected to the jig in the milling machine is positioned in the correct location, and the function of fixing the tray so that it does not move during milling.
- ④ Handle : As a handle for the PreGuide, it is used for intraoral impression and can be removed easily if necessary.

(2) Light Curing Resin Impression Material

It is a non-polymerized putty type high-strength light curing resin contained in the PreGuide Tray. After taking an intraoral impression and curing it, a guide hole is directly acts as surgical guide.

(3) Transparent Membrane :

As a thin membrane covering the resin impression material, it removes the undercut when taking an impression, compensates for resin shrinkage that occurs during light-cure for precisely seated to the teeth after light curing.

(4) Protection cap :

It prevents resin from entering the jig holder and fixes the membrane.

3) PreGuide types

PreGuide has 4 types PGS, PGM, PGA and PGF as a tray and 8 types in total, PGS13, PGS24, PGM13, PGM24, PGA, PGF-L/M/S depending on the location.





• PGS13

• PGS24



• PGM13



• PGM24







• PGF-L/M/S

PGS

PreGuide Single For absence of 1~2 pre-molar or molar teeth on mandibular or maxillary, PreGuide(PGS) is selected.

PGM

PreGuide Multiple For absence of 2~3 pre-molar or molar teeth on mandibular or maxillary, PreGuide(PGM) is selected.

PGA

PreGuide Anterior For absence of 1~4 anterior teeth on mandibular or maxillary, PreGuide Anterior is selected.

PGF

PreGuide Full-arch For absence of multiple teeth on entire arch of mandibular or maxillary, PreGuide Full arch is selected.

* No.13 is applied for right maxillary posterior site/left mandibular posterior site. No.24 is applied for left maxillary posterior site/right mandibular posterior site. PGF is divided into PGF-L(large), PGF-M(medium), and PGF-S(small) according to the size of the arch.

※ Trial Tray

Trial Tray is practiced tray, which tray itself is identically manufactured as PreGuide. Trial Tray is to designated proper location in oral condition, and for patients to practice bite as Centric Relation(CR) position. As PreGuide varieties, Trial Tray also has 8 types.

As E.O gas or plasma sterilization is possible, it is sterilized and packaged individually. (Up to 10 times in autoclave sterilization)



• Trial Tray 8 types



• Trial Tray 8 Types Packing



• Try-in



Centric Relation(CR) position

VARO Plan

VARO Plan is an implant planning software dedicated for VAROGuide. Without intra-oral or model scan data, only a CT Data(DICOM) which patient taken CT with PreGuide. (Not compatible with other S/W)



VARO Mill

VARO Mill is a milling machine, dedicated for VAROGuide. Millng a guide hole(s) and exterior stopper designated by VARO Plan on CT scanned PreGuide. (Not compatible with other equipment)





VAROGuide Workflow

Preparation for surgery in 30 minutes





VAROGuide Preparation

PreGuide Impression

1) Positioning PreGuide in the oral cavity

(1) Check occlusion :

Having the patient practice biting in the centric occlusion, take an oral photo to record the midline and occlusion.

- Recorded photos are forwarded to the planner.
- During planning, refer to the mid-line and occlusion photos.



(2) Select a Trial Tray : Select a trial tray suitable for the implant location.

• For PGF Trial Tray, select PGF-L, PGF-M, or PGF-S according to the patient's arch size.



Applied on multiple teeth loss in entire arch of maxila and mandible (3) Try-in : Inspect the accurate location of tray and educate the patient to practice bite as CR(Centric Relation) position.

- Make sure that the trial tray is covering the expected surgical site.
- Inspect the location where anterior site minimally opened. If there is too much gap, it becomes difficult to position the implant by considering the tooth in the opposite arch when planning the implant.
- * For PGA, the process of biting in CR(Centric Relation) Position is not necessary.





- The reason for biting in CR(Centric Relation) Position : Since the position of the implant axis is determined according to the position of the tooth in the opposite arch, the CR(Centric Relation) Position is necessary during the impression and CT scan process.
- (4) Primary Impression : Hold the handle of PreGuide that selected identical as trial tray and gently press 1/3 with finger and check the impression is properly positioned.



