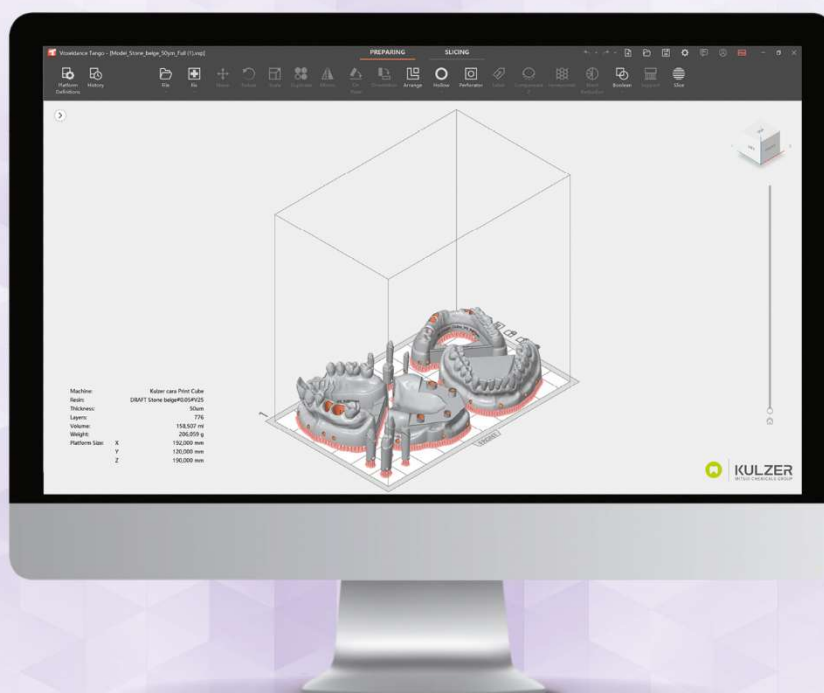


# CARA PRINT COCKPIT

## USER GUIDE



Version: 03  
Date: 15.10.2025



[www.kulzer.com/  
mycube-support](http://www.kulzer.com/mycube-support)



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MITSUI CHEMICALS GROUP

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hyperlinks in the  
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## Overview



### cara Print Cockpit

cara Print Cockpit is a data preparation software for Additive Manufacturing with cara Print Cube printers. To prepare CAD files for printing, the software enables users to:

- launch the slicer “Voxeldance Tango” and convert the Tango slices into printable cara Print Cube files (.capc )
- send the print job to cara Print Cube printers via network or USB drive
- perform software and print parameter updates via internet connection
- manage the visible print parameters incl. xy-compensation of Voxeldance Tango



### Voxeldance Tango

Voxeldance Tango is a slicing software which prepares CAD files for the printing process. The latest Voxeldance Tango version is always included in the cara Print Cockpit installer. Voxeldance Tango includes a wide range of functions. The following functions are useful in most cases:

- Load CAD files (.STL-file recommended)
- Choose print parameter and layer thickness
- Arrange all objects
- Adjust the orientation
- Adjustment by compensating z
- Create supports depending on indication
- Labelling
- Slice to 2D Layers /Check layers

# Installation Requirements

## Hardware

1. CPU
  - Intel Core i5/i7/i9
  - AMD Phenom II X4/X6 at 3.0GHZ or higher with SSE2
2. Memory
  - 16GB RAM or higher
3. Free Disk Space
  - 2GB of free disk space
4. Display
  - 1920 x 1080 is recommended
  - Video Card
  - NVIDIA Geforce GTX 1060 or AMD Radeon RX 480 or better
  - At least 1GB of memory
  - At least a memory interface width of 192-bit (256-bit is recommended)
  - Any Intel GPU chipsets are not recommended

## Operation System

cara Print Cockpit (Voxeldance Tango) is only supported by:

- Windows 10/11 (64-bit) (recommended)
- Windows 8 / 8.1 (64 bit)
- Windows 7 (64 bit)

cara Print Cockpit is recommended for:

- Windows Professional edition
- Windows Enterprise edition

cara Print Cockpit is not supported by the following systems:

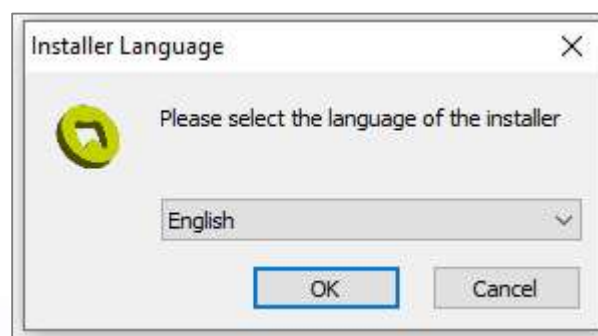
- Windows Server edition
- Virtualization system such as VMWare

## Installation

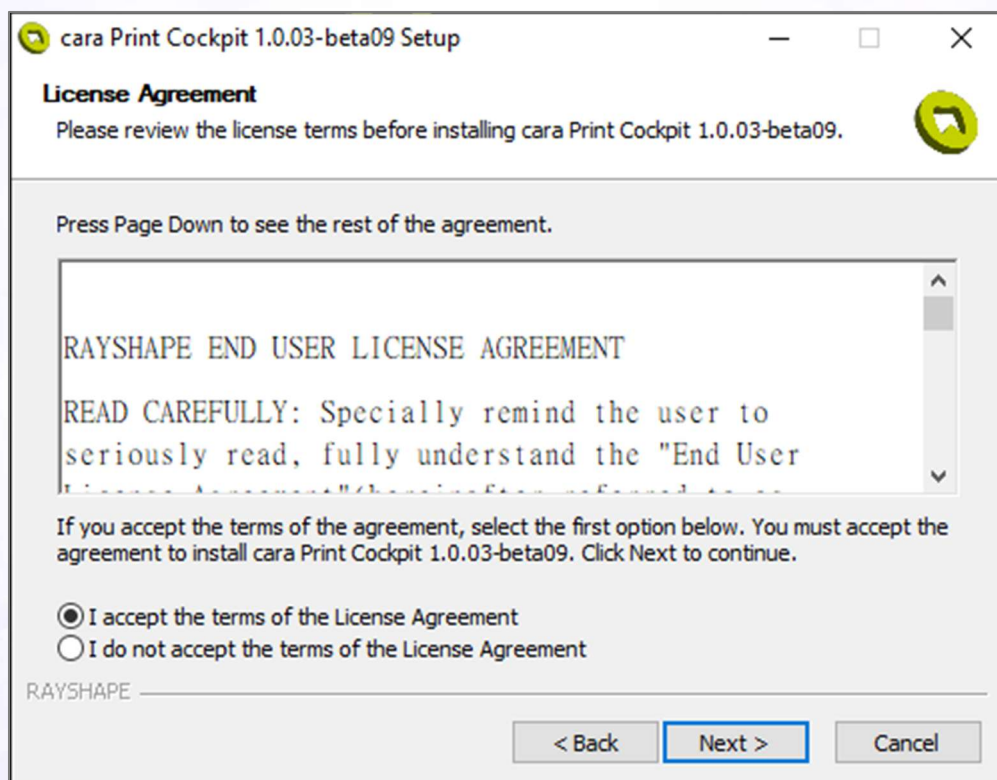
1. Double-click on the cara Print Cockpit setup file (start as admin)



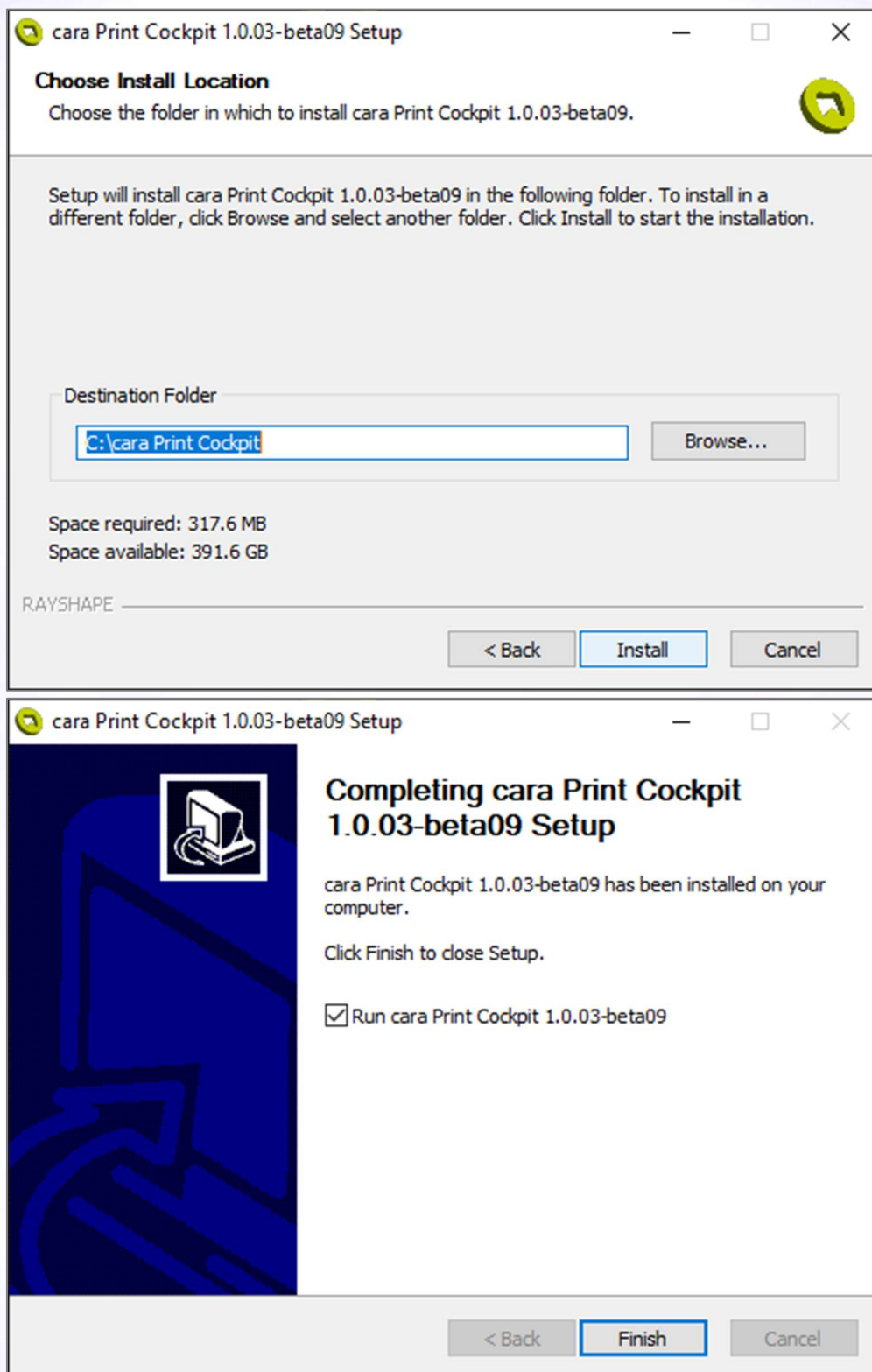
2. Select a language



3. Check and accept the License Agreement of cara Print Cockpit and follow the wizard to complete the installation of cara Print Cockpit

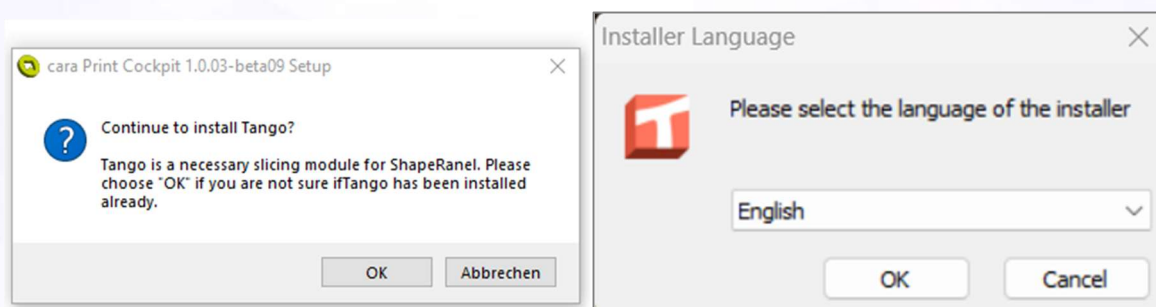
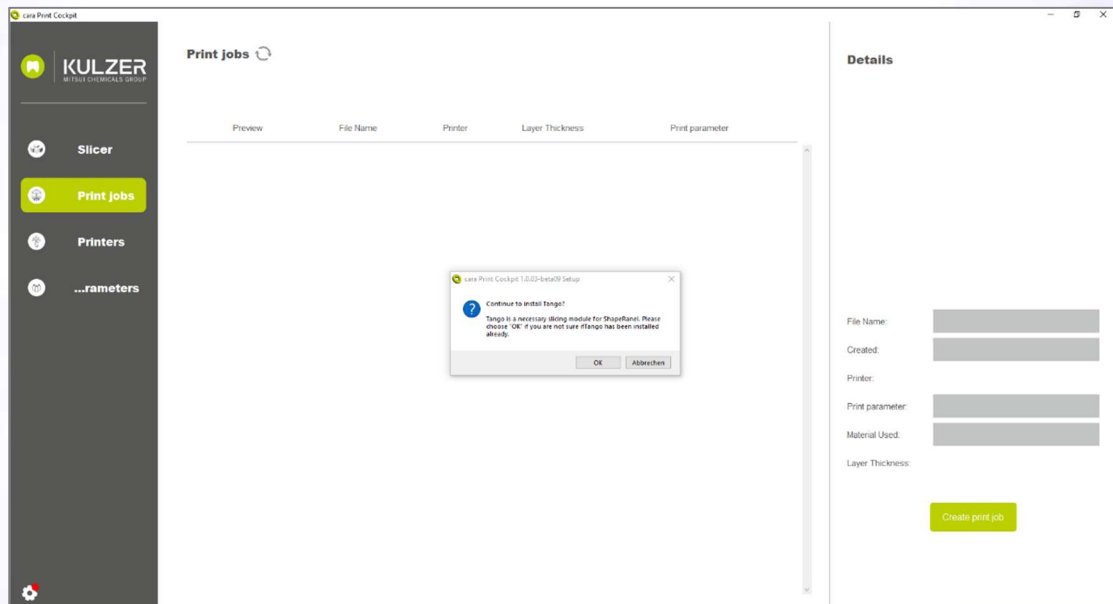


Follow the wizard to complete the installation of cara Print Cockpit. It is recommended not to change the installation path.






4. After the installation of cara Print Cockpit, continue to install the slicer following the automatic pop-up window.



5. Follow the wizard to complete the installation of the slicer software
6. Activate the slicer software with a license code.
  - a. Register your cara Print Cube printer, if not done before, here or by following the QR code (on the printer or below):  
[www.kulzer.com/mycube-registration](http://www.kulzer.com/mycube-registration)  
Until you have received your personal license code via email after successful printer registration, you may use the trial version of the software. However, this will not allow to create printable files.



- b. Online license activation  
Choose “Activate Your License”

 Voxeldance Tango ×

---


**Activate Your License**  
If you have a **local license**, please activate your Voxeldance Tango.

**Sign In**  
Log in to Voxeldance Tango with an account. **(Subscription)**

**Free Trial**  
Don't have a license? You can use **the Ultimate version** for 15 days.

Input license and information, then click on “Next”.



 Voxeldance Tango

## Enter your license and information

License\*

Click Red Activate to **Activate** with printer device code.

First Name\*

Last Name\*

E-mail\*

Industry\*

Aerospace ▼

Company\*

Country\*

If this computer is offline, please run **local license tools**.

Back

Next

**Caution:** In case the license was activated online, it can be deactivated and reactivated in total 3 (three) times during usage, e.g. to transfer it to other computers. The license must actively be deactivated by the user on the existing computer before being able to reactivate it again on another device. Kulzer does not recommend to switch computers with one license, unless it is really needed, e.g. if the computer must be exchanged due to technical reasons.

c. Offline license activation

Input license and information, then click on “local license tools”.

<b>Company*</b>	<b>Country*</b>
<input type="text" value="xxx"/>	<input type="text" value="xxx"/>
If this computer is offline, please run <span style="border: 2px solid red; padding: 2px;">local license tools.</span>	

A QR code will be shown. Use a smartphone to scan the QR code and receive the local key string in an email sent to the email address entered in the previous window.

Copy the local key string from the email to the box in step two (see picture below), then click on “Next”.

**Caution:** If a license is activated offline using the “local license tools” it is not possible to deactivate the license at a later stage to switch the PC.

**Step one :** The following is the system id. Only when the local key matches the system id can it be registered.

3B05993F-1162-5A9F-8661-24

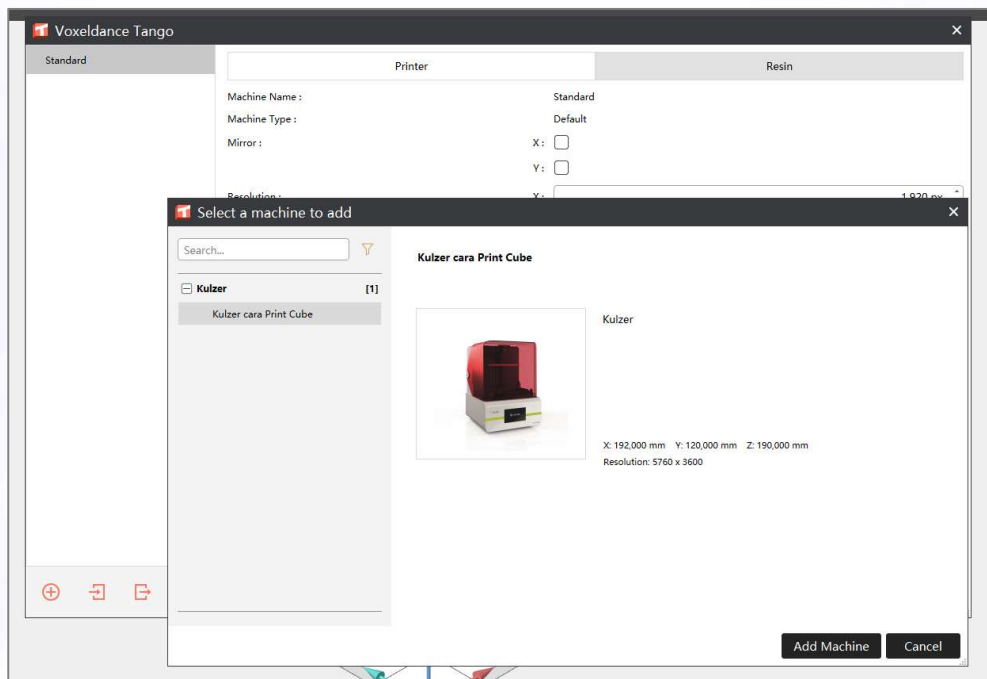
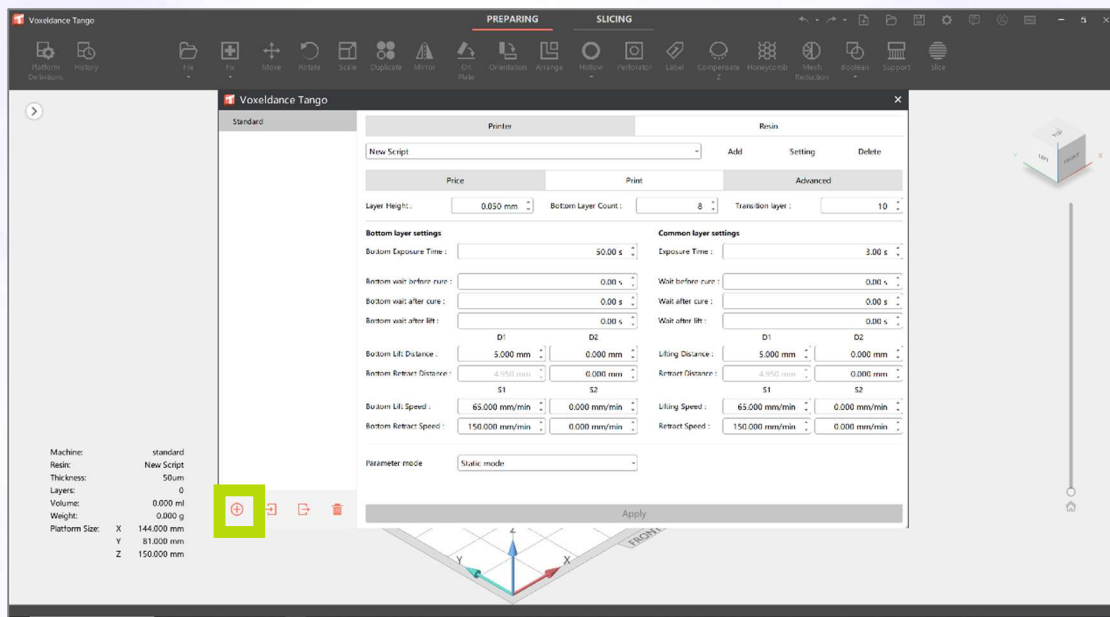
**Step two :** Please copy the generated local license string to the text box and click Next to register.

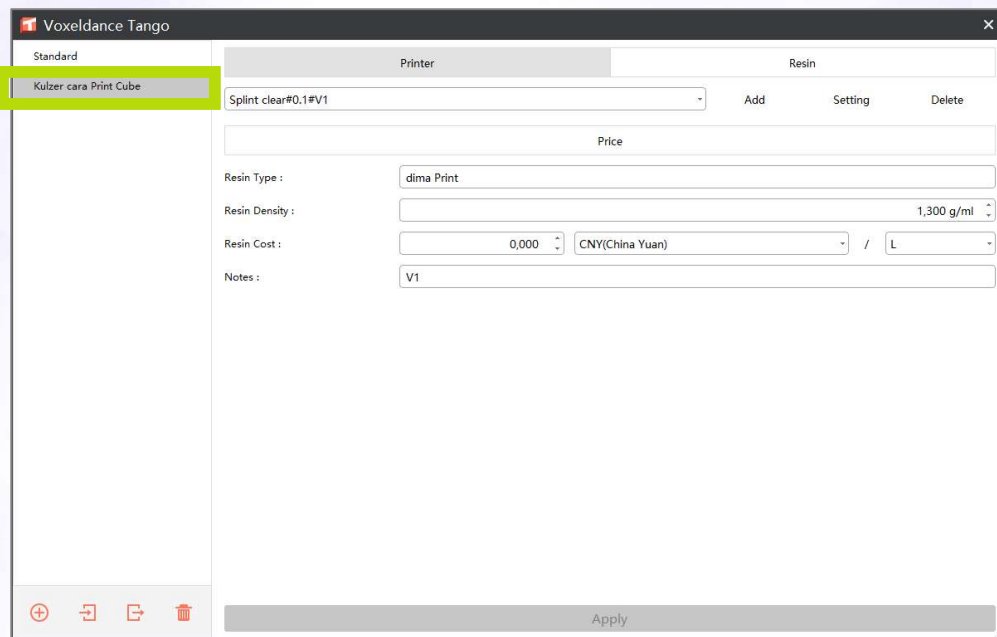
You can **Read** vox\_key.vxcd.

