

# Guideline

Ivotion® Base Print  
for Asiga



This guideline describes the validated use of Ivotion Base Print on the Asiga PRO, MAX, Ultra and MAX2 series devices.



## Software

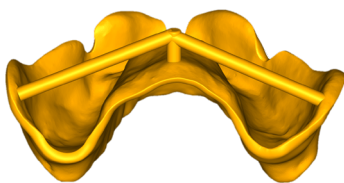


### CAD Design

Use Ivoclar material libraries in exocad or 3Shape in which the material-specific design parameters are stored.

When using an alternative CAD, the following setting parameters are recommended for the STL / SLC file of the maxillary and mandibular:

Denture Base Thickness (Gingival)	2 mm
Denture Base Minimum Thickness	0.5 mm
Denture Base Minimum Thickness Cervical	0.7 mm
Denture Base Thickness under Teeth	0.8 mm
Denture Tooth Pocket Gap	0.2 mm



To ensure a higher standard of precision, the construction of at least one "stability bar" on the denture bases in the CAD is recommended. These remains in place until the bonding process and is removed in the final step of finishing.



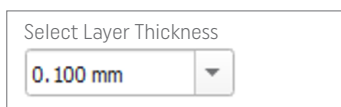
### CAM Design

Use the Asiga Composer software



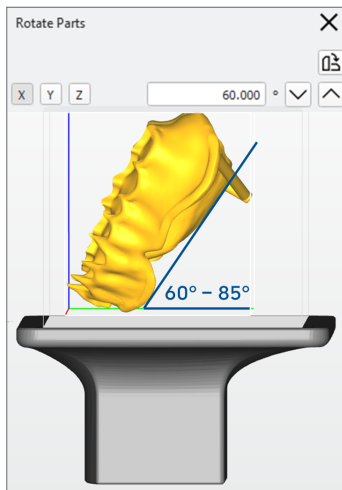
### Material Profile

Import the INI file "Ivotion Base Print" and select this as the material profile.



### Layer Thickness

Select a layer thickness of 100 µm.



## Orientation

Import STL / SLC file.

Arrange object in an angle between 60° and 85°.

For best accuracy, it is recommended to place the denture base at a 60 - 85° angle with the labial shield facing the build platform.

Whenever possible, the angle should be selected to ensure that supports are placed outside the functional fitting areas (e.g. the basal surfaces).

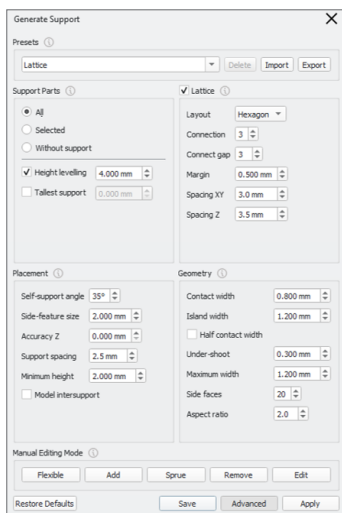


## Support Structure

Support structures are generated after alignment.

Choose Advanced Support Settings.

Import the ini.file "Ivotion Base Print Support Style" for the support parameters:



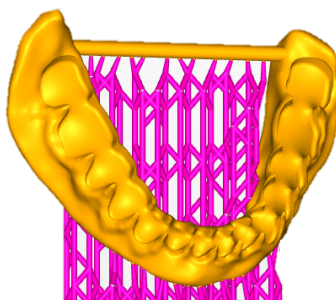
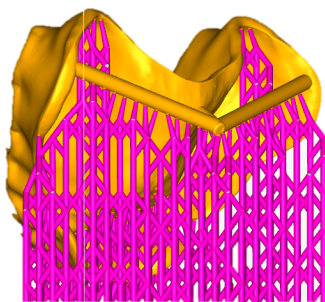
<b>Presets</b>	Lattice
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<b>Support Parts</b>	
Height leveling	4.000 mm

<b>Placement</b>	
Self-support angle	35°
Side-feature size	2.000 mm
Accuracy Z	0.000 mm
Support spacing	2.5 mm
Maximum height	2.000 mm

<input checked="" type="checkbox"/> <b>Lattice</b>	
Layout	Hexagon
Connection	3
Connect gap	3
Margin	0.500 mm
Spacing XY	3.0 mm
Spacing Z	3.5 mm

<b>Geometry</b>	
Contact width	0.800 mm
Island width	1.200 mm
Under-shoot	0.300 mm
Maximum width	1.200 mm
Side faces	20



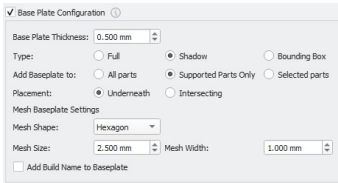


## Build Wizard

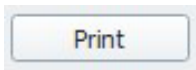
Start the build wizard.

Select the option Separation Detect.

Select the Base Plate Configuration. With the setting:



<input checked="" type="checkbox"/> Base Plate Configuration	
Base Plate Thickness	0.500 mm
Type	<input checked="" type="checkbox"/> Shadow
Add Baseplate to	<input checked="" type="checkbox"/> Supported Parts Only
Placement	<input checked="" type="checkbox"/> Underneath



Select "Print" to send the build job to the printer.

## Hardware



### Material preparation and printing process

Shake the material in the bottle for 2 minutes.

Ensure that the printer is calibrated regularly in accordance with the manufacturer's instructions.

Use a fresh build tray. Fill the tray to the maximum filling level mark.

Stir the resin before each build job using the silicone spatula supplied with the printer.

Print the objects.

Allow uncured material to drip off in the printer with the lid closed after printing is complete.

Remove the objects from the printer.

Separate the parts from the build platform before cleaning.

Use the removal tool supplied with the printer and place it on the bottom edge of the printed object at a 45° angle to the build platform.

Apply light pressure to peel the parts from the build platform.



## Wash

Washing should occur immediately after this step to maintain optimum material properties.

Clean the objects in an ultrasonic bath. Refer to the ultrasonic bath manufacturer's instructions for use.

Use two separate cleaning containers filled with isopropanol ( $\geq 99\%$ ). The cleaning containers must be solvent-resistant, sealable, and impermeable to light.

Use the following parameters for cleaning in the ultrasonic device:

Cleaning Bath I	Cleaning Bath II
2 min	2 min
Gentle Ultrasonic Mode	Gentle Ultrasonic Mode

After cleaning, dry the objects thoroughly with oil-free compressed air.



## Cure

Post-cure the objects in the curing unit Otofash G171 (NK-Optik) in combination with the polymerization tray "Type 360N with UV-B Blocker Transparent 360-950 nm".



Otofash G171  
[NK Optik]

The objects are cured with 2x3000 light flashes. The polymerization objects are turned between the curing cycles.

## Finishing

Remove the support structures. Optionally, the support structures can be removed after the first cleaning bath. Finish the dentures according to the Ivotion Base Print IFU.



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