• Press 1/3 of the PreGuide in the oral cavity for the Primary impression



Check whether the position of the impression is appropriate



* If the position is not appropriate, can mold the resin by hand and do the Primary impression again.

- (5-1) Secondary Impression : PGS, PGM, PGF
 - a. After confirming the proper impression position, place the PreGuide in the oral cavity and press half with finger and gently to settle it.
 - Locate the PreGuide where the gap between the tooth and buccal side of tray is about 1mm.



- b. Patient bite it gently to make sure the PreGuide is impressed all the way.
- Guide the patient to bite in the CR(Centric Relation) Position.
- $\ensuremath{\cdot}$ Let the patient bite, as the anterior site is vertically apart less than 5mm.
- \bullet Occlusal site of teeth almost contact the tray of PreGuide(0~0.5mm).







- c. Press prominent resin on opened occlusal site of the PreGuide.
- Clean up the prominent resin to prevent damage to the milling burr during Milling.



- (5-2) Secondary Impression : PGA
 - a. After confirming the proper impression position, place the PreGuide in the oral cavity and press half with finger and gently to settle it.
 - Position the labial side with about 1mm gap if possible.
 - Be careful not to tilt the tray handle toward the incisal edge.





2) PreGuide Light-curing

- A dental light curing unit is used to cured the resin during PreGuide impression.
- A different light curing times for the power of 1000 \sim 1200W or high power 1200 \sim 1800W.
- Check the light curing unit in the clinic and verify the light curing time accurately. (High power light curing unit recommended.)



(1-1) Primary Light-curing(Half-Curing) : PGS, PGM, PGF

Primary light curing of the buccal, occlusal and lingual area using a dental light curing unit





- Buccal, Occlusal Light-Curing : Light cure the buccal and occlusal side respectively with PreGuide bitten.
 - PGS, PGM, PGA : 10 seconds
 - PGF : 15 seconds
- b. Lingual Light-Curing : As finger-pressed on the PreGuide, light cure the lingual side.
- PGS, PGM, PGA : 10 seconds
- PGF : 15 seconds
- * In case of concern about undercut, light cure the lingual area for 10 seconds after removing 2-3 times.

- \bullet Light curing time is based on the 1000 \sim 1200W light curing unit.
- If the high power light curing unit (1200 ~ 1800W), reduce light curing time by 5 seconds.

(1-2) Primary Light-curing(Half-Curing) : PGA

Primary light curing of the buccal, occlusal and lingual area using a dental light curing unit







- a. Labial, Incisal Light-Curing : As finger-pressed on the PreGuide, light cure the labial and incisal side.
- PGS, PGM, PGA : 10 seconds
- PGF : 15 seconds
- b. Remove the PreGuide vertically 2-3 times in the oral cavity.
- PGS, PGM, PGA : 10 seconds
- PGF : 15 seconds
- * In case of concern about undercut, light cure the lingual area for 10 seconds after removing 2-3 times.
- c. Lingual Light-Curing : As finger-pressed on the Pre

As finger-pressed on the PreGuide, light cure the lingual side.



(2) Remove the PreGuide vertically 2-3 times in the oral cavity.

a. To prevent undercut, remove the PreGuide vertically during impression.

(3) Secondary Light-Curing(Complete-curing) : Place the PreGuide at same place, light cure the the buccal, occlusal, and lingual area for second time.





- a. Buccal, Occlusal Light-Curing : Light cure buccal and occlusal area respectively with PreGuide bitten.
- PGS, PGM, PGA : 10 seconds
- PGF : 15 seconds
- b. Lingual Light-Curing :

As finger-pressed on the PreGuide, light cure the lingual side.

- PGS, PGM, PGA : 10 seconds
- PGF : 15 seconds

- \bullet Light curing time is based on the 1000 \sim 1200W light curing unit.
- If the high power light curing unit (1200 ~ 1800W), reduce light curing time by 5 seconds.

※ For PGF

① Since PGF resin is insufficient to the location of implant surgical site add additional resin and replace PreGuide into oral cavity.



② Remove undercut through removing PreGuide 1~2 times in the oral cavity.



③ Light cure the area to which the resin was added in the oral cavity for 10 seconds.

- Light curing time is based on the 1000 ~ 1200W light curing unit.
- \cdot If the high power light curing unit (1200 \sim 1800W), reduce light curing time by 5 seconds.