Back
Next

- Platform Definitions:  
Add cara Print Cube by clicking the “+” icon and selecting the correct printer → cara Print Cube

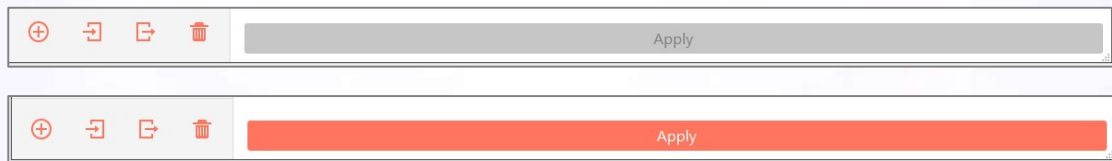






If the “Apply”-button is gray, the selected print parameter is likely already selected.

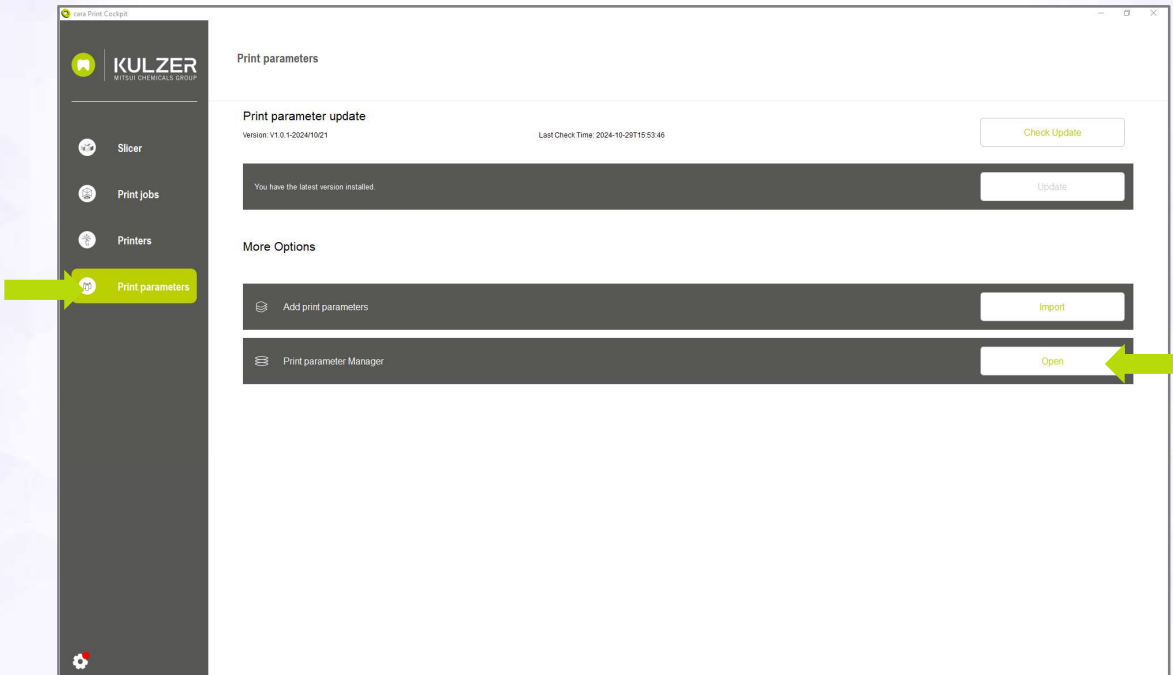
The “Apply”-button switches to orange if the currently selected material is not applied already.



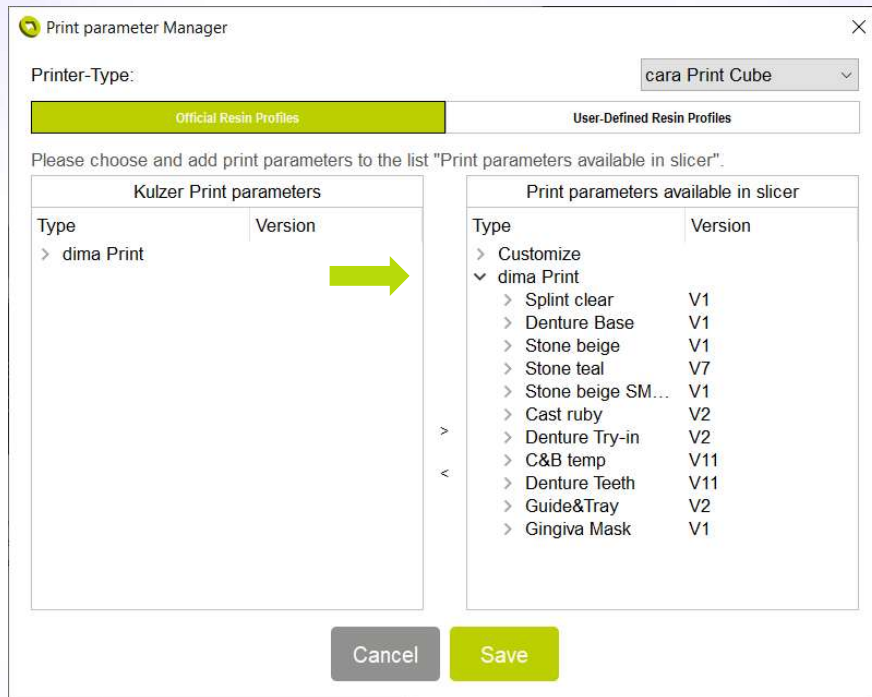
# Configuration

## Print parameters manager

1. Open the Print parameters manager



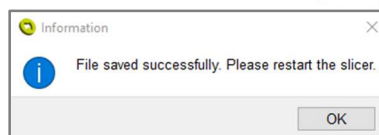
2. Here, you can choose the official validated “Kulzer Print parameters” for dima Print materials or you can create your own “User-defined Print parameters”. On the left side the available validated “Kulzer Print parameters” are displayed. “Print parameters available in Slicer” (on the right) includes all available “Kulzer Print parameters” after initial software installation.



- To manage the "Print parameters available in Slicer" mark the parameter or a specific layer thickness and click the "<" or ">" button to manage lists.

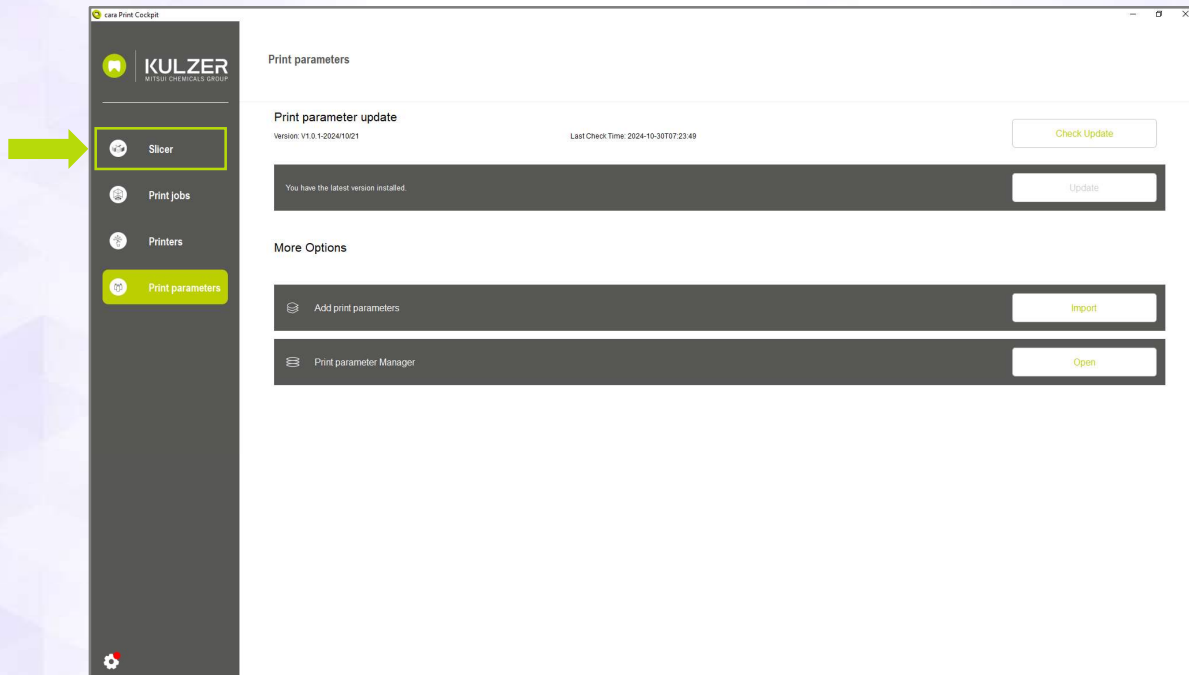
It can be helpful to fill the list "Print parameters available in Slicer" only with the print parameters you use in your daily business to reduce the size of the drop-down list in Voxeldance Tango.

- Click on "Save" after editing the "Print parameters available in Slicer" list





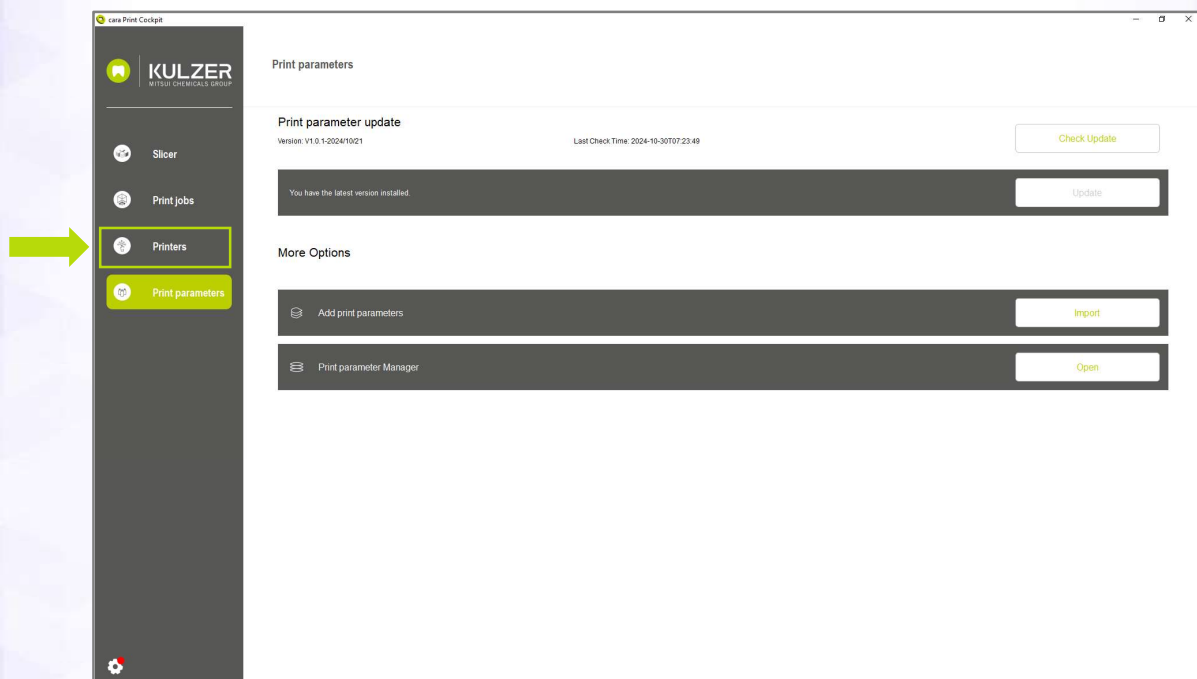
## 5. Open/Restart the Slicer



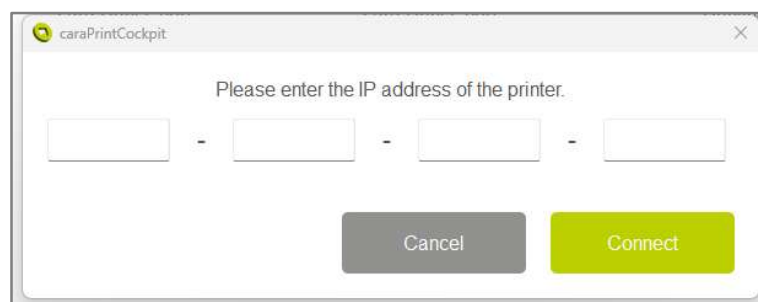
## Printers

cara Print Cockpit can send print jobs to a cara Print Cube printer via network. To use this function, the PC and printer should be on the same network (connected to the same router). cara Print Cockpit can find the printer with the IP address or automatically, depending on the network settings.

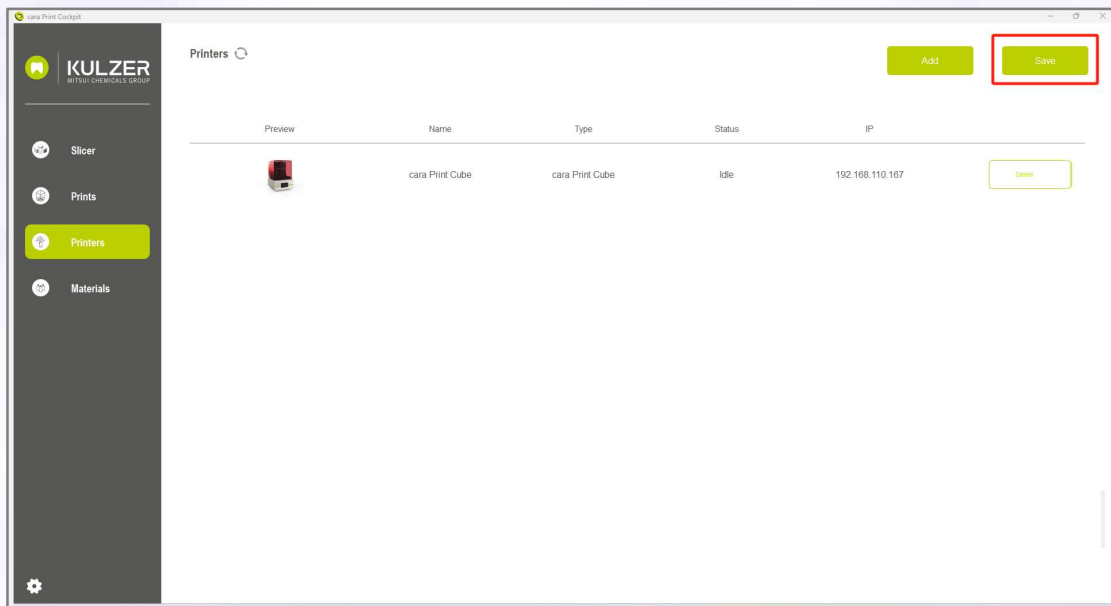
- 1) Connect the printer to a network
- 2) Find the printer IP address via “Setting-Network-Wireless Config”
- 3) Open the Printer Management tab in cara Print Cockpit



- 4) Click on “Edit” and “Add”, insert the printer IP address in the pop-up window and click “Connect”



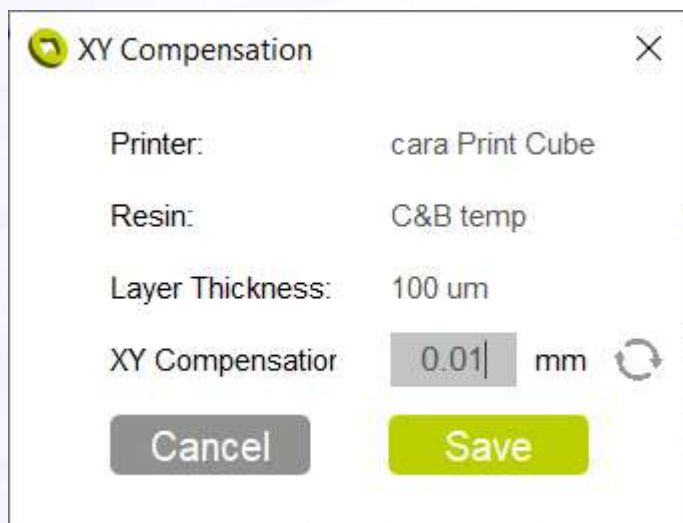
- 5) The printer is now connected to cara Print Cockpit. Click “Save” before exiting the cara Print Cockpit software.



## XY-Compensation for print parameters

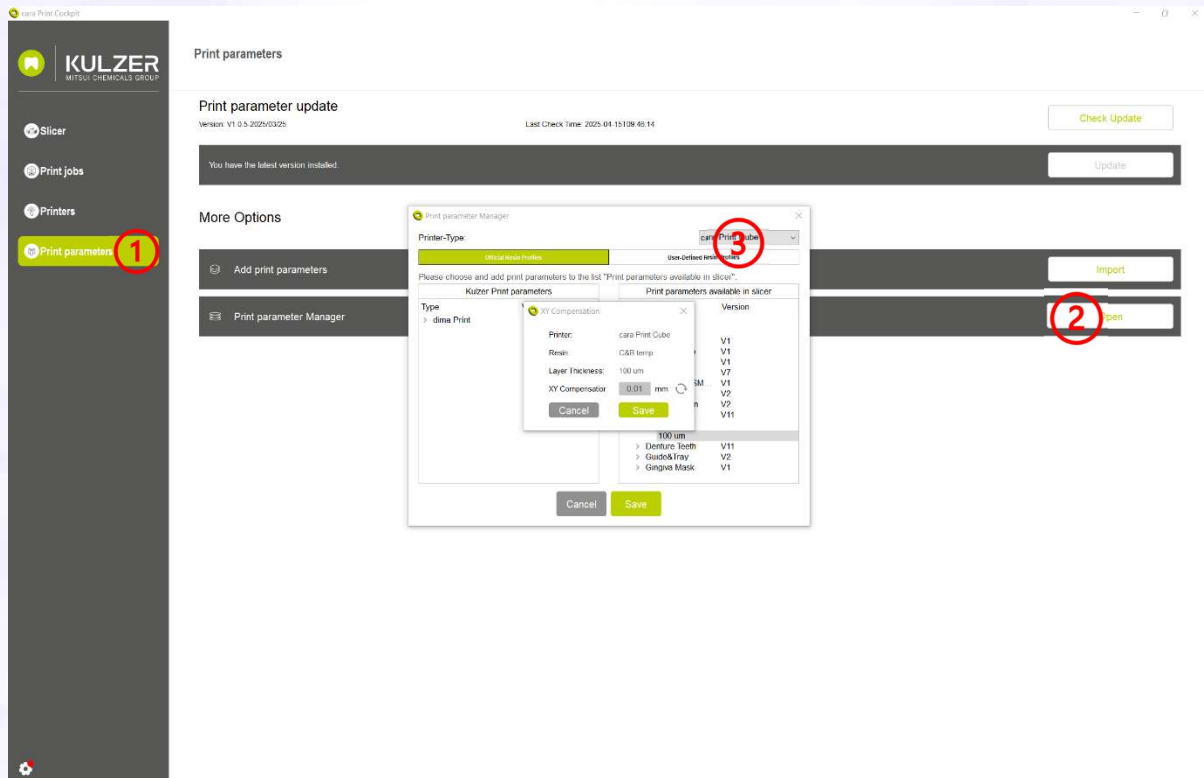
The XY - Compensation is pre-defined for every layer thickness of the “Kulzer Print parameters”. Kulzer recommends always using the pre-settings.

To reset to the pre-setting, click on the arrow cycle icon. 



To change the settings:

1. Open the Print parameter menu
2. Open the Print parameter Manager
3. Choose the Print parameter and layer thickness in the “Print parameters available in slicer” → Right-click to open the editing window
4. Input the XY-Compensation value (on the right side of the panel)
5. Click “Save”
6. Open/Restart the Slicer.