(4) Tertiary Light-Curing(Additional curing) : If there is a part where curing is not complete, place it in the oral cavity again and perform additional light curing.



- a. Resin may shrink resulting in inaccurate impressions, so make sure to place it in the oral cavity for additional light curing.
- Incomplete curing area : 10 seconds

(5) Quaternary Light-Curing : Remove the PreGuide from the oral cavity and light cure the area where the guide hole will be located(thick area).



- a. If the area where the guide hole is located is not completely cured, the bur may be broken during hole milling, be sure to light cure this area.
- For guide hole area : 10 seconds

- Light curing time is based on the 1000 ~ 1200W light curing unit.
- If the high power light curing unit (1200 ~ 1800W), reduce light curing time by 5 seconds.

3) Removal of protection cap and membrane/excessive resin

(1) Remove the protection cap.

If not disassembled well, remove excessive resin with denture burr around the protection cap.

- (2) Remove the transparent membrane from PreGuide. If not disassembled well, scrape it off with a pointed instrument like an Explorer.
- (3) Remove any excessive resin on jig holder and stopper with a denture burr. Excessive resin in that area may interfere with the precise installation of PreGuide in the milling machine or cause errors during processing.



Remove protection cap



• Remove transparent membrane



• Remove excessive resin on the jig holder, stopper or occlusal surface with a denture bur



4) Stability check of PreGuide

(1) Check whether PreGuide is properly placed in the oral cavity.

(2) If the PreGuide does not come off easily from oral cavity, remove the undercut.

(3) Additional resin may be applied to supplement if PreGuide shows vertical gap, tilting or rocking. When applied additional resin, insert the PreGuide into oral cavity and light-cure.

Light cure for 3 seconds and disassemble to avoid possible undercut which cause trouble for removal of PreGuide.

If the additionally added resin is not completely light cured, repeat the above steps 1~2 more times to fully light cure.



CT Scan

CT scan with gauze bitten

(1) Fold the gauze once and place it on the mesial side 1cm from the center of PreGuide mesiodistal side and have the patient to bite in CR Position. The reason for placing the gauze is to prevent lifting when patient bites a tooth in the opposite arch. Locate the gauze slightly anterior site to avoid the gap between PreGuide and teeth.

If gauze is too thick, can cause the teeth to open, making it difficult to determine the occlusion.

(2) Check again whether the patient bites well with CR Position.Planning may be difficult when patient bites side to side or sticks out toward the anterior tooth.Because the base of the implant position and orientation is the occlusion.This is the last important checkpoint before a CT scan.

(3) Immobilize a patient on accurate position and CT Scan.



 Fold the gauze once and place it 1cm anterior to the center or 0.5~1cm anterior to the implantation site, and have a patient bite gently in CR Position



• CT scan in the correct position as recommended by the CT company



• For PGF, place the gauze on both premolar areas for CT scan



• For PGA, fold the gauze lengthwise and place it. In case of overbite, guide a gentle edge bite



• During the planning process, to check the occlusion, bite the guide in the CR Position and take a CT scan



• If the guide is lifted when taking a CT scan, the result may be different from the existing plan. Therefore, check guide seating before CT scan

- The patient should not move during CT scan.
- Since the implant surgical site must be scanned, the CT scan position should be accurate.

Export **CT DICOM** Data

Export the scanned CT data as a form of DICOM file. VAROGuide S/W can only read DICOM files.



% Precautions

• DICOM file export method is different for each CT company, so contact the manufacturer.

VARO Mill



- Prior to place PreGuide on the milling machine, first disinfect to prevent cross-infection.
- (2) Washing the PreGuide in tap water, put it in the PreGuide pouch.
- (3) Put 90mL of disinfectant solution into the PreGuide pouch and soak it for at least 10 minutes.

- Recommended disinfectant solution : Ophiclean Sol., Scoterin Sol., Betadine, Chlorhexidine, CidexOPA
- Do not soak more than 1 hour as the bond between the tray and resin will weaken.

Record Patient Information

VARO Guide	hait	
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Guide Order Informatio	an	
Fully Guided : Toath #	FxType/Co.	Guide Kit wasi
Out-door Planning Ord	; Tauth # See (Late Warson : :	
Description :		

Record patient information and order details on the back of the PreGuide pouch

(1) Put the patient's name, implant placement location, and staff name.

(2) Select whether the surgery is the Onevisit or Two-visit.

(3) For one visit surgery, when the indexing/CT was taken is important. In the case of indexing/CT is done in an extracted location, milling can be done immediately after planning. In the case of indexing/CT before tooth extraction(extract while planning and after extraction), add resin to the extraction area of the PreGuide, reline in the oral cavity, and mill.

The person in charge should check the progress of each step on the chart and proceed.

(4) For 2 visit surgery(2 cases) : Only indexing/CT scan after tooth extraction or on the healed ridge, and only indexing/CT scan before extraction, and then scheduling the next appointment.

(5) Fully Guided : This refers to guided production from drilling to implant placement, and is a common case. In this case, you must put the type of implant to be used and the type of guide kit.

(6) Initial Drill Guide Only : This is a case where only initial drilling is used as a guide using a single drill provided by the VAROGuide Accessory kit. It can be applied mainly to reduce the milling time when placing the mandibular anterior teeth or multiple implants. It can be also applied when only initial drilling is preferred as a guide. Single drill is 2.4mm step/taper drill.

(7) Out-door Planning : To request guide planning at outside.



Implant Planning

Implant Planning : VAROGuide S/W - VARO Plan

The implant placement location is planned using only CT data(DICOM) taken with PreGuide in the patient's mouth. The implant planning is done using VARO Plan, which is the software for VAROGuide only. (Not compatible with other S/W) VARO Plan has 3 stages, Planning Preparation, Implant Planning, and Result(Save).



1) Patient Management

Register patient's information. (Patient ID, Name, Birth, Description, etc.)

VARO Plan			
Very parties	Bith Date : Description :		
	tur Cas	New patient X Patient ID	(1) Click "New P (2) Click "New P
			(3) Enter patient

tient".

n".

D, Name, Birth, and Description.

2) Case Set up

Select the tooth number to area of implant surgery.



- (1) Select the dentition.
- (2) Click "Planning" on the implant placement tooth.
- (3) If you want to arrange teeth on adjacent teeth or pontic, click "Crown".

(4) Go to the next stage, "Data registration".

3) Data registration

Import the scanned CT file(DICOM) and select the PreGuide library of the case.



(1) Click "CT Data" to import DICOM file.

(2) Click "PreGuide" to select a library that same PreGuide worn on the patient.

(3) Go to the next stage "Alignment".

4) Alignment : Point Alignment

Align CT data and the PreGuide. Criteria of point alignment is markers of PreGuide.



(1) HU(Hounsfield) value are controlled so that the PreGuide markers on CT images are visible.



(2) Select 3 markers on the mesh screen to make the widest triangle.(Randomly select from 5~6 markers)

(3) Select the marker in the same order as the selected PreGuide marker on the VR screen.

- When marker selection is complete, it is automatically aligned on the 3D screen.
- ② If the alignment is successful, the marker will appear in green, and if it is not successful, the marker will appear in red.

4) Alignment : Manual alignment

Manal alignment is also possible.



(1) Click "Manual Alignment".

- (2) Fine adjustment : Select the fine adjustment of Axial, Sagittal, Coronal, and finely adjust the angle and movement with appropriate buttons.
- (3) Adjustment value can be set in "Settings". (Settings → Options → Implant Planning → Implant Fine Adjustment)

(4) Go to the next stage, "Crown placement".

5) Crown placement

Place the crown in 3D.



(1) Reposition the size and shape to fit the surrounding teeth alignment in the occlusal view.

(2) Adjust the position, orientation, and length of the tooth in the buccal view.

6) Draw Curve

Draw the curve to create panoramic and cross sectional view.



(1) Drag the blue ball to adjust the height of the cross section according to the upper and lower jaws.





(1) On the axial view, click the middle of the arch to set the curve.

⁽²⁾ If curve setting is completed, go to "Nerve setting" stage.

7) Nerve setting(only applied to mandibular case)

Set a nerve canal(Inferior alveolar nerve) in the lower jaw.



(1) Select right and left by activating MPR overlay.

(2) Set the nerve in the Orthogonal and Tangential screen.

(3) Scroll the mouse to find the nerve and click to set.