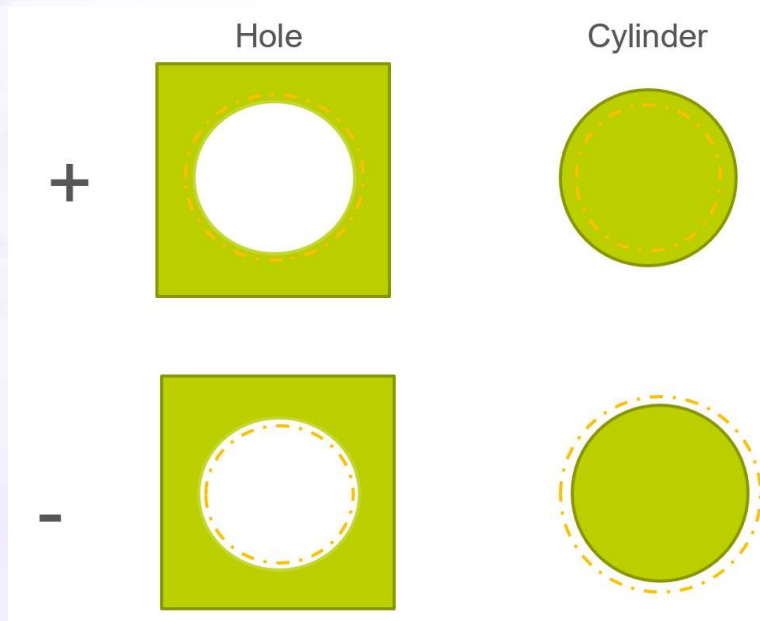


### Explanation of XY-Compensation:

If the green geometry below is the result at zero XY compensation, then a change in plus/minus direction tailors the geometry to the dashed line

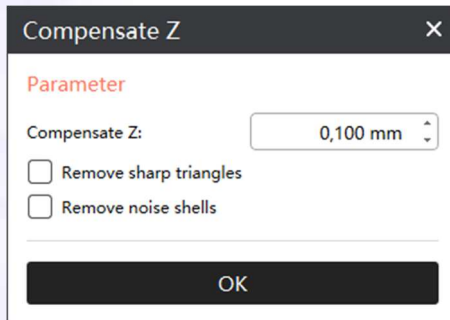
+ “looser”

- “tighter”

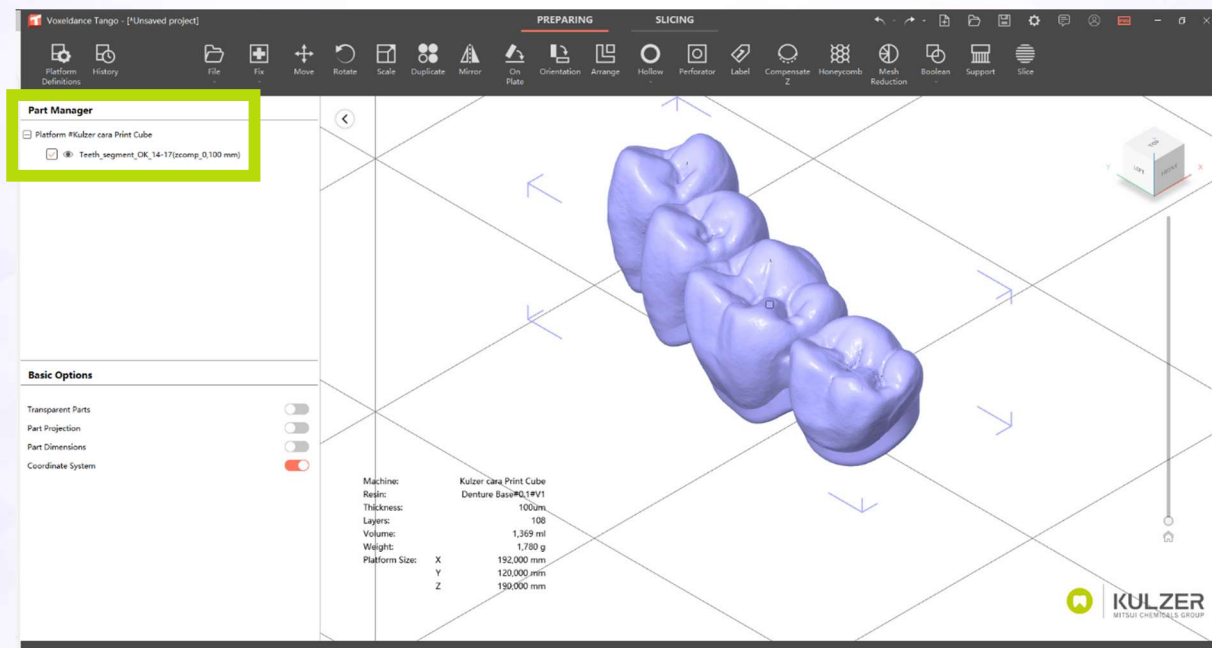


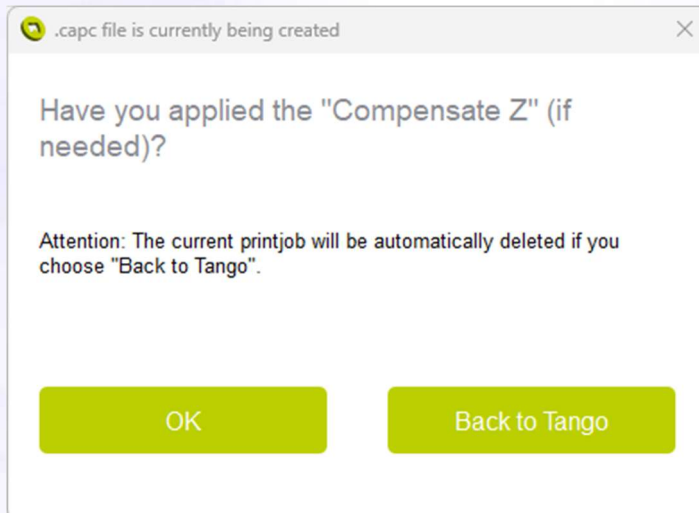
## Z-Compensation for print parameters

The z-compensation for each print job is set in the Tango slicer (see chapter “Voxeldance Tango” for further explanations).



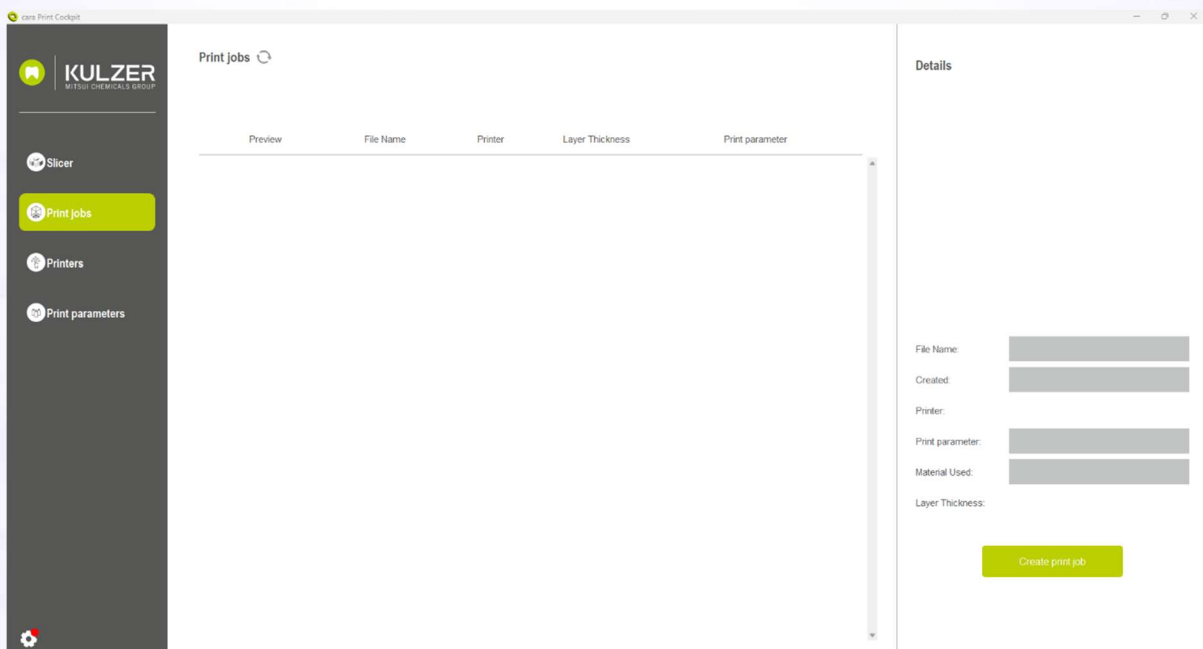
In the part manager on the left side, the user can see if and which Z-compensation is used for which part.



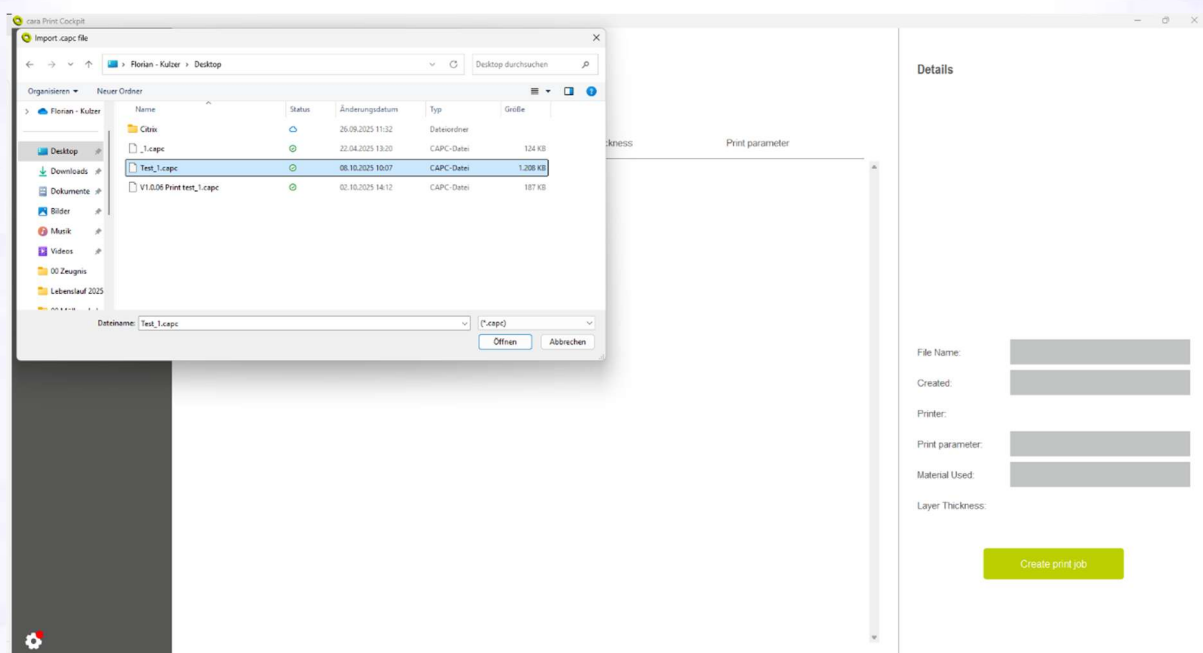
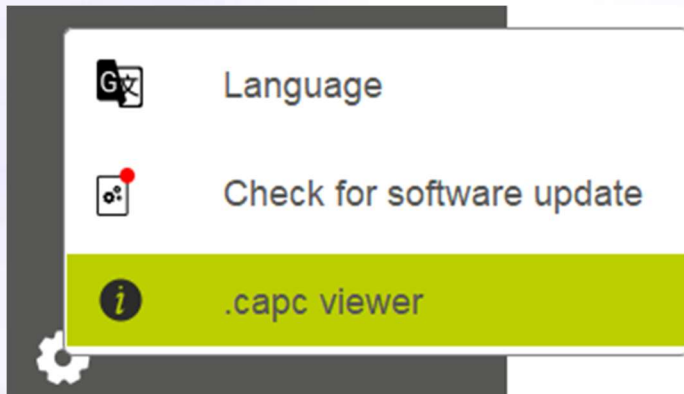


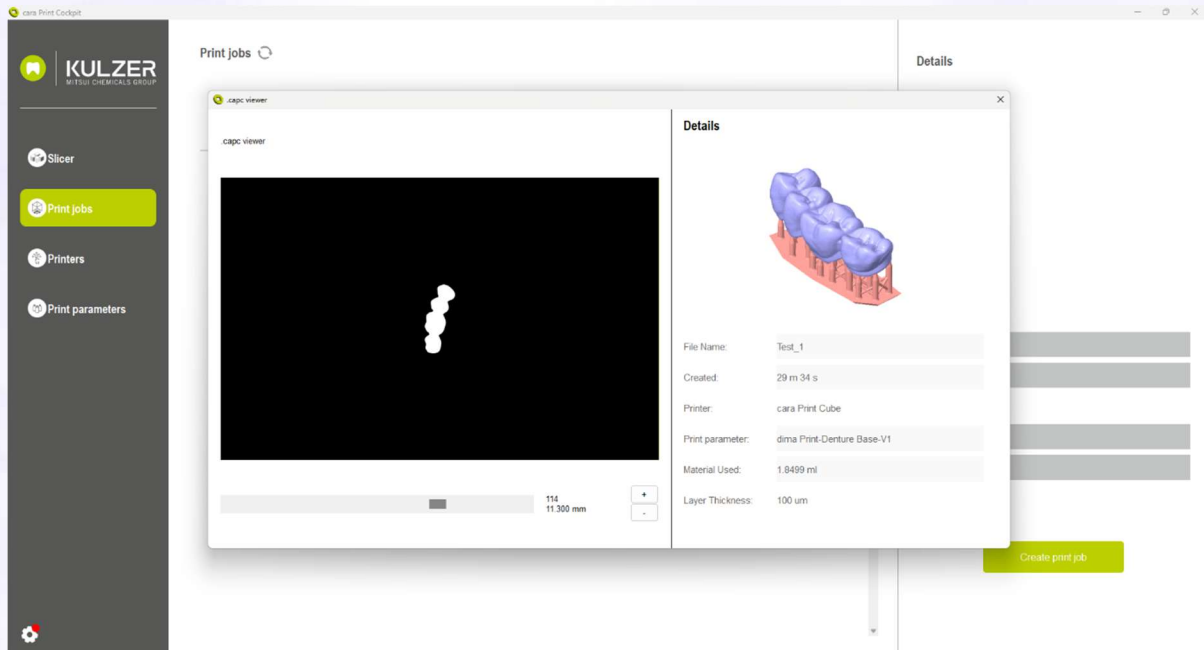
## .capc viewer

In case you do not exactly know which print job design a specific .capc file contains, you can make the design visible with the .capc viewer in cara Print Cockpit firstly available with V1.0.06. Essential information will be shown, as well as a picture of the print job and the possibility to browse through the sliced layers.





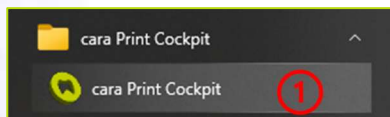


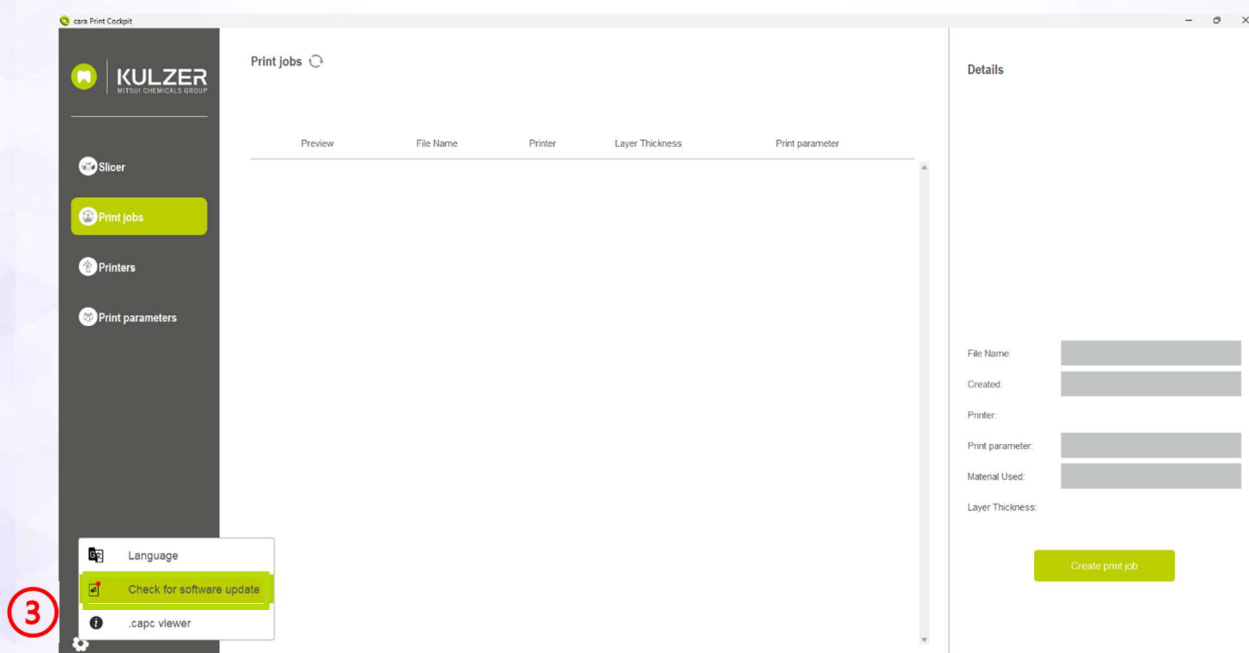
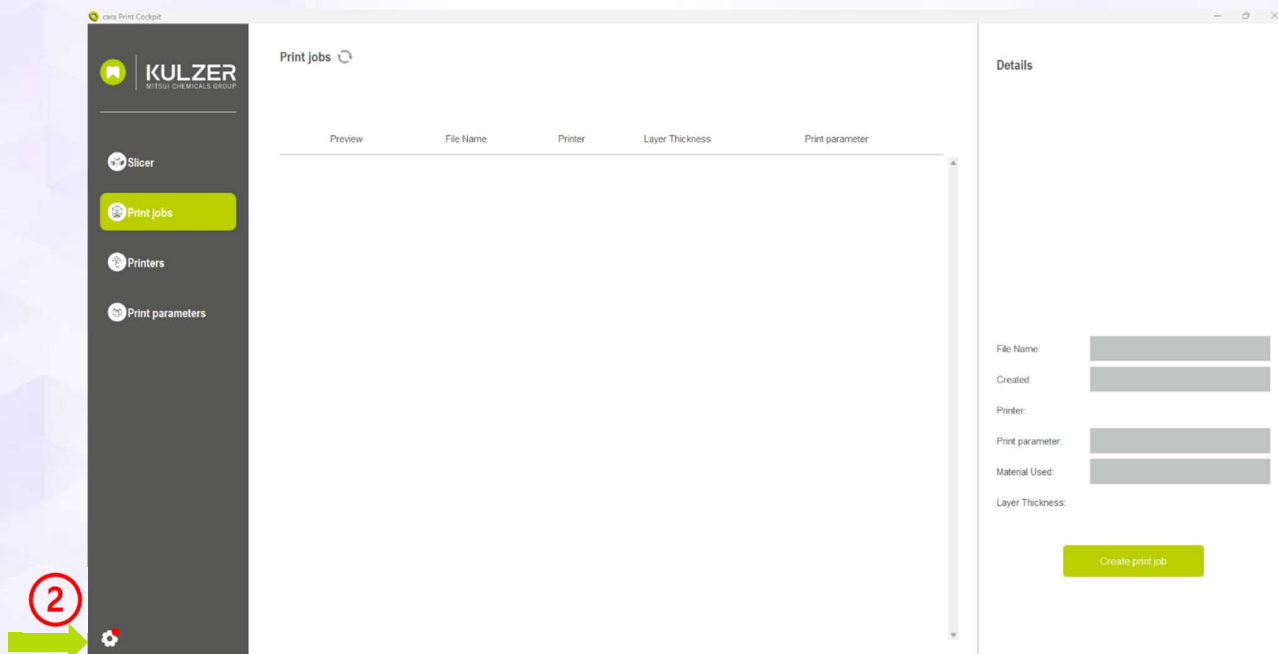


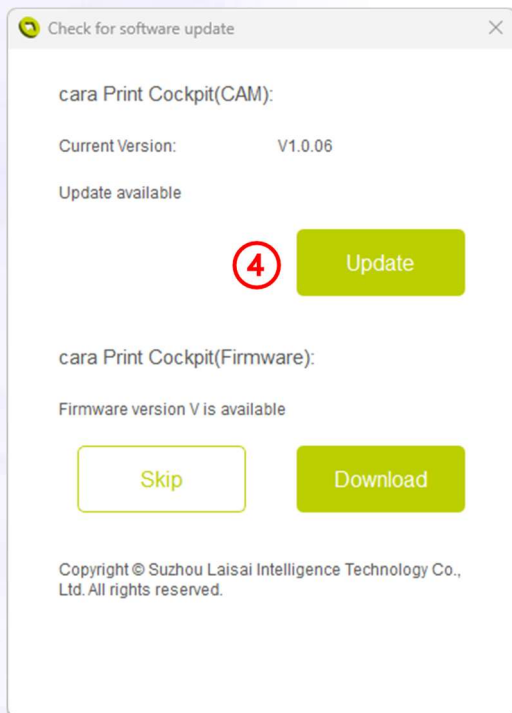
## Updates

### Software Update for cara Print Cockpit/CAM:

1. Start cara Print Cockpit
2. Bottom left corner → Setting symbol
3. Check for updates
4. Click on Update → Finish

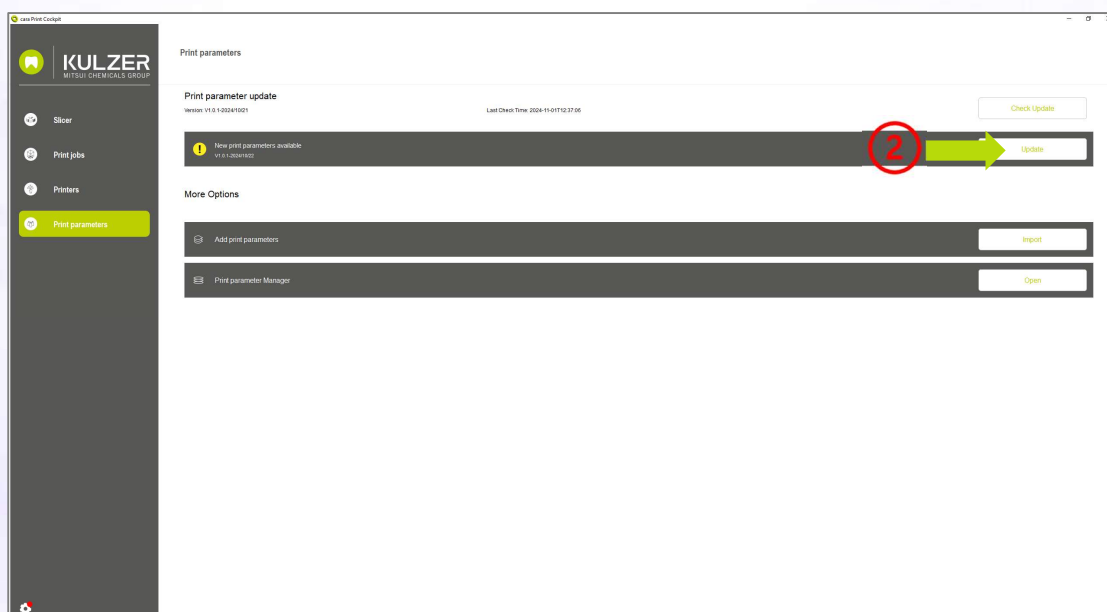
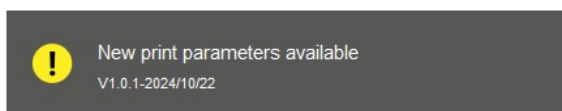
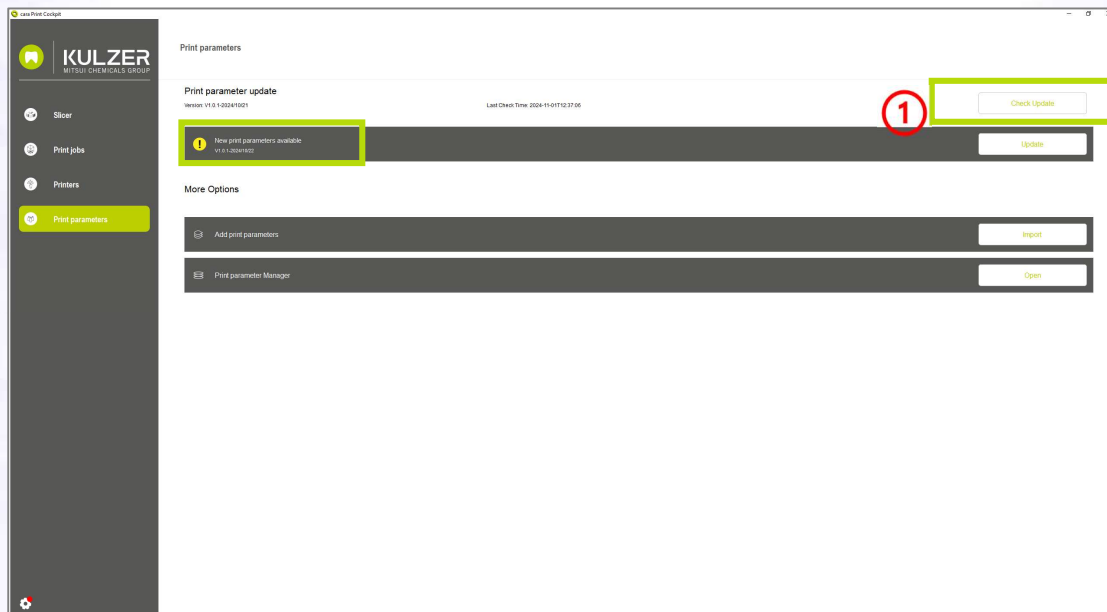


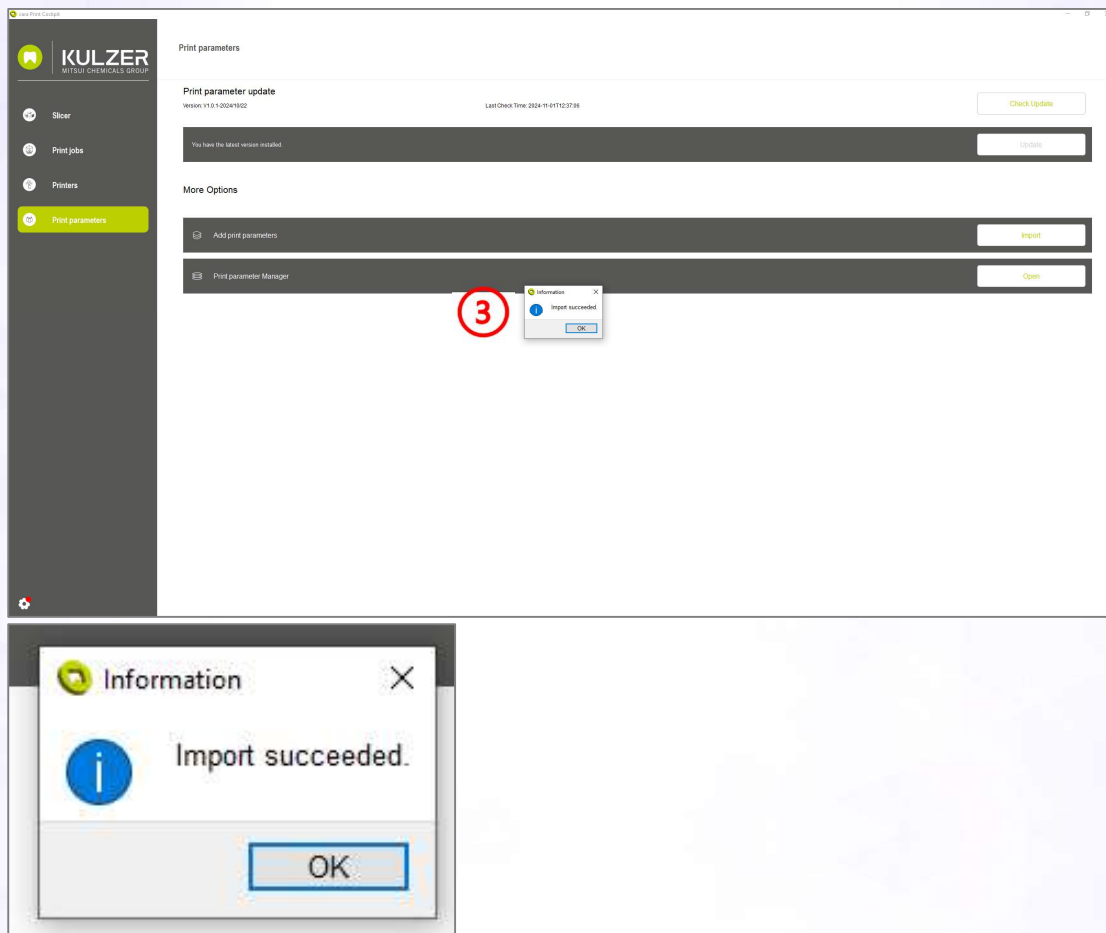




## Update Print Parameters

1. Click on “Check Update” button (If update available, this will be indicated with a yellow exclamation mark)
2. Click on Update – to update print parameters.
3. Finish



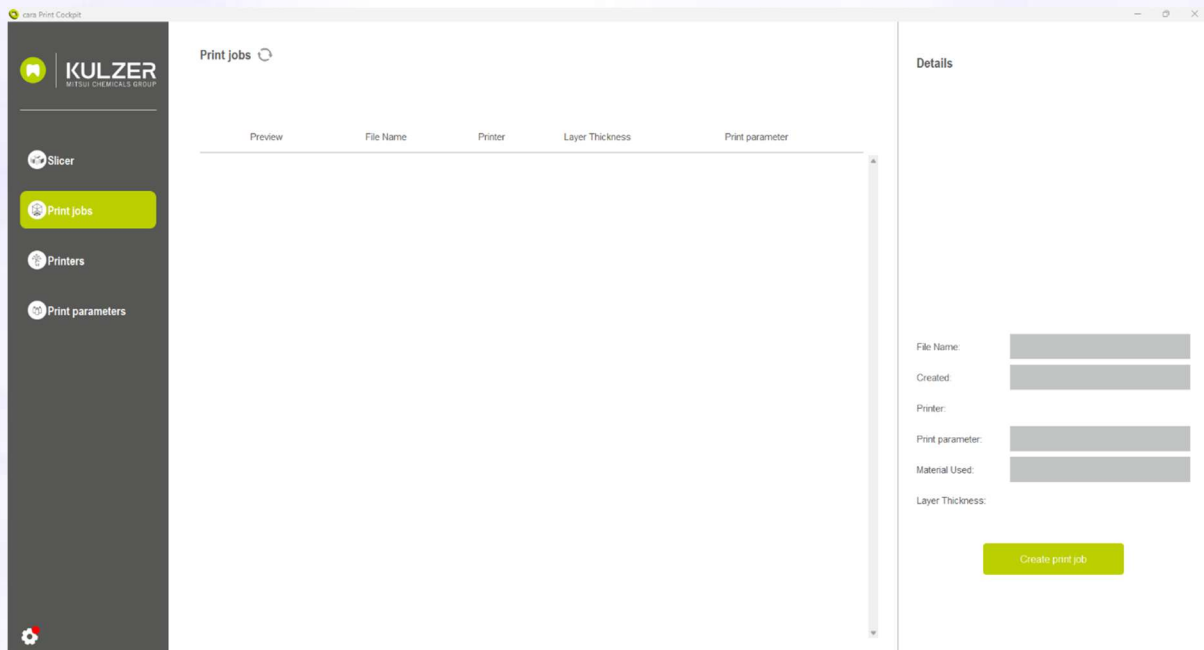


## Update cara Print Cube firmware

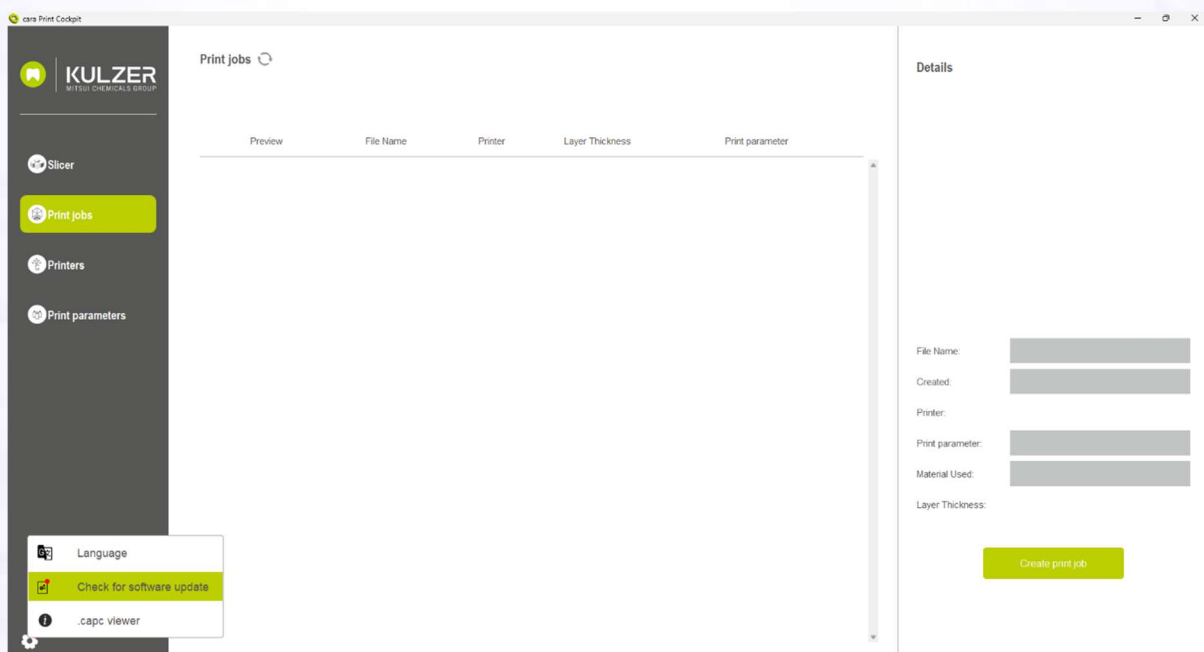
With cara Print Cockpit Version V1.0.06 the user will get an alert in the cara Print Cockpit software, once a new cara Print Cube firmware is available for download on the cara Print Support Hub. This alert is just meant to be informational. The user must still download and install the new firmware on the cara Print Cube printer using a USB drive. **IMPORTANT: NEVER RENAME** the firmware updated file and **DO NOT** hide it in a folder on the USB drive when updating the firmware.

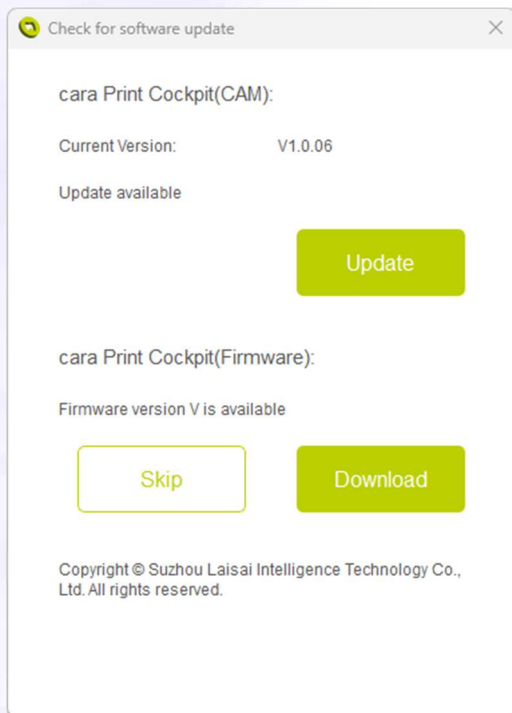
1. Start the cara Print Cockpit software. Check if there is a red dot visible at the settings symbol





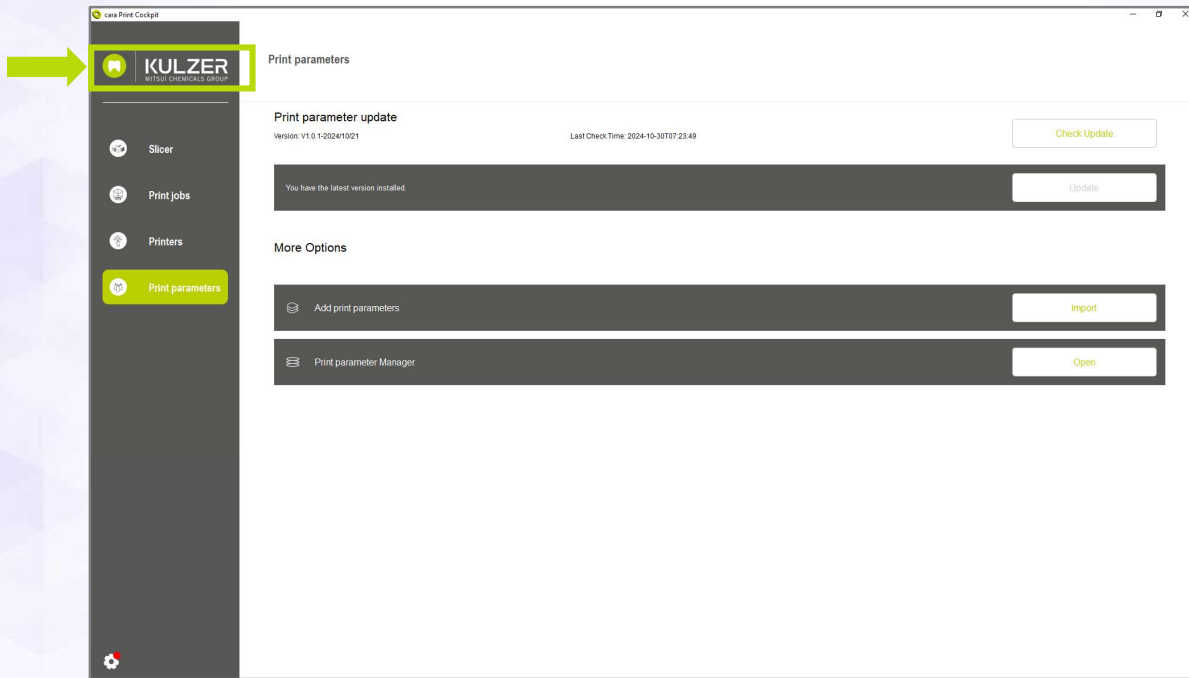
2. Check for updates to see if a firmware update is available





## Support

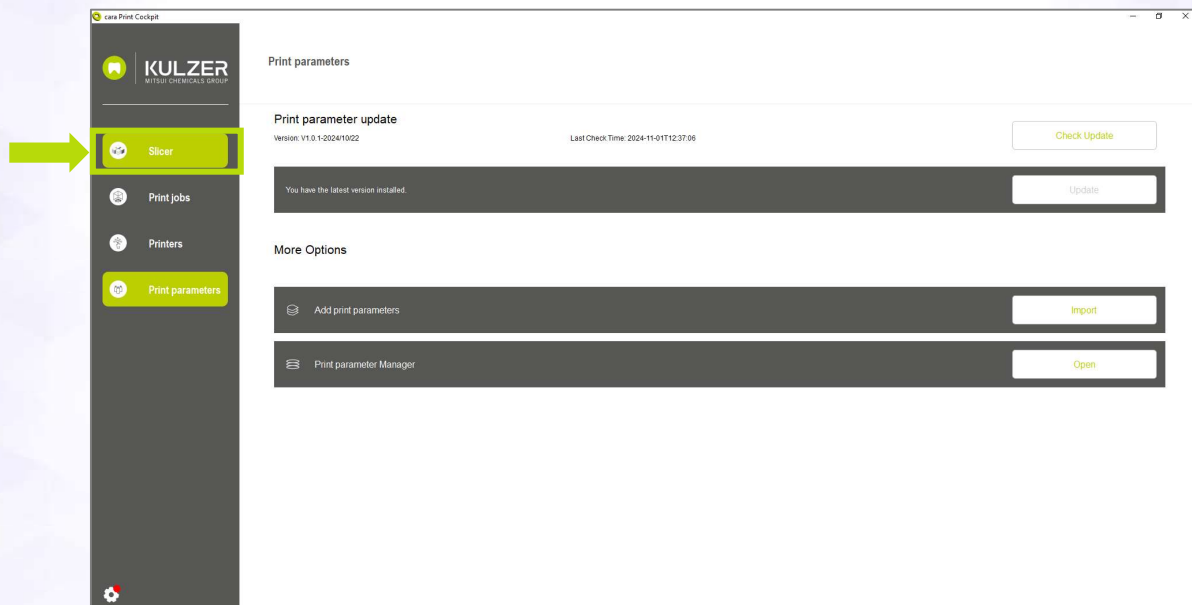
If you need support while working, you can click on the Kulzer button in the left upper corner of the cara Print Cockpit interface. This will directly lead you to Kulzer's cara Print Support Hub.



# Voxeldance Tango

## Slicing and Printing

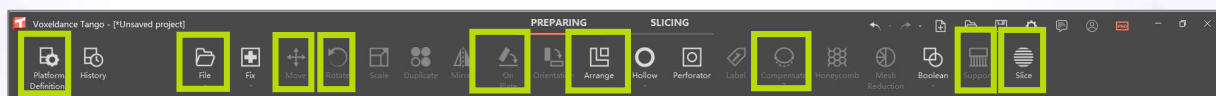
### 1. Open the Slicer



The slicing software offers you a wide range of options. Those marked in green are the frequently used ones for dental work.



Options frequently used for dental workflow.



- 1 2 6 3 4 5 7 8 9

- |                         |  |
|-------------------------|--|
| 1. Platform Definitions | Choose print parameter and layer thickness                                       |
| 2. File → Open File     | Choose the stl files   |
| 3. Rotate               | According to the <i>dima Print Parameter Matrix</i><br>→ depending on indication |
| 4. Put on plate         | Orientates area parallel to build table (if needed)                              |
| 5. Arrange ("nest")     | Automatically nest parts on platform   |

6. Move

Move selected parts by inputting the desired values

7. Compensate Z

According to the *dima Print Parameter Matrix*  
➔ depending on material

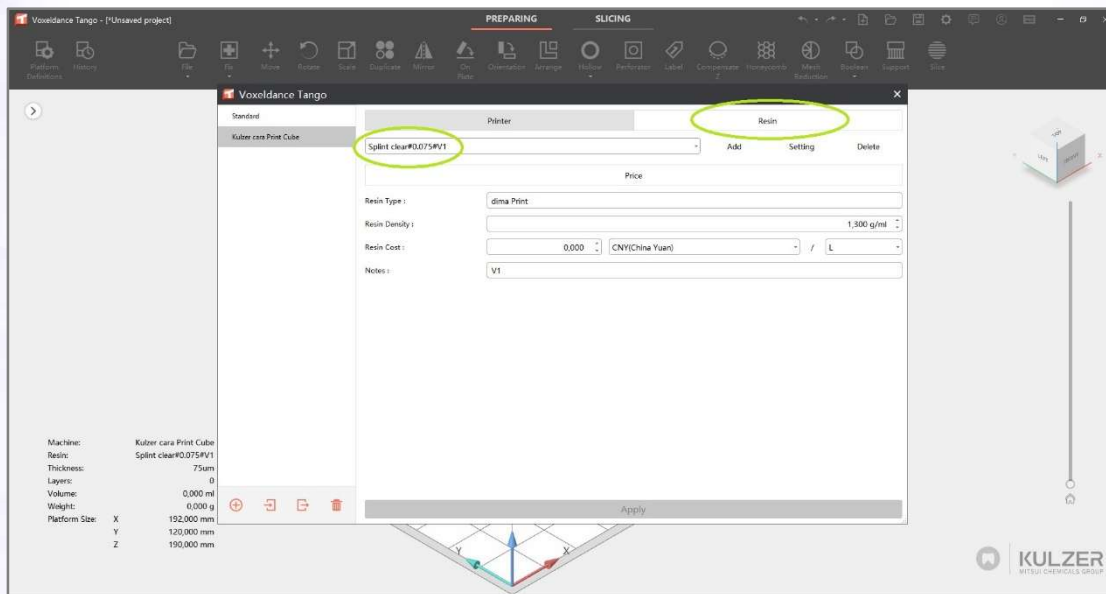
8. Support

According to the *dima Print Parameter Matrix*  
➔ depending on material and indication

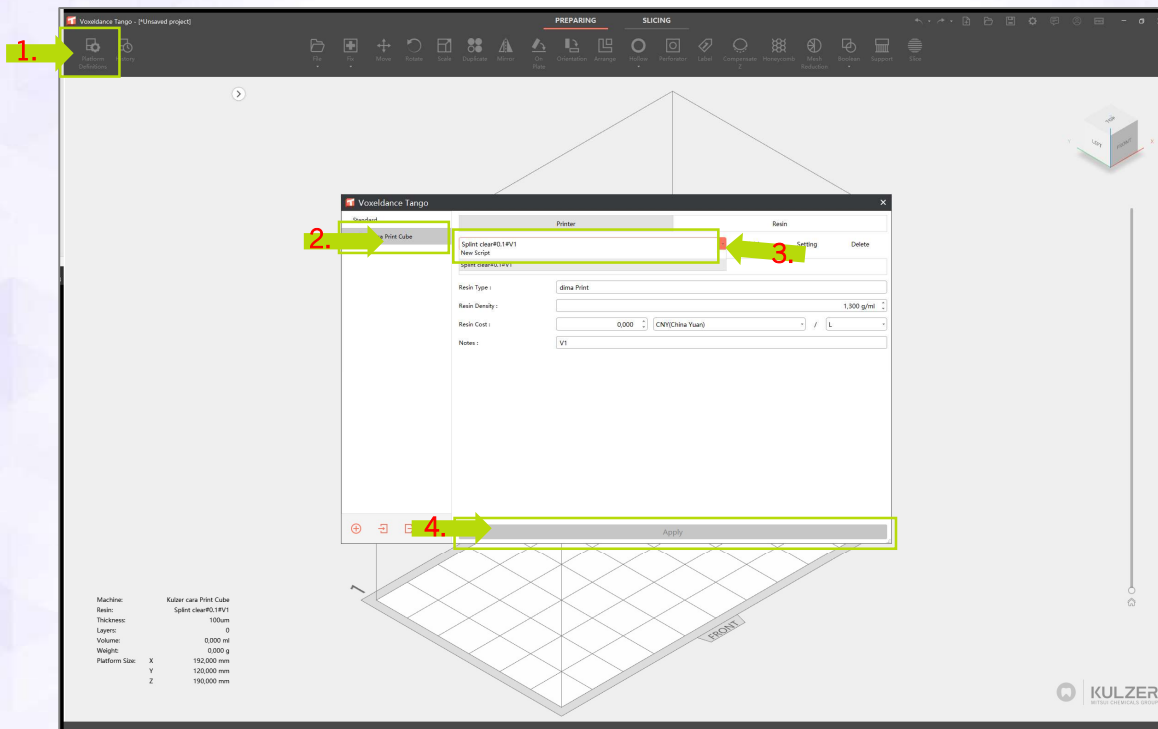
9. Slice

Slice parts on current platform

2. The process of creating the print job starts with “Platform Definitions”, here you select printer, material and layer thickness.



3. Select printer “Kulzer cara Print Cube”, resin type and layer thickness to be used, confirm by “Apply” (4.) After confirming, close the window.