8) Implant Placement

In this stage, Implant is automatically placed on tooth number and crown basis. Adjust the position and orientation of the implant according to the intention of the operator.

* Table of automatic implant size 5010 4010 4010 3510 4010 4010 3510 4010 5010 4010 4010

Can adjust the position and angle of the implant in 3D and 2D screens.



(1) Position movement : Drag the implant body to move positons.

(2) Angle adjustment : Drag the red ball to adjust the angulation of implant.

⁽³⁾ Implant length adjustment : Drag the green ball to adjust the length of implant directly.

(4) Sleeve offset setting : Drag the sleeve to set the offset. Sleeve offset may depending on the implant company.

VAROGuide default sleeve offset is 12mm, which can be changed to 10.5mm or 9mm.



• In the cross section view : Fixture place at center of alveolar crest and tooth's central fossa.



• In the panoramic view: Fixture place at center of both adjacent teeth.



• The distance between implant and nerve more than 2mm. (Mandibular case)



• Determine the relationship between the implant and sinus. (Maxillary case)





• Axis of implant and crown's central fossa should be correspond. (Place implant at center of functional cusp and central fossa)



• Implant place at 0.5~1mm under the alveolar crest, remaining space at least 1mm to lingual side and planned BG at buccal side.

9) Guide Generation

Generate portion of implant hole and stopper.





- (1) Remove by setting the implant hole and stopper shape.
 - ① Adjust the angle of the removal area : Drag the red ball to adjust the angle.
 - O Adjust the length of the removal area : Drag the green ball to adjust it.

(2) Set the hole diameter offset value.

(3) Click "Guide Generation" to check the final guide shape with the implant hole created.

10) Result Approval

Read the terms and conditions of the treatment plan & surgery guide for final approval.

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(1) Click the approval button to approve.

11) Save Surgical report

Surgical reports can be exported and displayed on the surgical monitor.



(1) Click "View surgical report".

(2) Resize the image and write a note to export the report. (Save as PDF file)

12) Save surgical plan

Save the surgical plan to a file(.ovg).

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(1) Click "Save and print surgical plan".

(2) Save the surgical plan as a file by selecting the window folder.

13) Save mesh(STL) file

Save the final mesh file(.stl).

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(1) Click "Print mesh file".

(2) Select the window folder and save it as a mesh file(STL).

• In the Cam program, create NC file(processing file) and send it to the mill. (Linked with Cam S/W)



- (1) When saved as a mesh file(STL), a notification window appears as shown in the picture, click the "Yes(Y)" button to run GO2dental S/W.
 - GO2dental S/W is a S/W that automatically calculates the path of the hole to be milled in PreGuide and saves it in the format(.NC) to be input to the mill.

(2) GO2dental S/W is executed, and NC file is automatically extracted.

- File saving path - C : \rightarrow GO2cam_Intl \rightarrow GO2dentalV606 \rightarrow Iso

(3) Go2Cam error check : Check whether an error has occurred in the calculation process. Please contact VAROGuide team in case of error. (Tel.02-582-2885, extension 2201)







VAROGuide Fabrication

VAROGuide Fabrication by VARO Mill



VARO Mill

Milling planned Implant Hole(Sleeve) on PreGuide. VARO Mill is a CAD/CAM milling machine, designated for VAROGuide fabrication. (Not compatible with other equipment)

1) VARO Mill power



(1) Connect the power cord(220V) on the back and press power switch.

⁽²⁾ Next, press the front power button to turn PC on.

2) VARO Mill operation

When S/W is executed, this screen is appeared. Press 'Reset' button for initialization.