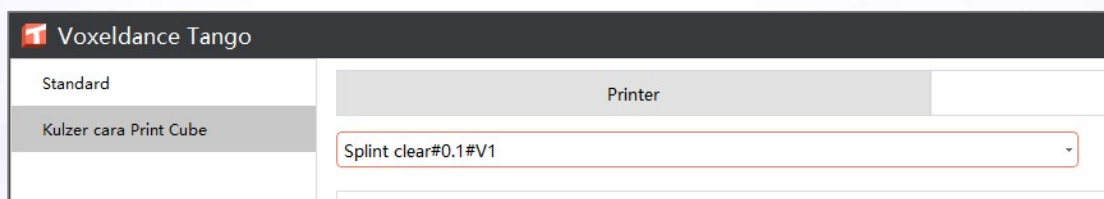


Syntax example: Splint clear#0.1#V1

Splint clear = Print parameter for dima Print Splint clear

0.1 = Layer thickness 100µm

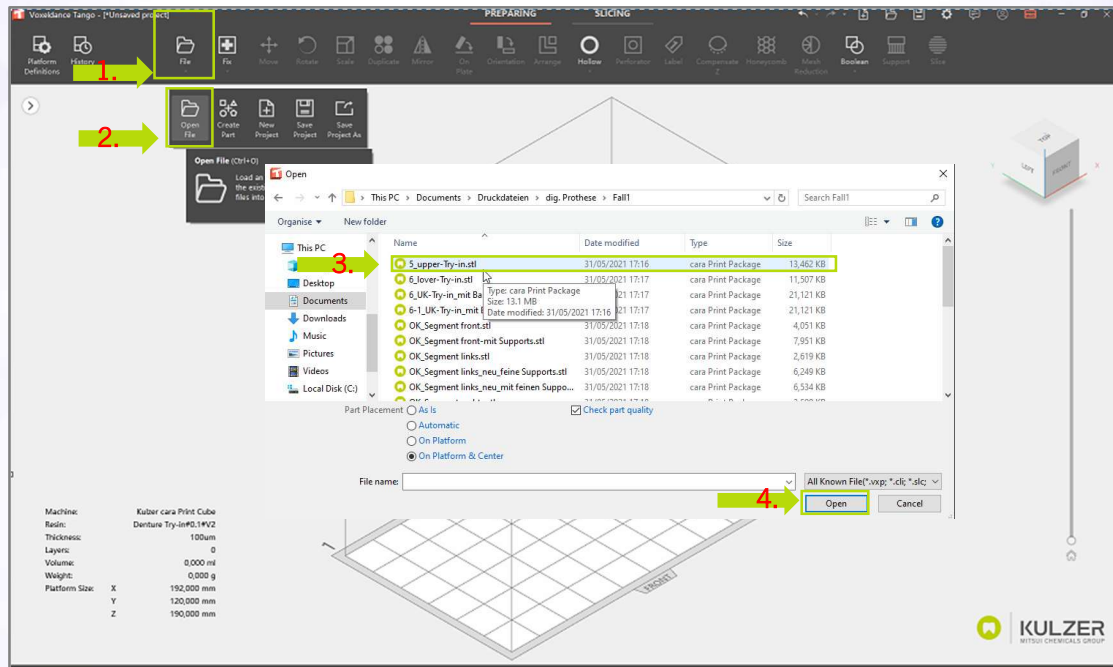
V1 = Print parameter version





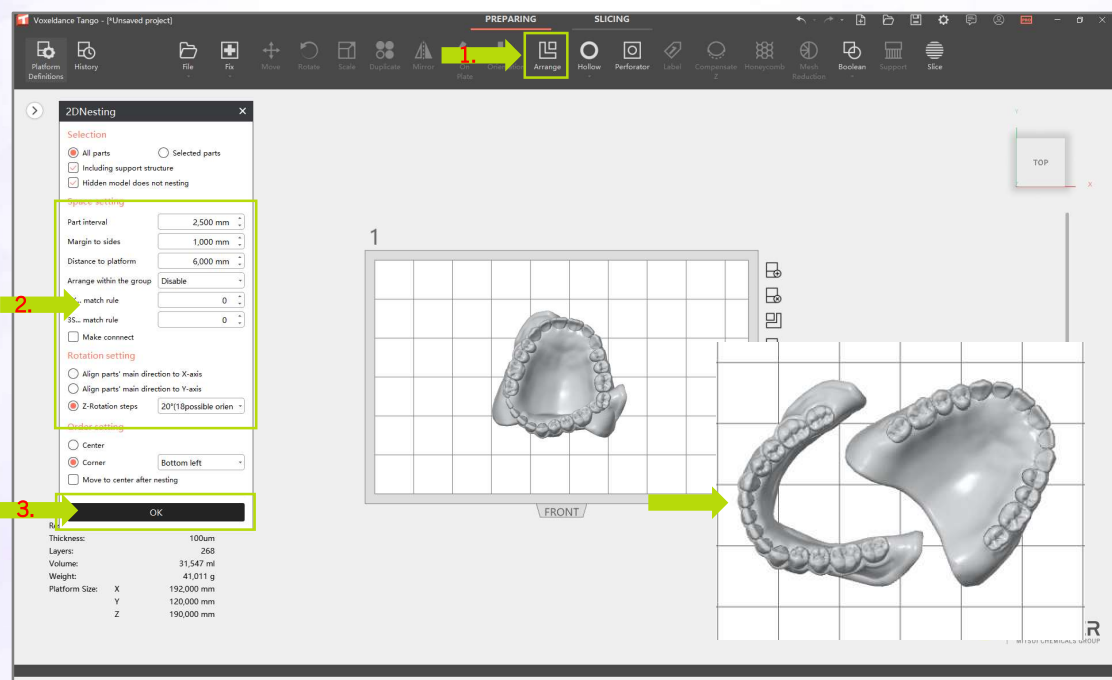
#### 4. Import STL Files

Besides the standard process >File>Open File>Explorer the function “drag&drop” is also available.



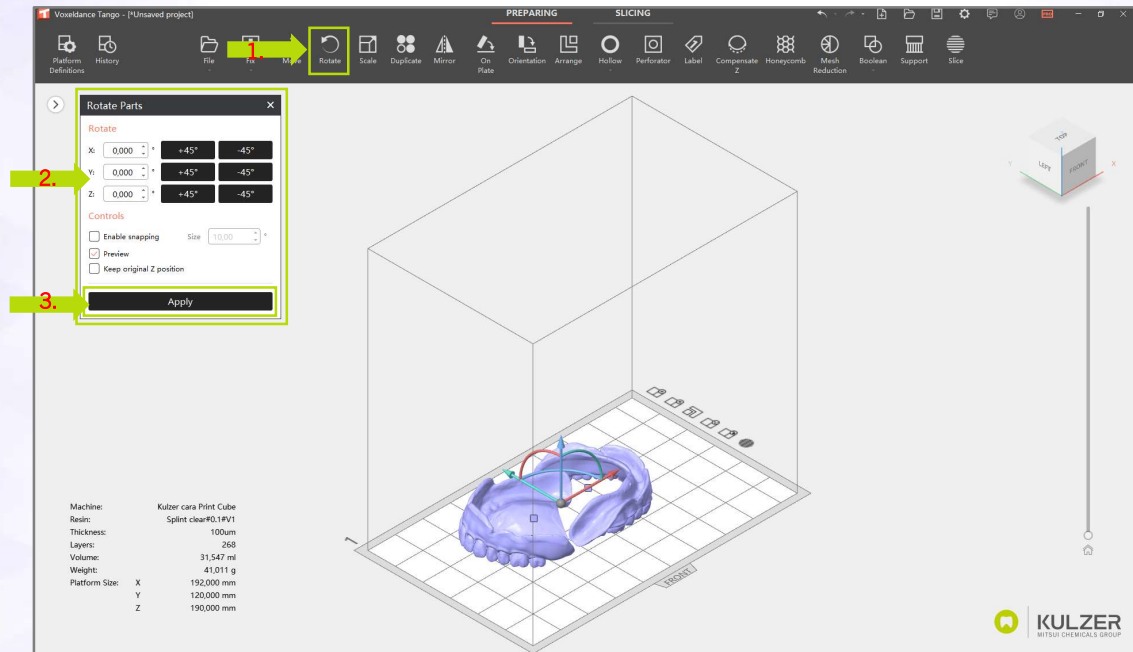
#### 5. Arrange

After importing multiple objects, “Arrange” will arrange them automatically on the built platform. Click on the imported file to select it. The file will turn blue, indicating that it is ready to be moved.



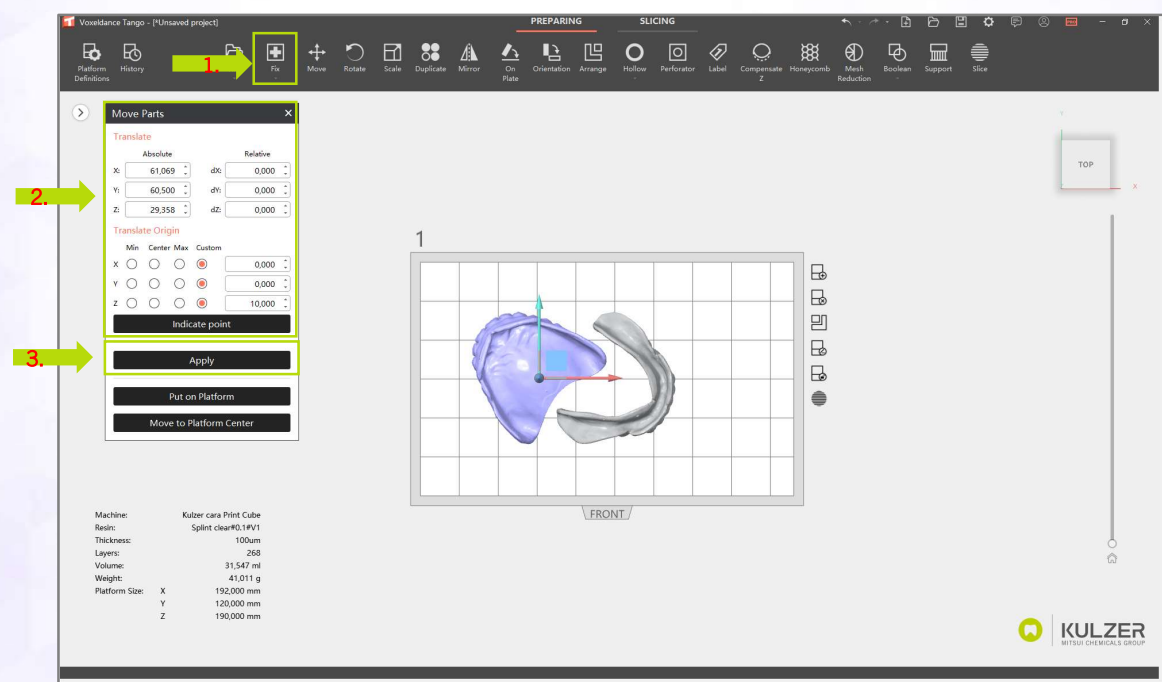
## 6. Rotation

Selected objects can be rotated directly by left-clicking on the circles attached to the coordinates or through insertion of numeric angles in the pop-up window.



## 7. Move

Selected objects can be arranged by moving the mouse – holding left click – over the coordinate axes displayed in the corner of the built box or by inserting digits into the pop-up window



The dima Print parameter matrix supplied by Kulzer gives important recommendations on how to arrange different dental indications on the build platform and find correct settings. Please see the image below as an example.






Please visit the cara Print Support Hub for the most recent version:

[www.kulzer.com/mycube-support](http://www.kulzer.com/mycube-support)

Application Information / cara Print Cube V2: 09.04.2025

**cara**

### DIMA PRINT PARAMETER MATRIX

PICTURE	MATERIAL	INDICATION	ORIENTATION	REINFORCE MENT	Z- COMPENSA TION	Z LIFT HEIGHT	REMARKS
	dima Print Stone beige	Model / Die-Model	0°	horseshoe model: yes	no	3 mm	▪ Just fill the resin tank to the 500ml line
	dima Print Stone beige	Die-Model	0°	no	no	3 mm	▪ Just fill the resin tank to the 500ml line
	dima Print Splint clear	Splints	35°-40°	one reinforcement bar recommended	0.4 mm	7 mm	▪ Use Z-Compensation before auto supporting ▪ Just fill the resin tank to the 250ml line for transparent materials ▪ Postcure with supports
	dima Print Cast ruby	▪ Partial Frameworks ▪ Bridges up to 5 units ▪ Crowns ▪ Copings ▪ Inlays ▪ Onlays ▪ Veneers	0-10°	optional for frameworks	no	5 mm	▪ Using "no support areas" could be necessary depending on geometry of framework ▪ Postcure with supports
	dima Print Denture Base Try-in	Try-Ins	0°	no	no	5 mm	▪ Postcure without supports

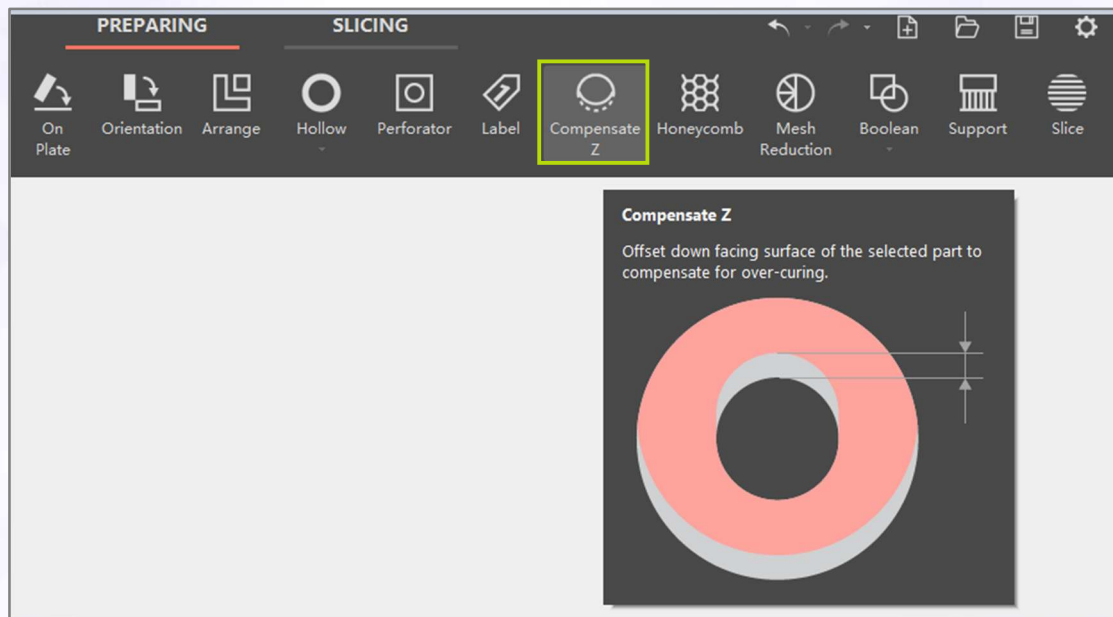
Find the current version here: [kulzer.com/mycube-support](http://kulzer.com/mycube-support)

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MITSUBISHI CHEMICALS GROUP

## 8. Z-compensation

When the object is in the desired final position, AFTER rotating but BEFORE creating supports, the necessary object and material related z-compensation MUST be checked in the dima Print parameter matrix and set in the pop-up window to avoid overbleed.

Not using the function may affect surface quality and/or accuracy.

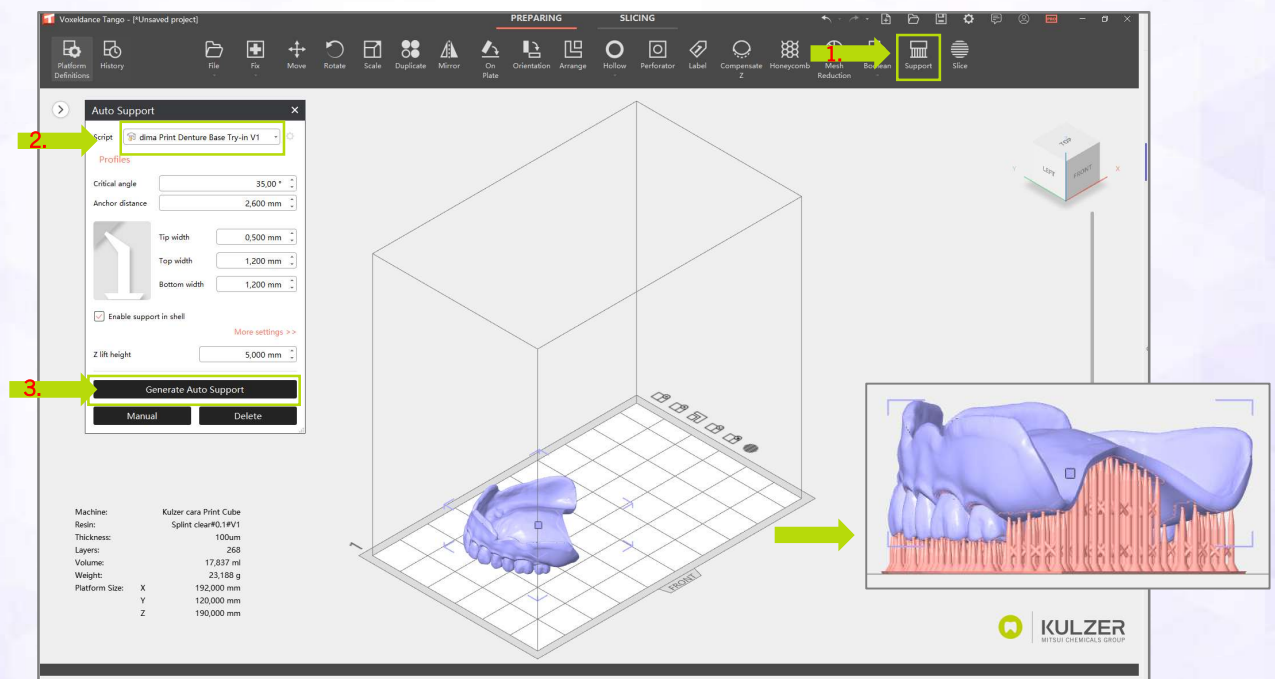


## 9. Auto Support

For each dima material you can choose a script with suitable supports.

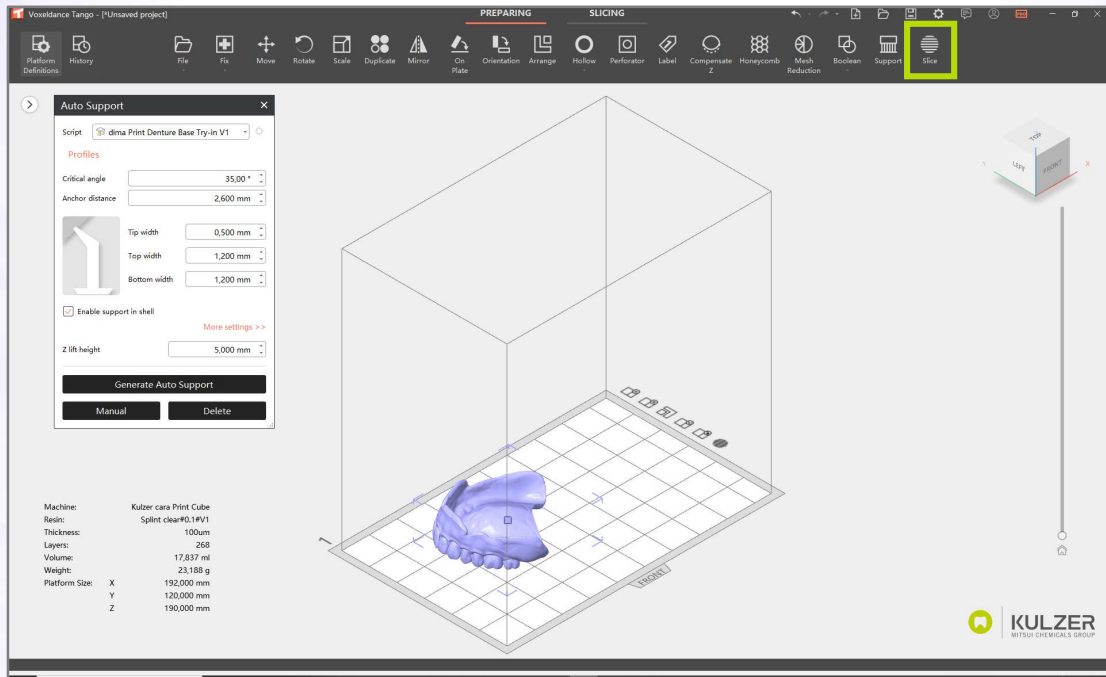
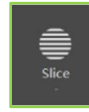
“Z-height” depends on the indication and needs to be set based on the dima Print parameter matrix.

Kulzer recommends putting each device on supports.



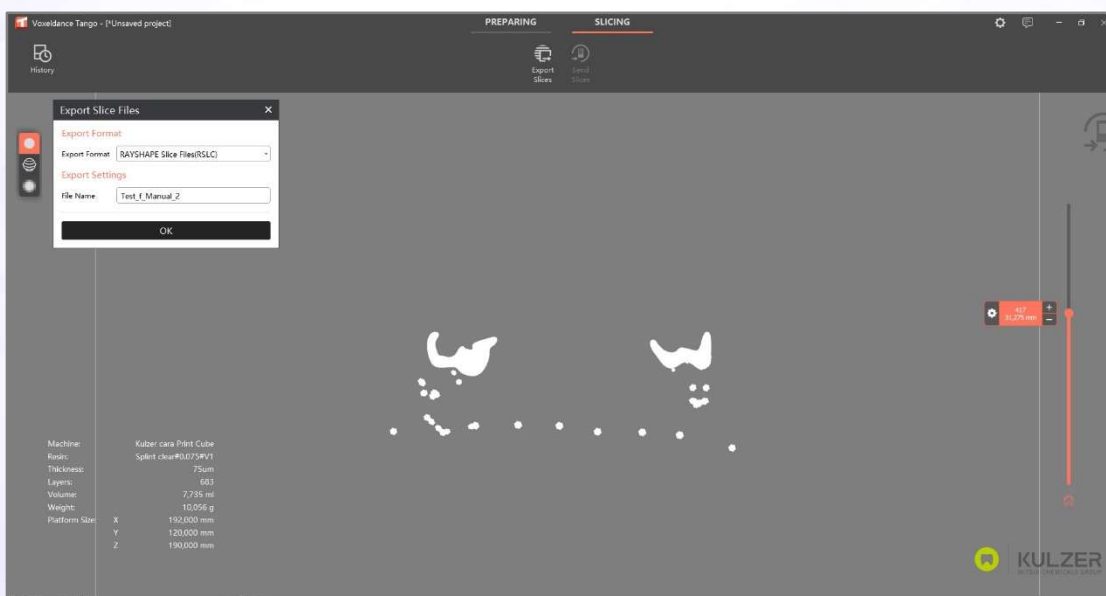
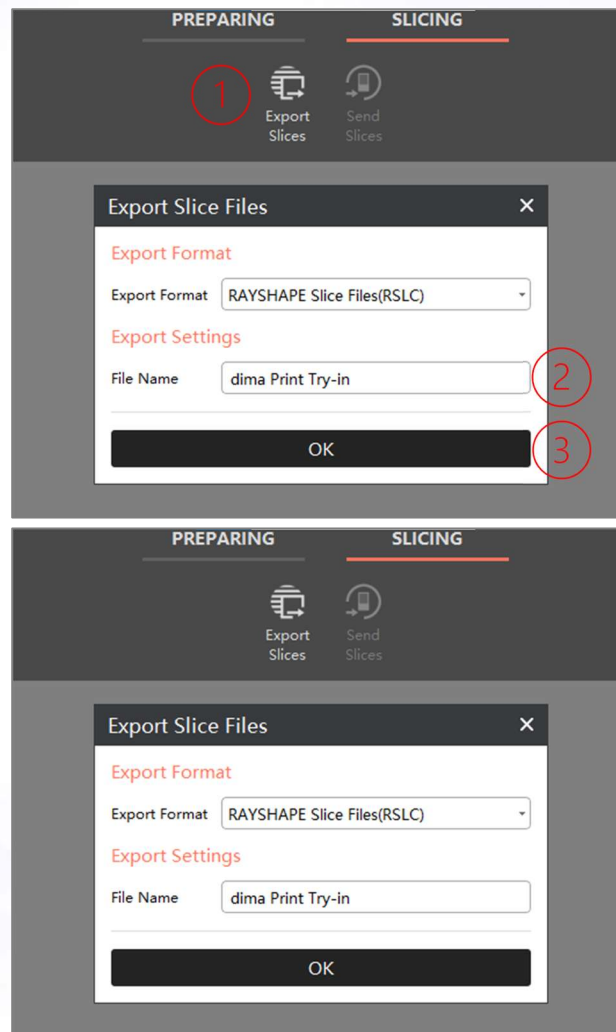
## 10. Slicing

After all parts are prepared, click “Slice”



## 11. Export slicing file to cara Print Cockpit



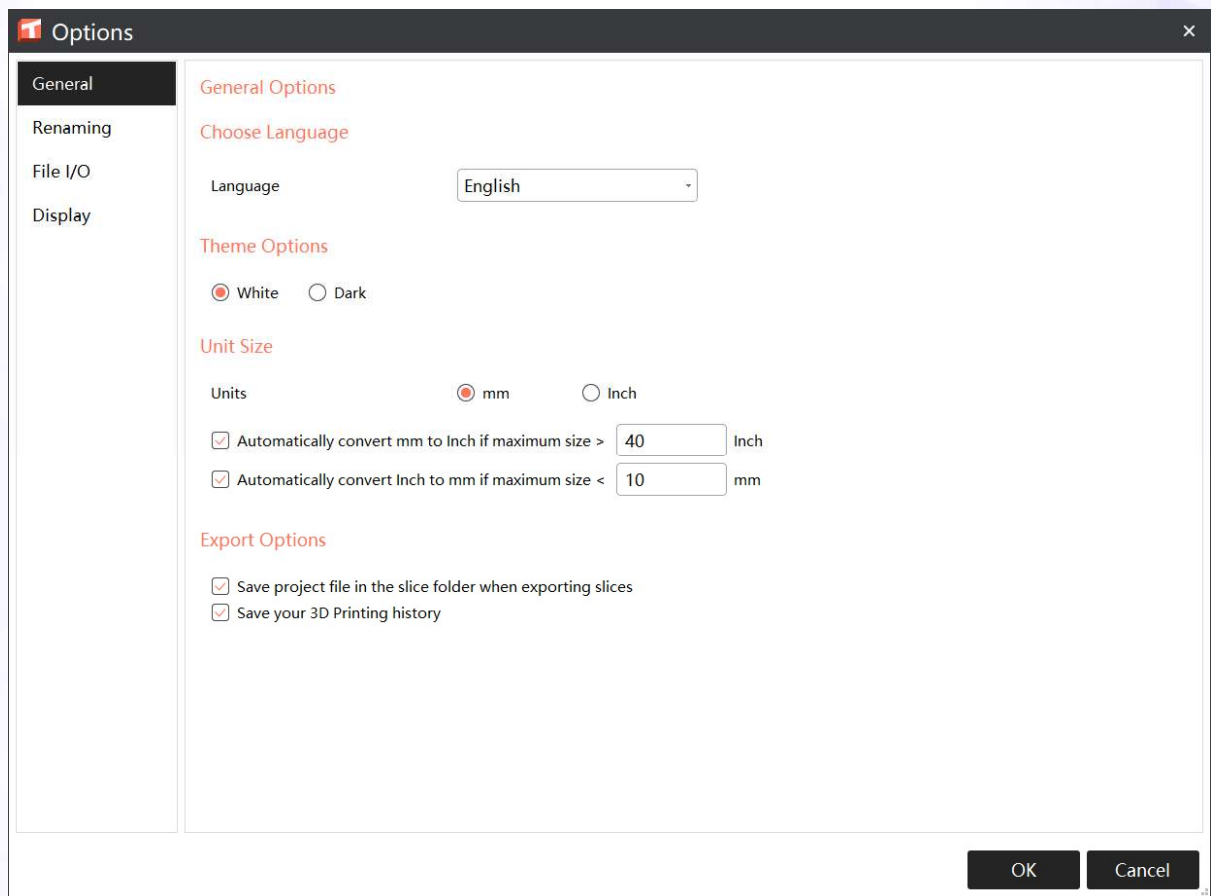


For more options how to use the Slicer software see Kulzer's online tutorials:  
<http://www.kulzer.com/mycube-support>

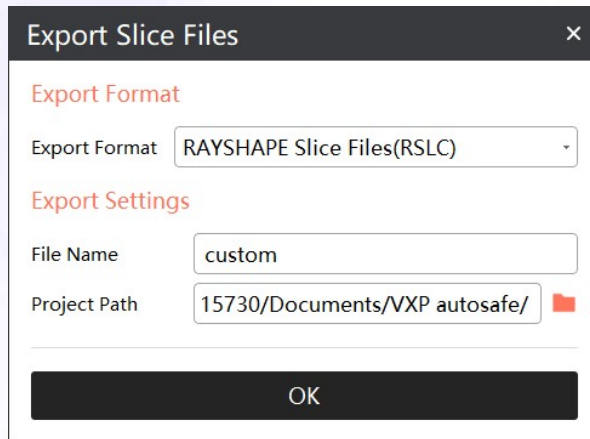
## 12. Save project

It is highly recommended to always save the “.vxp” Tango project. This will allow you to always quickly get back to the project you worked with in case you need to at a later stage. Furthermore, this helps the Kulzer support team a lot when trouble shooting is required.

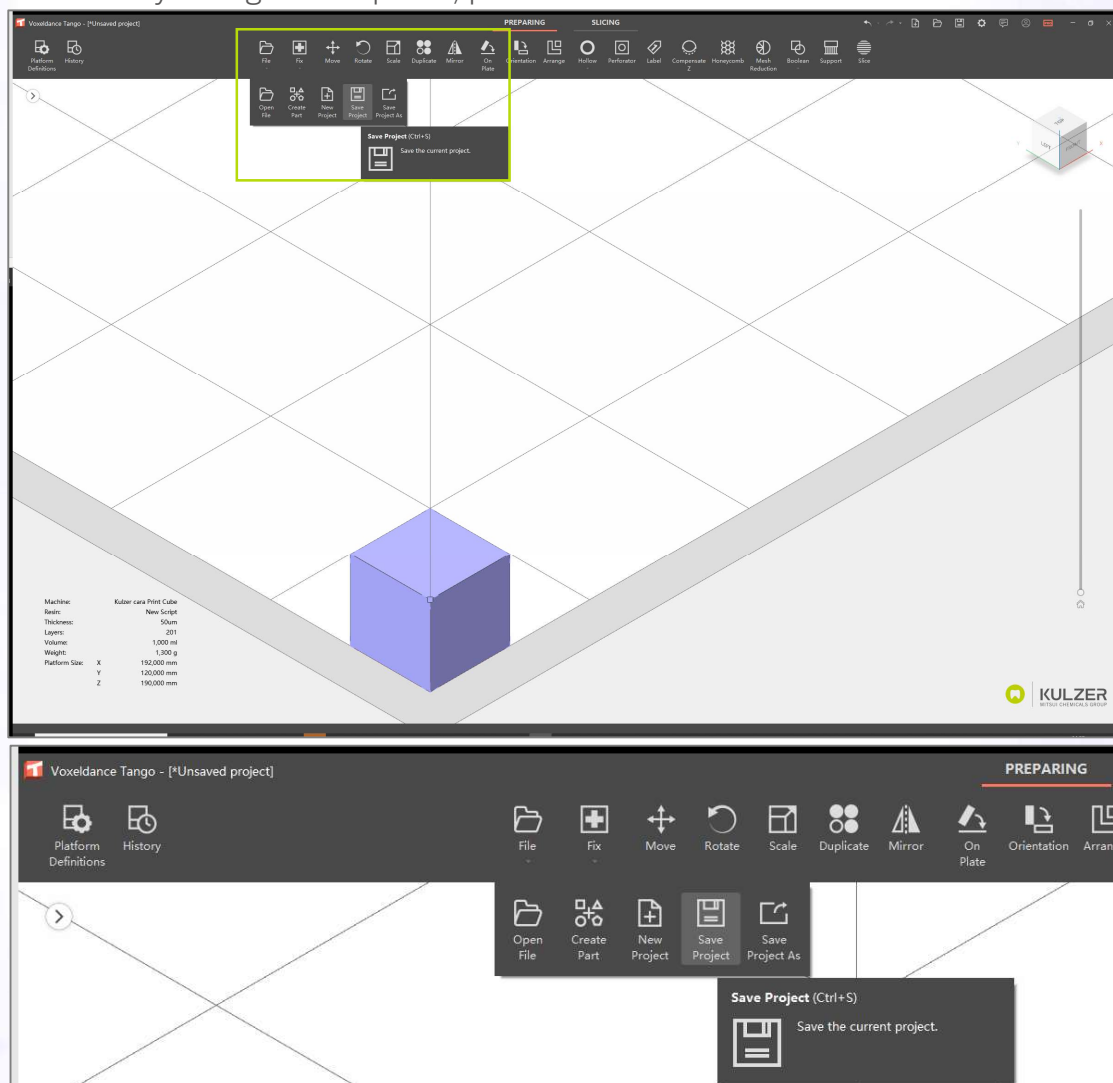
**Highest recommendation:** Activate the “.vxp auto save” function as shown below in “Export Options”



During Export Slice Files the project path can be set:



For manually saving the “.vxp” file, please see below.

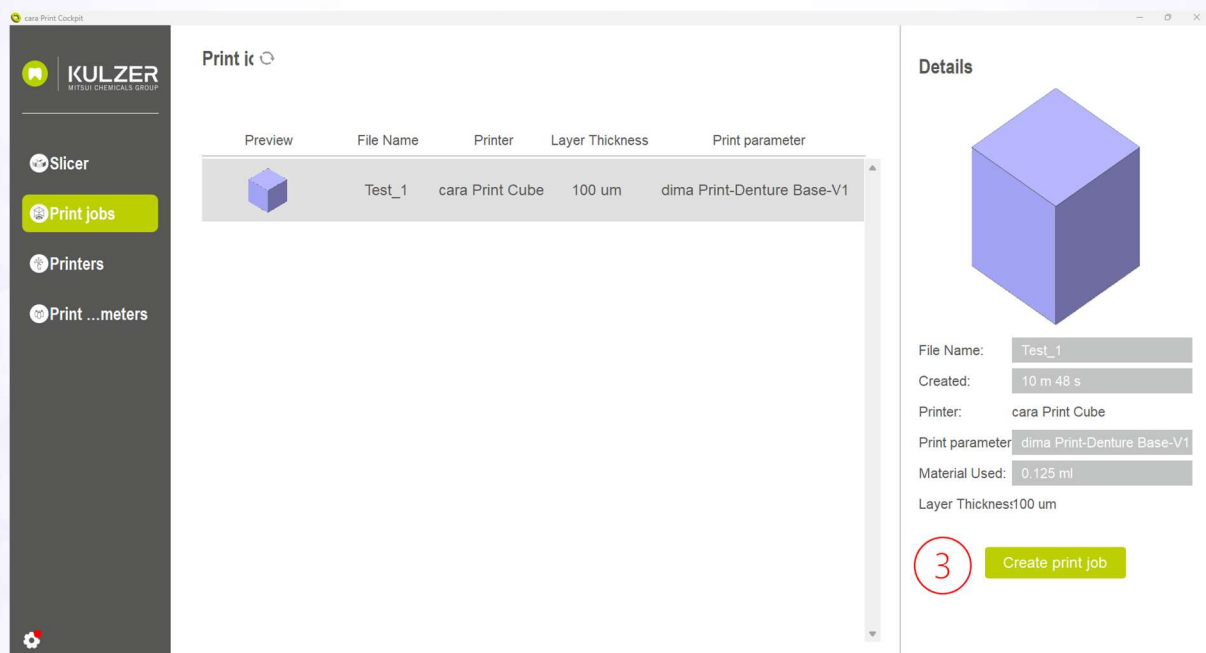


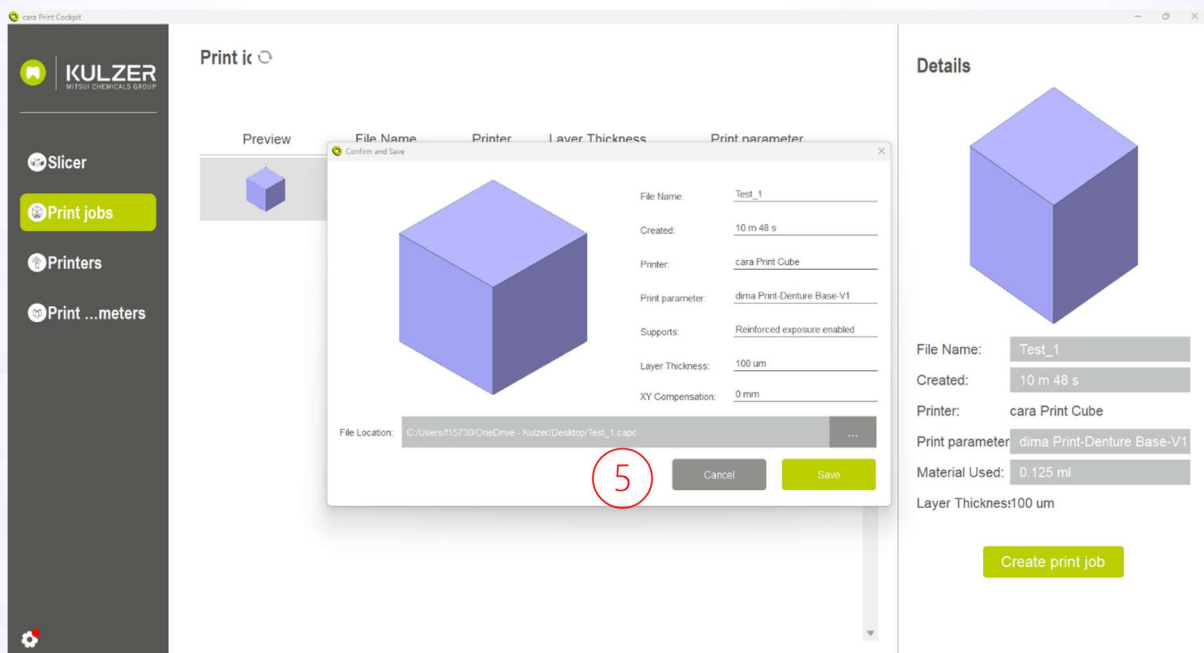
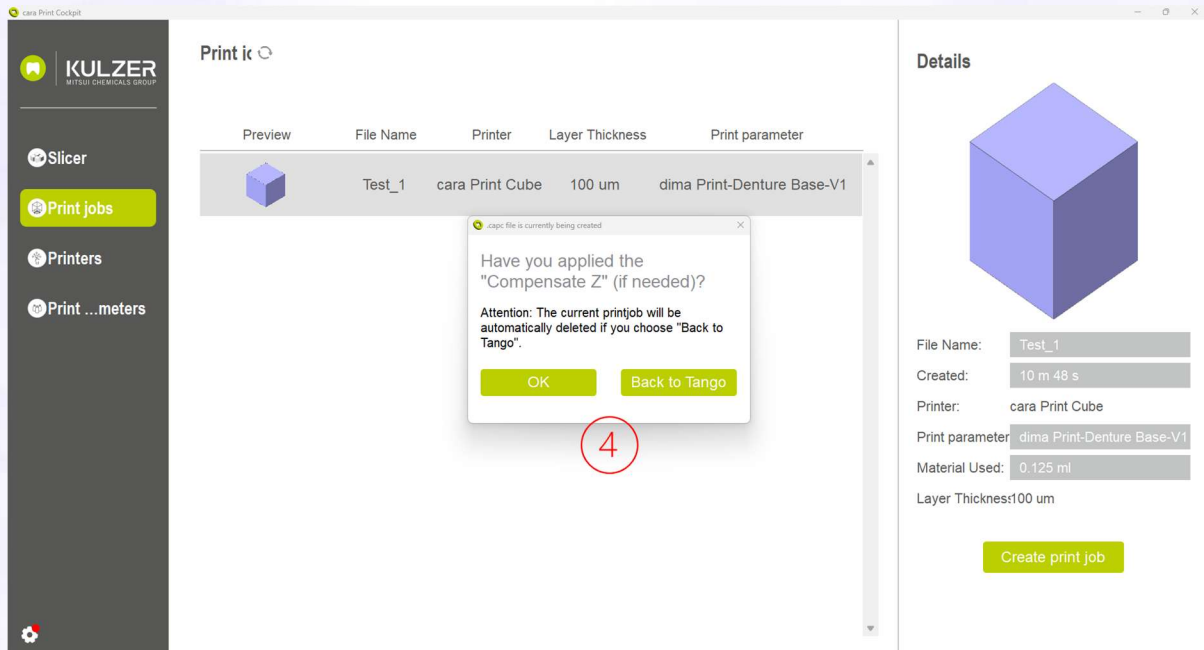


### 13. Create print job in cara Print Cockpit (Based on Voxeldance Tango Export)

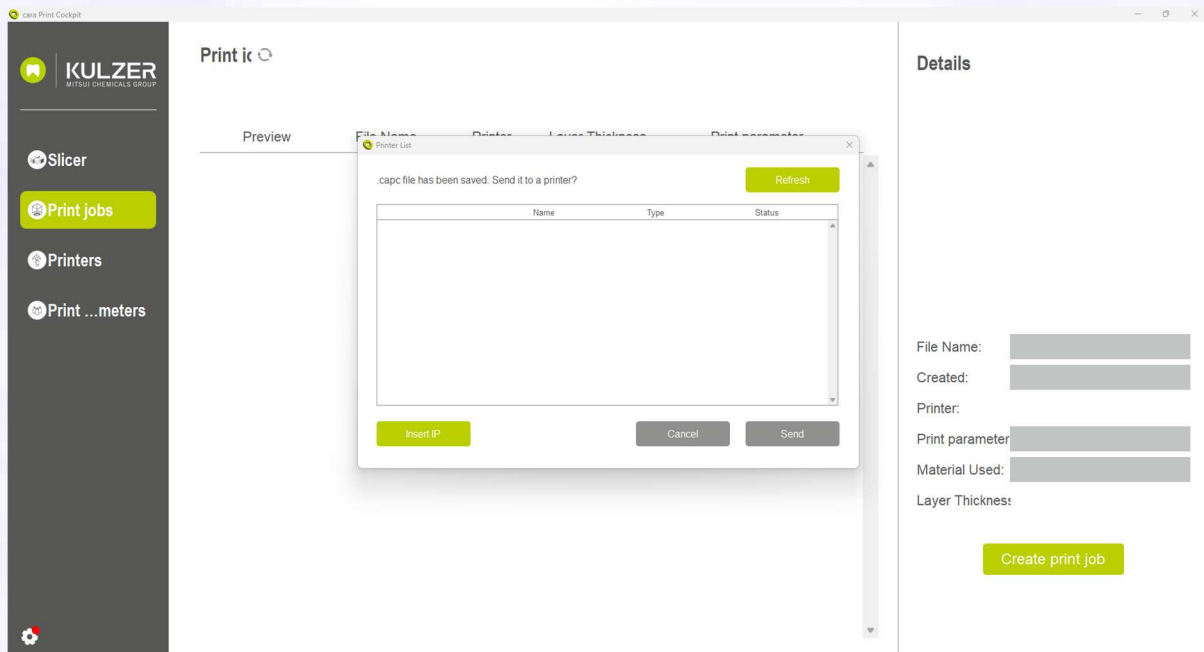
1. Click Print
2. Choose Print job
3. Create Print job
4. Confirm Compensate Z or go back to Tango
5. Chose Location
6. Save

Starting with cara Print Cockpit V1.0.06, a window will pop up to remind you, if you have applied a z-compensation value. You need to either confirm or go back to Tango to set a z-compensation value.





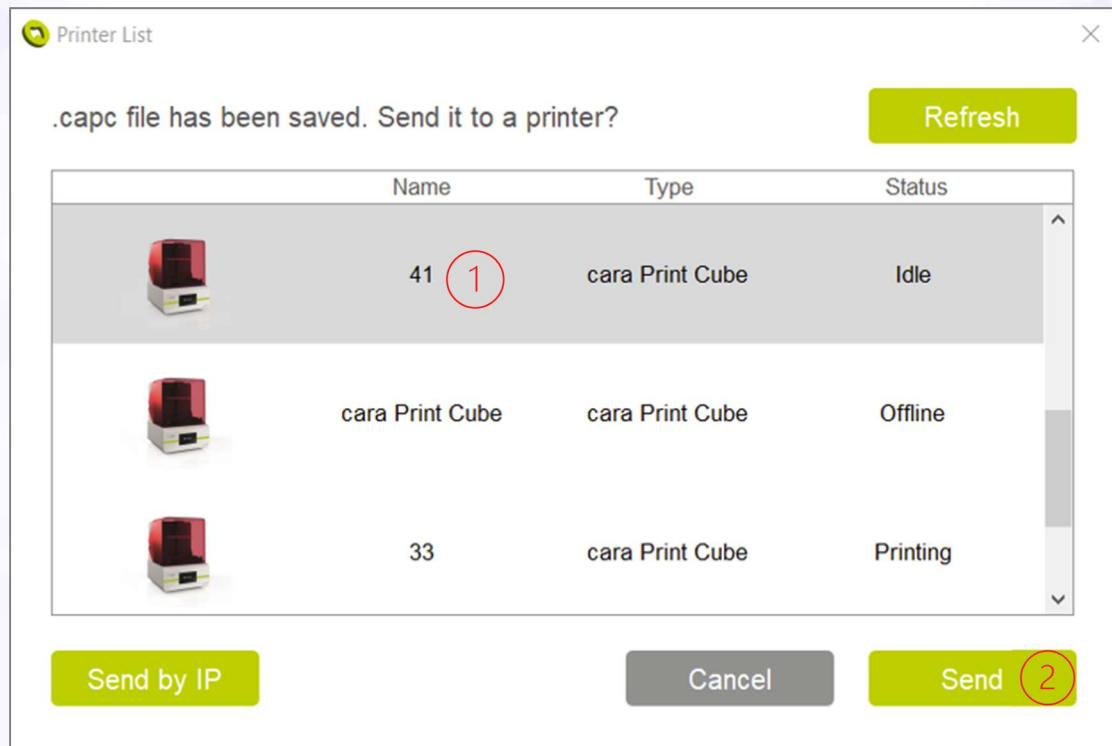
If you have printer connected in your network, you can now select it and send the print via the network.