Starting the Device				
Please press the 'Re	set' button to start.			
		No	component	substance
	Close	1	O Emergency Stop	Emergency Stop Button Stop operation of milling machine in case of malfunction or emergency (user protection, equipment damage prevention) When the button is pressed, it is changed to the [Reset] butto (Refer to 1')
Hain	🗘 Settings	1′	C Reset	Reset Button Reset after releasing the stop state (if you want to turn off the reset, refer to p.31)
		2	Ready Position	Ready Position Button Spindle and stage move to ready position for processing preparation
MAXX	Emergency Stop	3	L Tool Change Position	Tool Change Position Button Spindle and stage move to specific positions for tool change
	Tool	4	2018_0421_0855-extension2.NC 49%	Processing NC file name and processing progress status displayed
Position	↓ Change Position	5	🖀 Open	Open Button Open NC file (refer to p.11)
	0%	6	► Start	Start Button Start processing (refer to p.14). During processing, it changes to the [Stop] button (refer to 6
Open	▶ Start	6'	Stop	Stop Button Stop processing
0.29.40] Start SurgicalGuide 0.36.06] ESTOP/RESET Butto	in pressed	7	[11:25:14] Sterl SurgeotDate. [11:25:27;15:17:04:12;17:Butte protect [21:45:12;17:04:42;17:Butte protect [15:17:28] Open Subte protect	Record Displays the record of operations such as program start, each button click, and processing start and finish
		8	tt Main	Main Button Displays the main screen
Main	Settings	9	🗘 Settings	Settings Button Displays the setting screen (refer to p. 16)

When the initialization is finished, the standby screen appears, and it looks as above.

3) VARO Mill tool installation

Press the [Tool Change Position] button on the main screen for tool setting and move a spindle to appropriate location.



4) VARO Mill tool installation and processing preparation







(1) Hold ① in the picture and turn ② counterclockwise to place it in a state where the tool can be installed.

(2) After installing the tool, hold ① and turn ② clockwise to fix the tool.

5) VARO Mill Ready Position

After tool setting, press the [Ready Position] on a main screen.

MAXX SURG	9 Emergency Stop
Position Ready	tool Change Position
	07
🚰 Open	► Start
(10.29.40) Start SurgicalGuide (10.36.06) ESTOP/RESET But	on pressed

6) PreGuide installation

Accurately place the PreGuide to be processed on the Jig in VARO Mill.



Unscrew the knob on the cover.



Lift the cover and attach the PreGuide at proper position.

% Make sure the PreGuide stopper is in a contact with a jig stopper.



Screw the knob by hand to immobilize the PreGuide.



PreGuide installation by type

• PGS13



• PGS24



• PGM13



• PGM24



• PGA



• PGF-L/M/S

7) CAM file(NC file) execution & processing

Press 'Open' to load CAM file (NC file) and 'Start' for milling. Approximately, 5-6 minutes. It takes less time to mill if an offset is short.

	SURG	
ор	en NC File	血
CINC	Local/2018_0621_0955-extension1.NC	
П	C:\NcLocal\2018_0621_0955-extens	ilon2.NC
Г	C:\NcLocal\2018_0621_0955-extens	iion2 - 복사본.NC
•	C:\NcLocal\2018_0621_0955-extens	ion1.NC
Г	D:\Aging.NC	
Π	D:\AgingTest.NC	
Г	D:\AB위치오차테스트 F1200.NC	
	🖀 Open 🚺	Back





• Making a drilling hole by milling the PreGuide

8) VAROGuide separation and disinfection

When finished milling, remove residual resin on VAROGuide and VARO Mill with a brush or suction. Remove the VAROGuide from the VARO Mill.





* Precautions

- Check whether the guide hole is well processed in place, considering the location of the adjacent teeth.
- The hole is a good location if it is on the line connecting the center between adjacent teeth and the fossa area of adjacent teeth.
- ${\boldsymbol \cdot}$ If the location is not correct, it can be modified again via S/W and reprocessed.
- At this time, add resin again on the processed area and harden it for re-process.

9) VAROGuide Disinfection



- (1) Wash the milled VAROGuide with saline to remove the final residue.
- (2) Put the VAROGuide in the disinfectant solution in PreGuide and deliver it to the surgery room. The surgery is possible immediately after 5-10 minutes.

* Precautions

 Recommended disinfectant solution : Ophiclean Sol., Scoterin Sol., Betadine, Chlorhexidine, CidexOPA



Surgery

Implant surgery using VAROGuide

1) Check Surgical Report

Set a surgical report on the monitor or as printed on screen. Place where the operator can see it easily. The operator should be familiar with the contents of the Surgical Report before or refer to it during the operation.







2) Check VAROGuide stability in the patient's oral cavity

Place the VAROGuide in the patient's oral cavity.



Make sure that the VAROGuide is seated correctly.



Start surgery with VAROGuide.