#### 14. Send the print job to a printer

##### 1. Send the print job via Network

Select the printer that should be used for printing in the pop-up window and click “Send”.



##### 2. Send an existing slicing file to a printer

Select the printer that should be used for printing in Printers Tab and click “Send File”, choose the slicing file to be sent in the pop-up window.



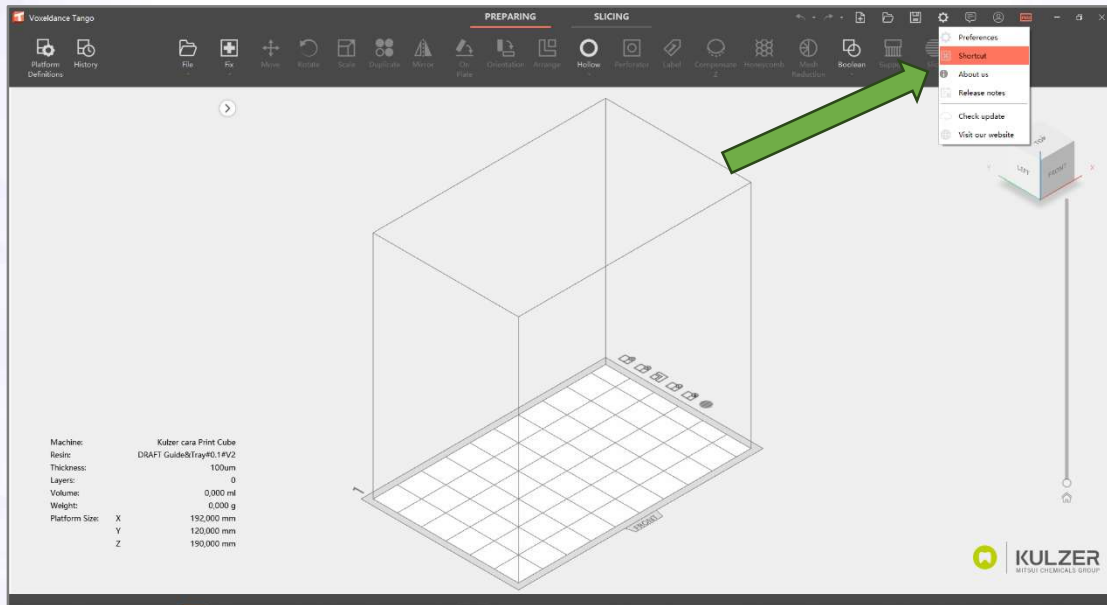
##### 3. Copy the slicing file with a USB drive

Copy the slicing file saved in Step 6) to the root directory of a USB drive, plug the USB drive, plug the USB drive into the printer to upload the slicing file.

# Special functions & Tricks in Tango

## Shortcuts

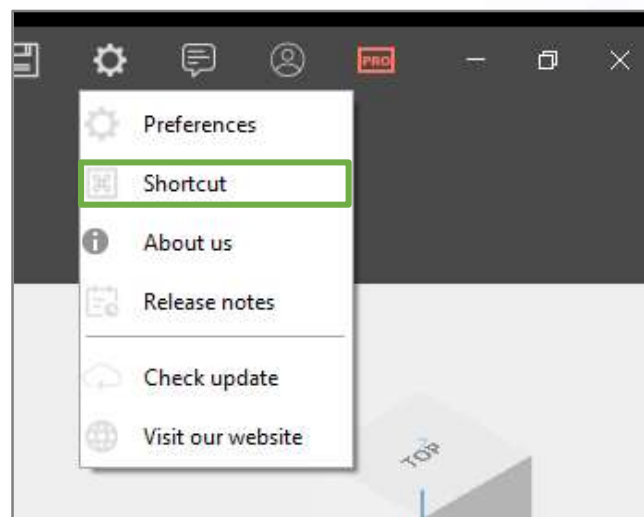
Shortcuts can be helpful to maximize workflow efficiency.

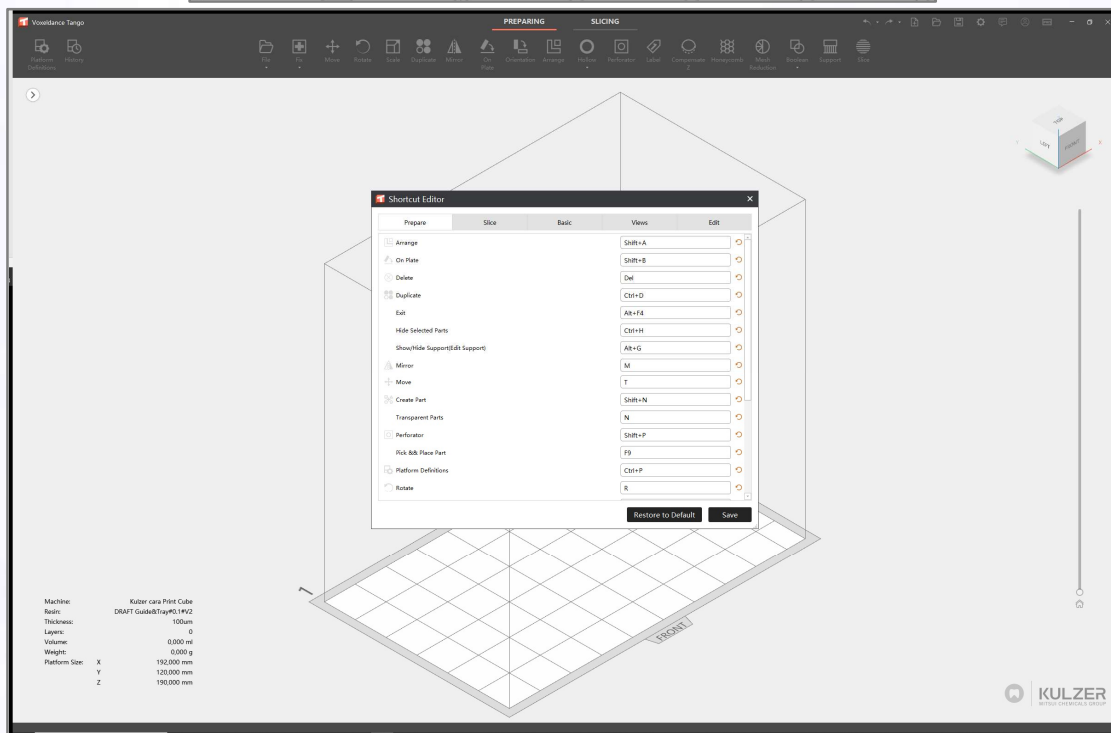
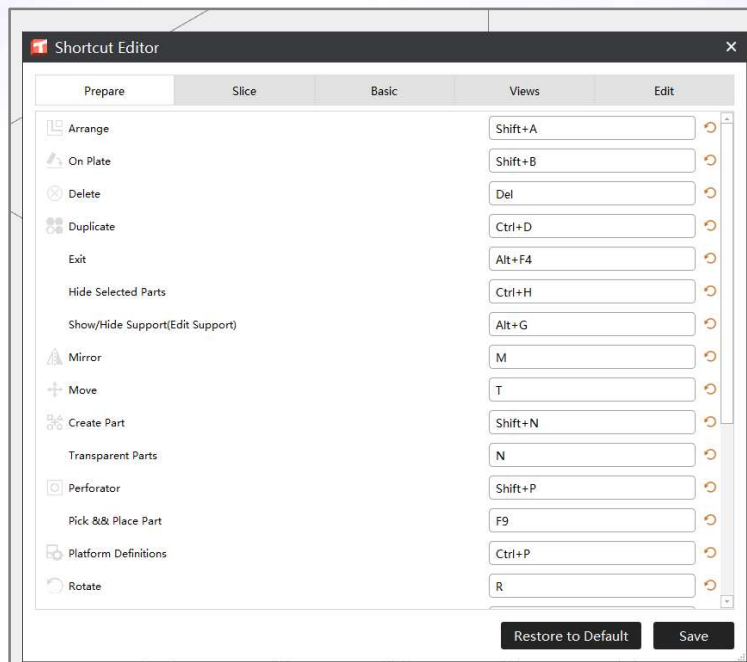


You can check and change the shortcuts by:

1. Left click on gear symbol
2. Left click on "Shortcut"
3. Check or change shortcuts

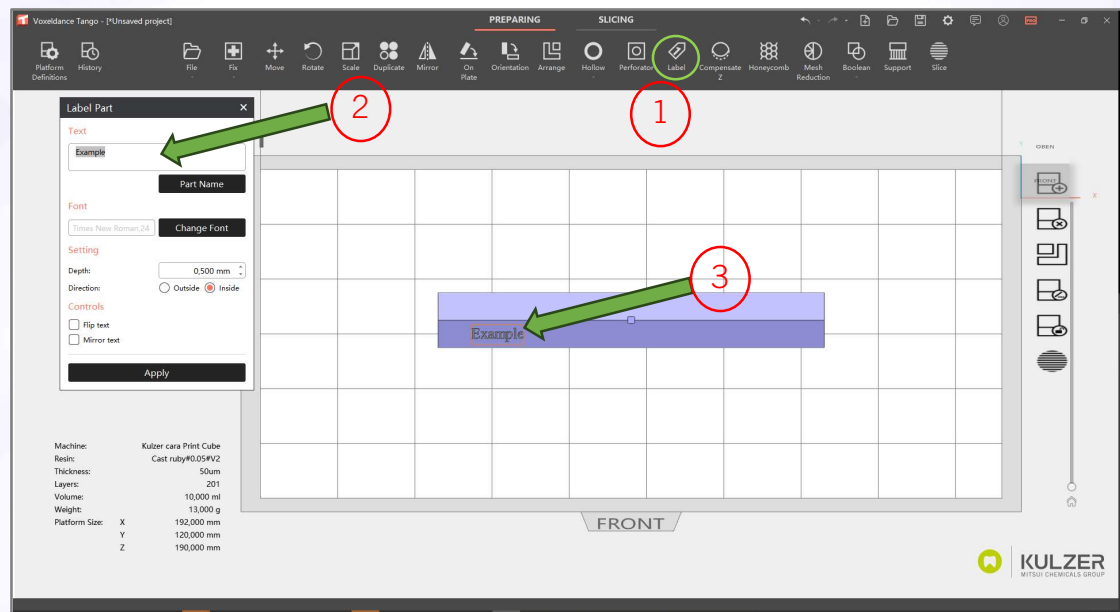
See following screenshots as visualization.





## Labeling of parts

Sometimes it is helpful to engrave parts for better identification.



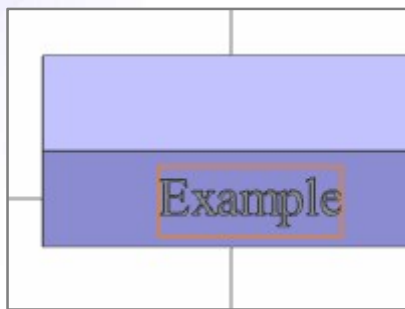
1. Click on “Label” button



2. Insert text or click “Part Name” to use part name



3. Mark/select label location on part by holding right mouse button to create text box (text will be stamped in view direction)



Settings

“Outside” = extrudes text

“Inside” = engraves text

## Add or delete supports manually

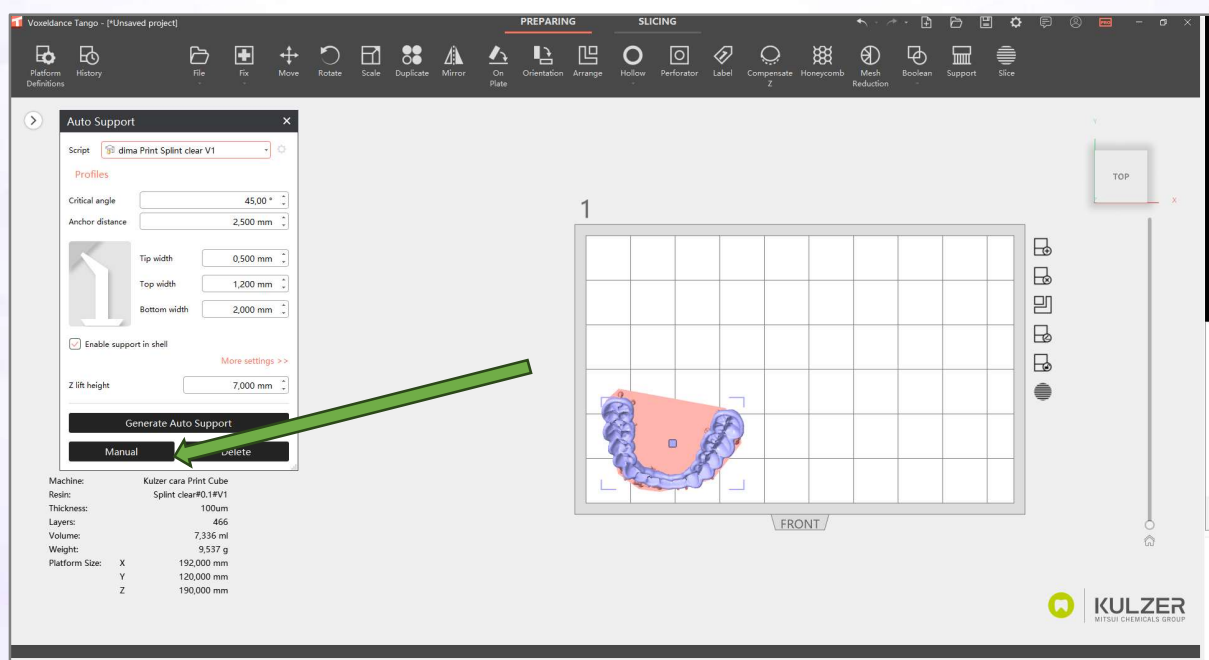
The indication related “Auto Support”-scripts are tailored to provide an optimal balance between support density and post process effort.

In raw cases your design needs a little more or less supports to improve your workflow and post process. Kulzer recommends to carefully check the slices for islands if you remove supports manually.

For details, please find corresponding video tutorials on Kulzer’s support hub. In the following section the workflow is just explained briefly.

To adjust, add or delete supports:

1. Click on “Manual” in the “Auto Support” menu.





Auto Support

Script dima Print Splint clear V1

Profiles

Critical angle

45,00 °

Anchor distance

2,500 mm

Tip width

0,500 mm

Top width

1,200 mm

Bottom width

2,000 mm

☒ Enable support in shell

[More settings >>](#)

Z lift height

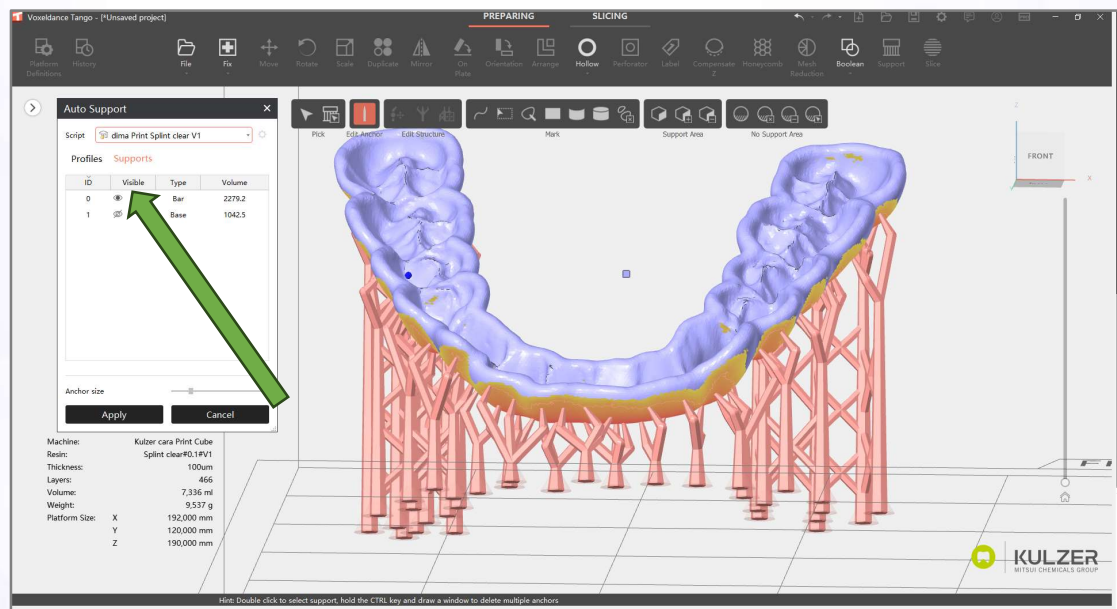
7,000 mm

Generate Auto Support

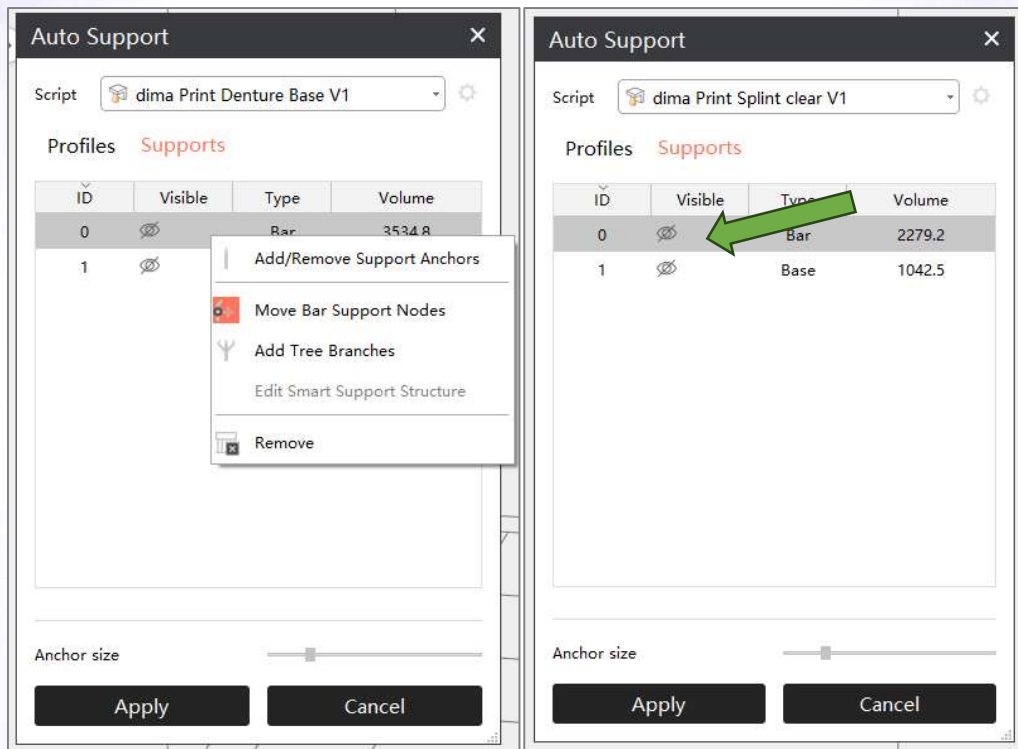
Manual

Delete

2. Hide existing supports by click on the eye in column “visible”.

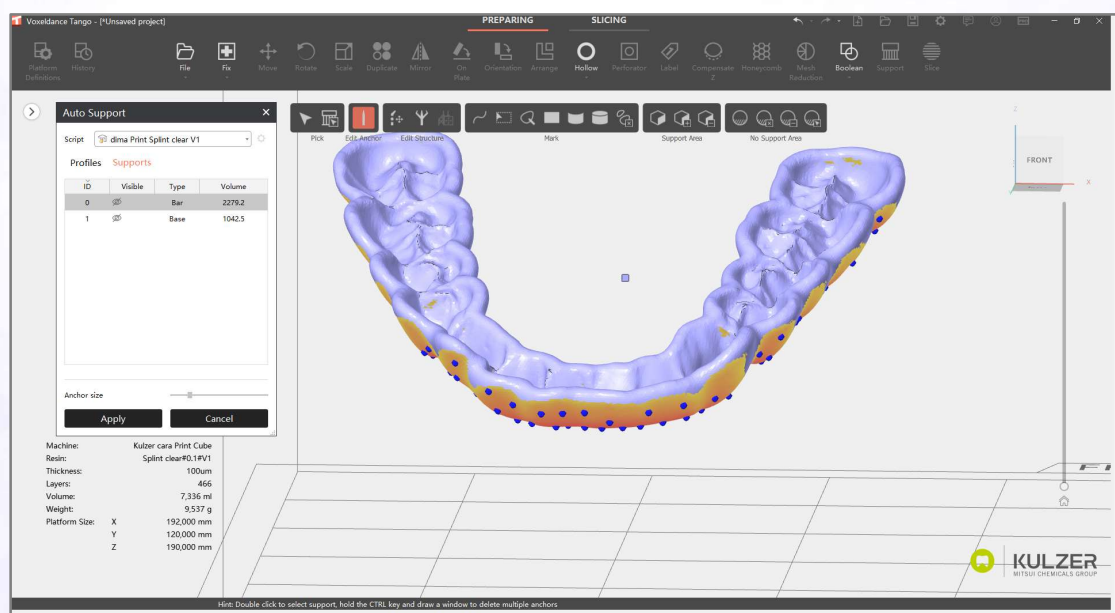


- Click on the area next to the hide eye symbol to show the connection points (see arrow) or right click "Add/Remove Support Anchors"



- The blue balls indicate a support connection point.  
 Adjust support = Drag and drop blue ball  
 Delete support = click on blue ball  
 Add support = click on surface to add blue ball

- Click on "Apply" to activate new supports

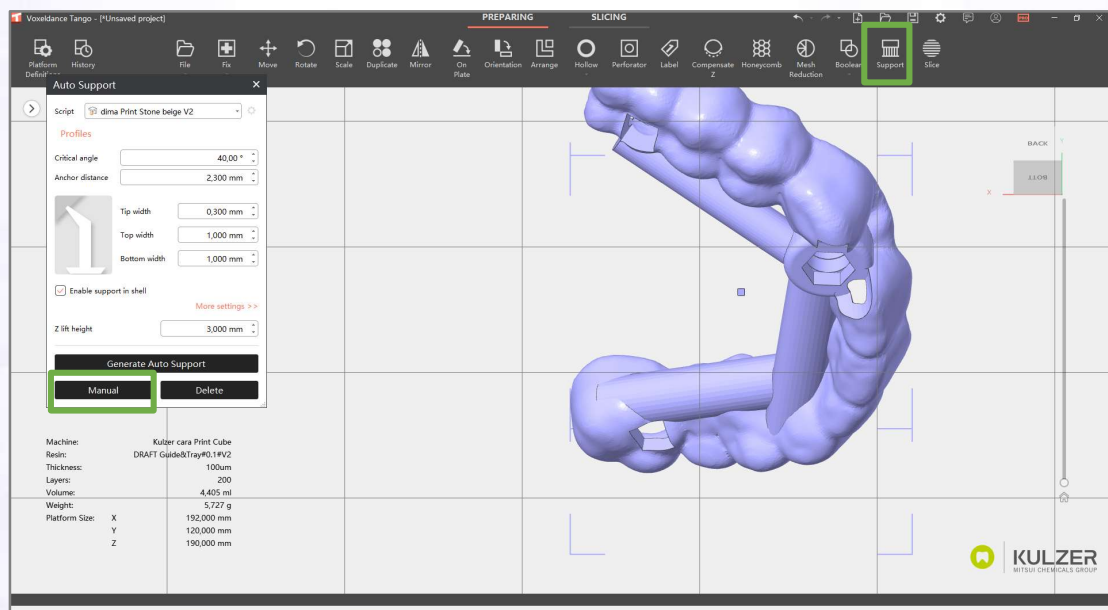


## No Support Area

Some indications have functional areas which should be support free if possible. One example would be a surgical guide as shown below. To skip functional areas in the support generation, the option “No Support Area” can be used. This option is an alternative to deleting supports after Auto Support. Kulzer recommends to carefully check the slices for islands if you use the No Support Area function. Islands are local minima which are not supported.

For details, please find corresponding video tutorials on Kulzer’s support hub. In the following section the workflow is explained briefly.

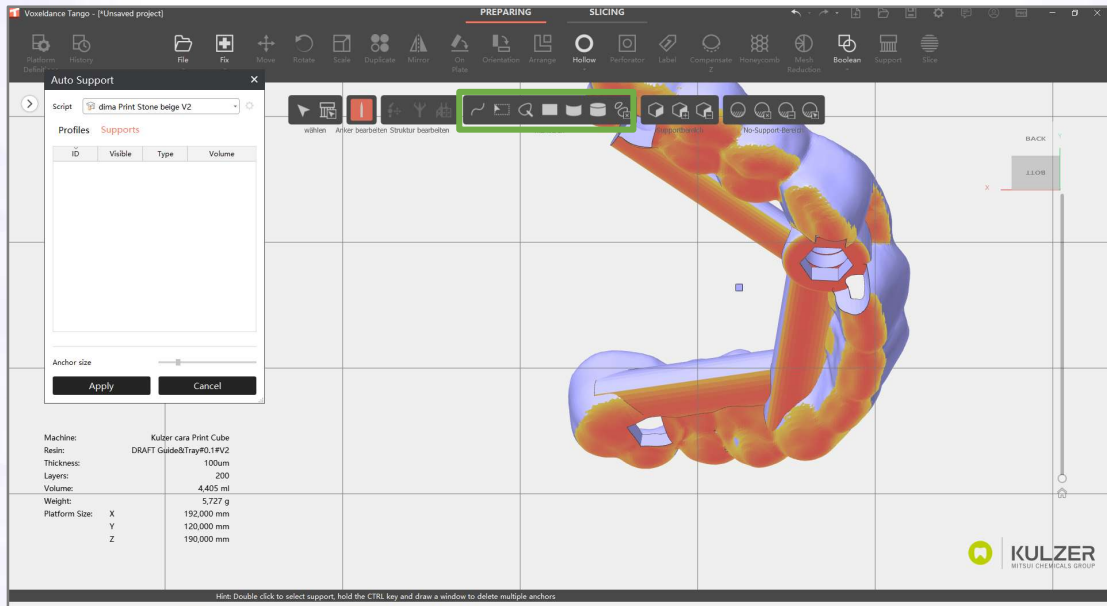
1. Open the “Auto Support” menu
2. Click on “Manual”
3. Use “Mark” tools to mark surfaces
4. Activate marked area (changes from yellow to orange)
5. Auto support to generate supports



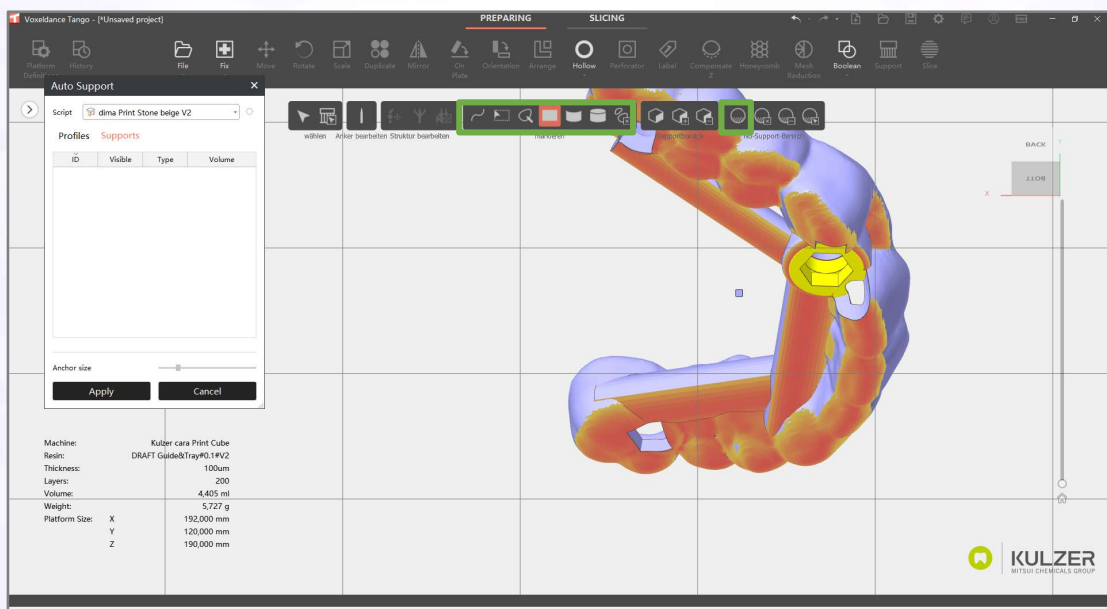
## Tools



## Tools to mark

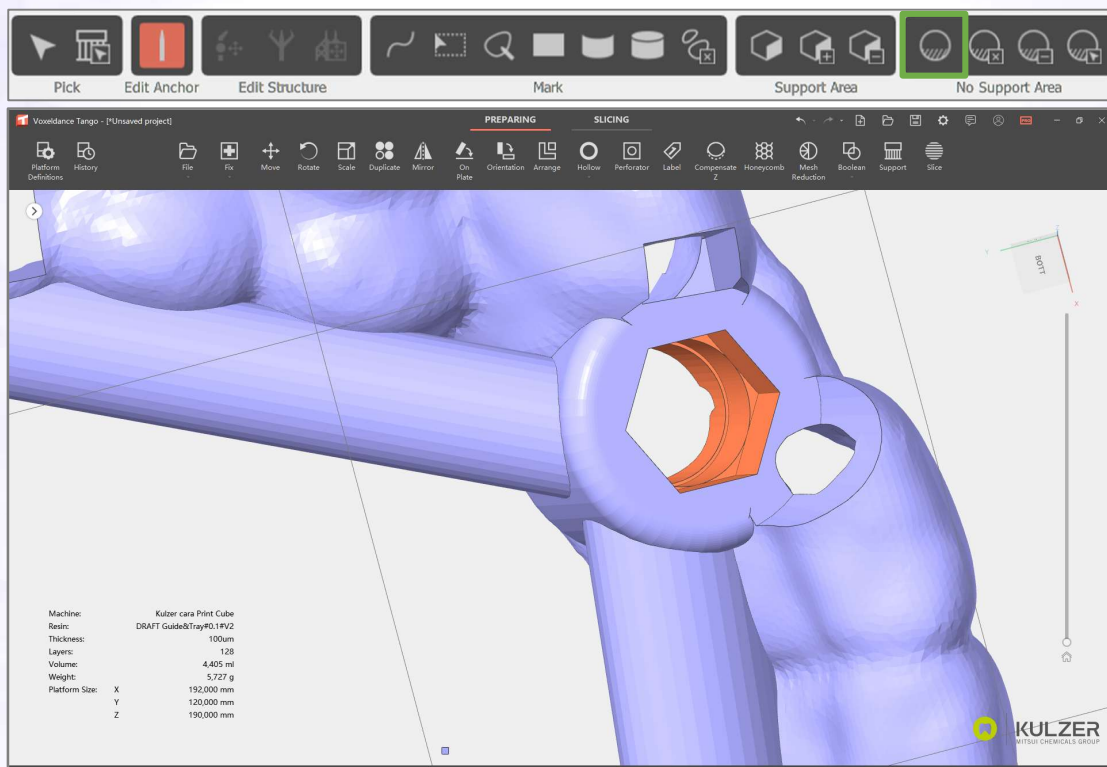


Marked area is yellow.

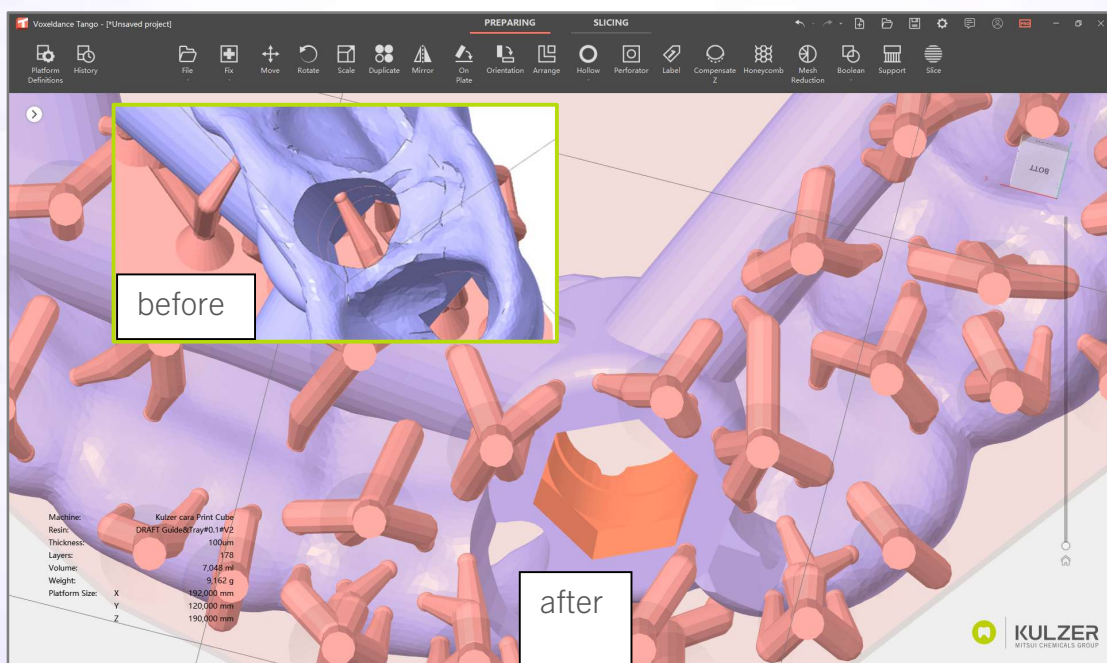




When the surface is marked, click on “no support area” to activate marked area.  
It switches from yellow to orange.



Now apply and generate supports

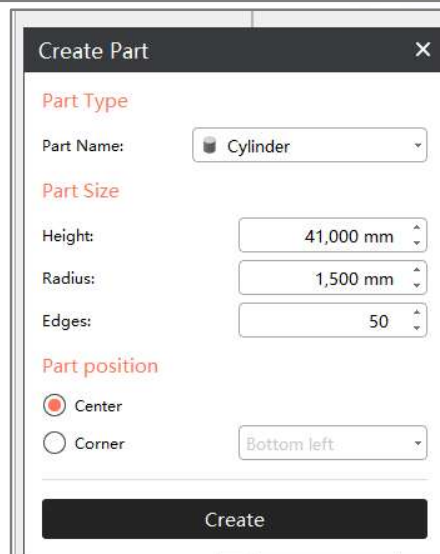
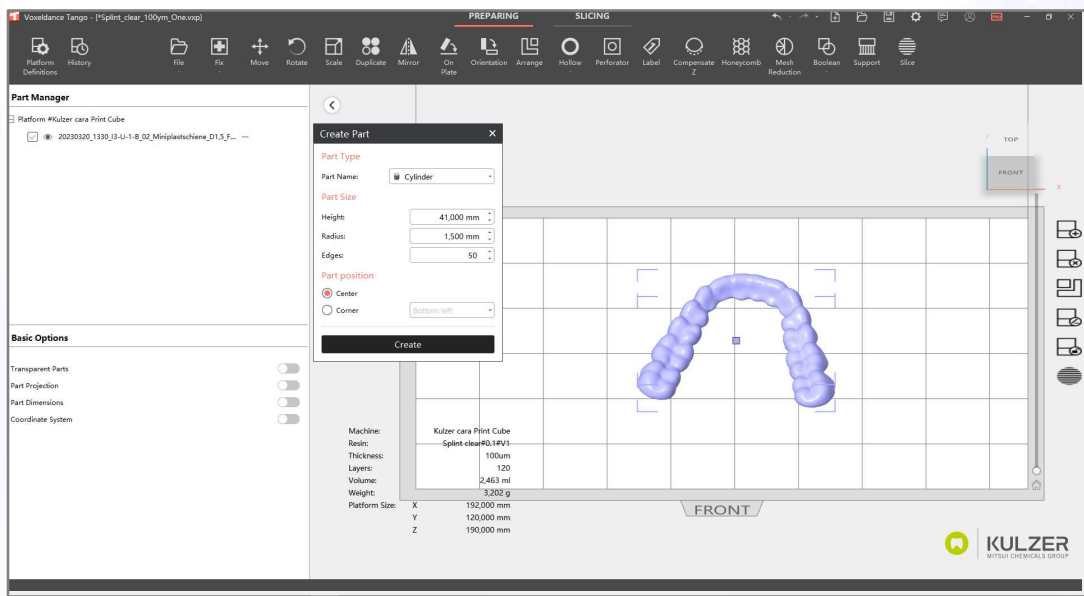


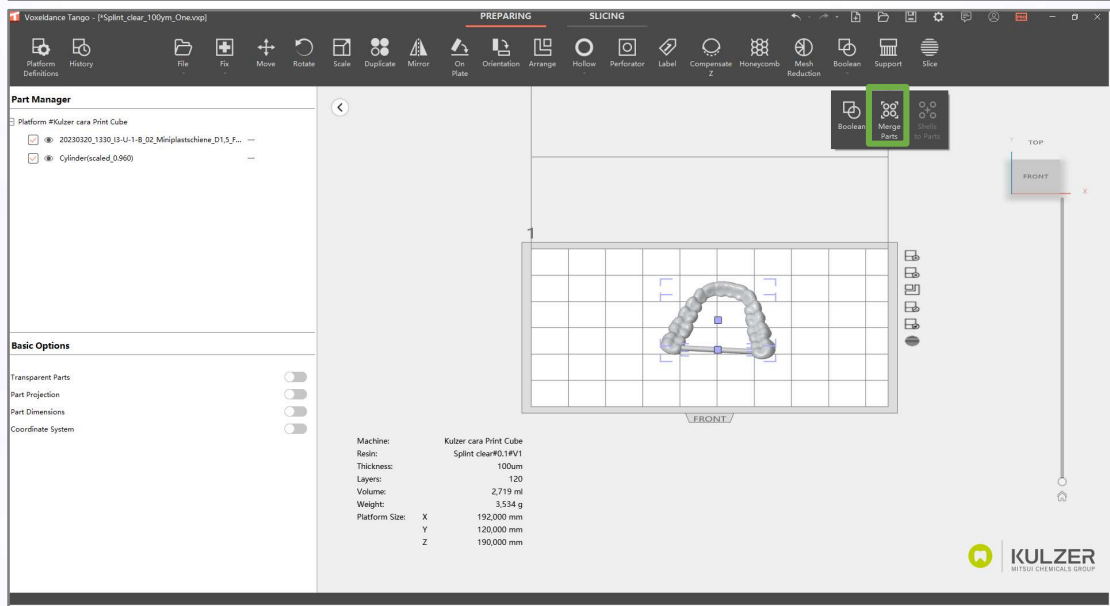
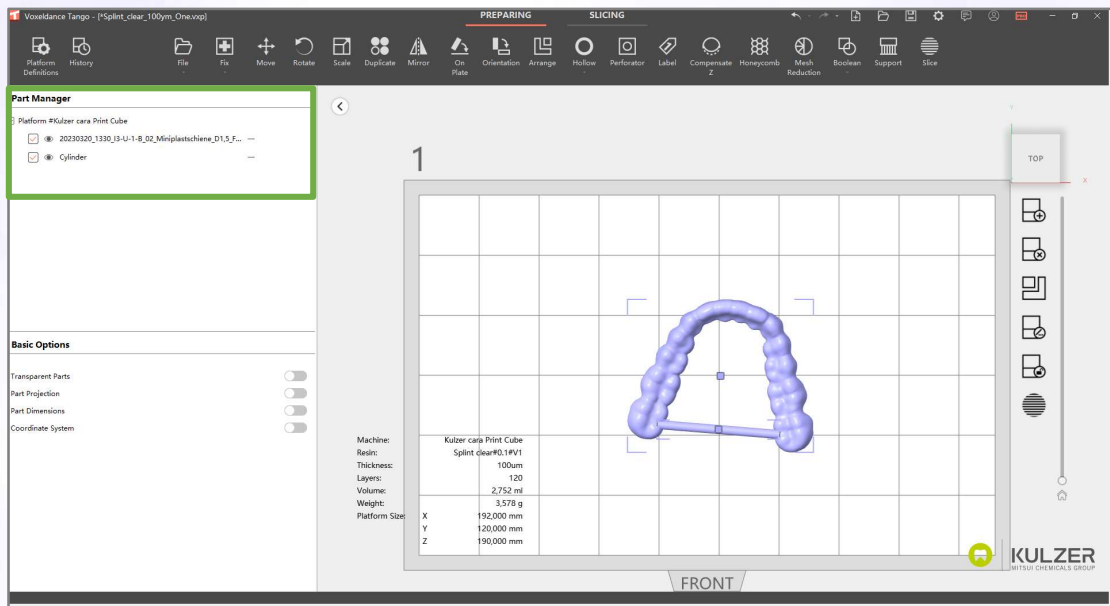
## Reinforcement bars

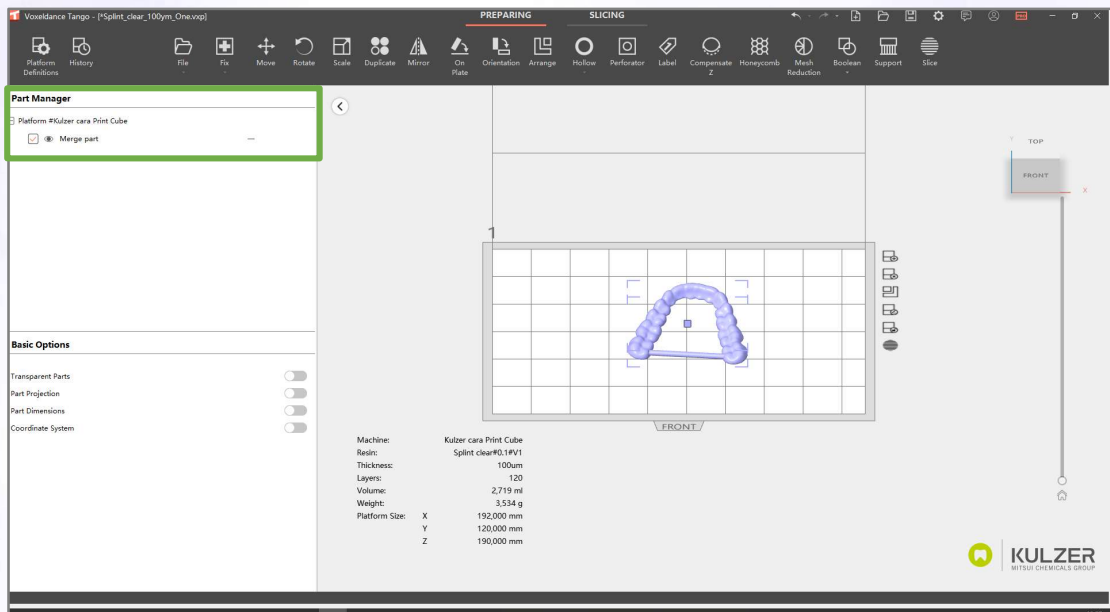
Some designs benefit from a reinforcement bar. Voxeldance Tango enables the user to create simple geometries which can be used as a reinforcement bar by merging them to the design. The Boolean tool enables even more options to combine and subtract parts.

For details, please find corresponding video tutorials on Kulzer's support hub. In the following section the workflow is explained briefly.

1. Create part for reinforcement > File > Create Part > Define Part size > Create  
Help: The standard grid size of the platform is 20mm
2. Move part to position for reinforcement
3. Merge parts by >Boolean> Merge Parts









## Technical Support

If you need support during the use of cara Print Cockpit, please contact your local Kulzer representative. Please see a list of contacts below.

Brasil	Kulzer South America Ltda. Rua Cenno Sbrighi, 27 - Sala 42 - Água Branca 05036-010 São Paulo SP Brasil <a href="mailto:support.br@kulzer-dental.com">support.br@kulzer-dental.com</a>
Germany	Kulzer GmbH Leipziger Straße 2 63450 Hanau Germany <a href="mailto:cara@kulzer-dental.com">cara@kulzer-dental.com</a>
France	Kulzer France S.A. Les Conquérants - Bât. Everest 1, avenue de l'Atlantique 91976 Les Ulis - ZA Courtabœuf Cedex France <a href="mailto:support.fr@kulzer-dental.com">support.fr@kulzer-dental.com</a>
Italy	Kulzer S.r.l. Via Console Flaminio 5/7 20134 Milano Italy <a href="mailto:support.it@kulzer-dental.com">support.it@kulzer-dental.com</a>
Republic of Korea	Kulzer Korea Co., Ltd. Room 501, Namsung Plaza Bldg. 345-30 Gasan-dong, Geumcheon-gu, Seoul 153-782 Republic of Korea <a href="mailto:support.kr@kulzer-dental.com">support.kr@kulzer-dental.com</a>
USA & Canada	Kulzer, LLC 4315 S. Lafayette Blvd. South Bend, IN 46614 USA <a href="mailto:cara-service-na@kulzer-dental.com">cara-service-na@kulzer-dental.com</a>
Australia & New Zealand	Kulzer Australia Pty Ltd New Unit 20 / 53 Lorraine St, PEAKHURST, NSW, 2210 Australia <a href="mailto:support.anz@kulzer-dental.com">support.anz@kulzer-dental.com</a>
Japan	Kulzer Japan Co., Ltd. TSK Bldg., Ltd. 4-chôme-8-13 Hongō, Bunkyo City, Tokyo 113-0033, Japan

## Document history

V1 2024-11-01 First edition

V2 2025-04-22 Addition of new functionalities

V3 2025-10-10 Addition of new functionalities