PIOCREAT



3D Printing Workflow for

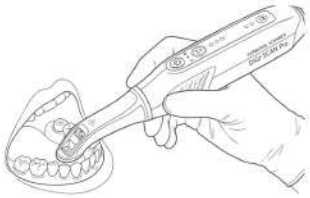
Ceramic Crowns

1 Intraoral Scanning & Design

1.1 Intraoral Scanning

Notice

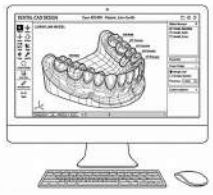
- Clear Margin
- Proper Occlusion
- Sufficient Space



1.2 Design

Notice

- Accurate Margin-line
- Optimal Contacts
- Adequate Clearance



2 Slicing & Printing

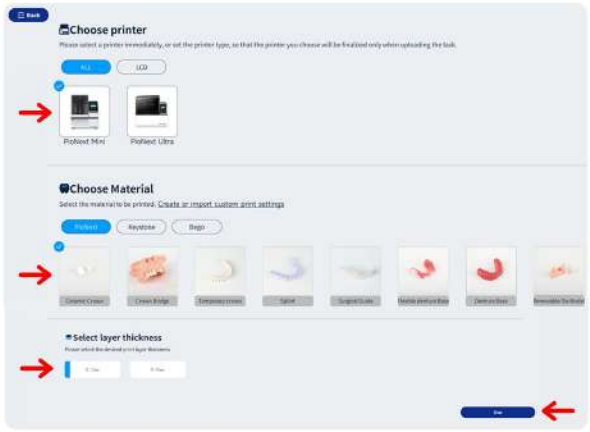
2.1 Slicing

① Printer and Material Selection

→ Open the PioNext Box software
→ Select the【PioNext Mini】and choose【Ceramic Crown】
→ Choose the 【Select layer thickness】and click【Use】

PioNext Box comes with built-in printing parameters, covering a wide range of indications, including fixed, removable, implant, and aesthetic restorations

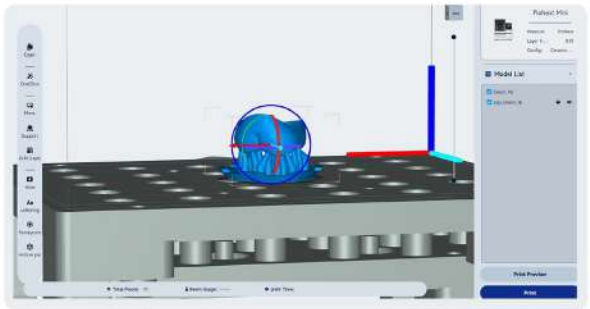
PioNext BOX



② Orient Models

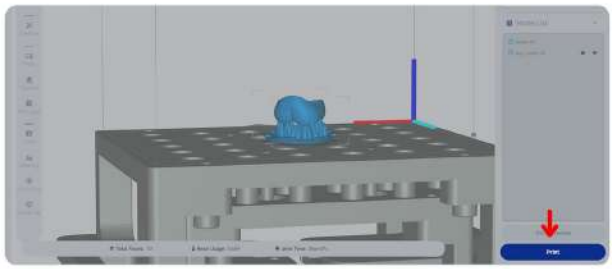
→ Click 【Auto Add Supports】

Note: Arrange supports in non-critical areas, such as the buccal side, occlusal surface or other polishable surfaces



③ Slicing

→ Click "Print" in the lower-right corner to generate the sliced file



④ Export Sliced File

→ Method 1: Export the file directly to a USB drive
→ Method 2: Send the file to the printer via WLAN



2.2 Printing

① Preparation

→ Before printing, check the LCD screen and vat release film for damage
→ Ensure the build platform is clean and free of residual resin
→ Shake the resin, then pour it into the vat without exceeding the MAX level
→ Tap 【Print】, select the file, and import

Via WLAN — Tap 【Print】, choose the target file, download and start printing

Via USB Drive — Insert the USB drive, tap 【Print】 select the target file and download it, then start printing

② Quick Release

→ Remove the build platform after printing is finished



→ Press both ends of the platform to quickly release the model



→ Remove the supports



3 Post-processing

3.1 Cleaning

① Prepare cleaning tools



Preparation



Medical cotton swabs



Disposable micro applicators



Non-woven wipes

⚠ Note: Do not immerse the ceramic crown in alcohol, as this may cause ceramic filler precipitation and affect the final restoration quality

② Cleaning Procedure

Medical cotton swabs, disposable micro applicators, and non-woven wipes should be moistened with alcohol before use to clean the restoration



Use an alcohol-moistened medical cotton swab to roughly clean the outer surface and inner surface



Use an alcohol-moistened disposable micro applicator to carefully clean the inner surface and occlusal fossa



Use an alcohol-moistened non-woven wipe to thoroughly clean all areas of the restoration



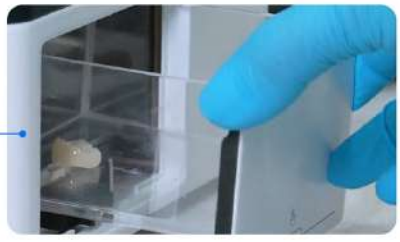
③ Completion Criteria

→ Visual Inspection: After drying, the restoration surface should show no reflective or whitish areas.
→ Tactile Inspection: Gently touch the surface with a glove; no tackiness should be present

3.2 Curing

Curing using the PioNext Mini Curing Unit
Parameter Settings: **PMW 30% 1 min**

Note: These parameter settings are applicable to PioNext ceramic crown resin, for reference only

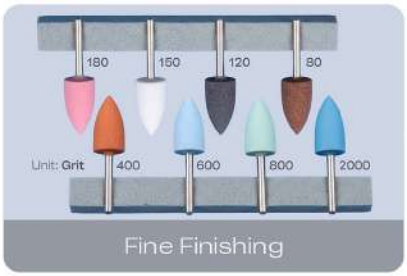




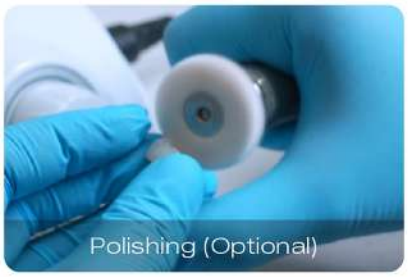
3.3 Grinding



Remove excess material and preliminarily refine the crown morphology



Eliminate fine scratches and create a smooth, uniform surface for glazing



This step is optional and can further enhance the final glazing result

4 Glazing



Select the corresponding shade guide based on the clinical shade value



Mix the glaze paste and start glazing



Complete glazing and proceed to curing
Parameter Settings: PMW 30% 1 min

Note: These parameter settings are applicable to PioNext ceramic crown resin, for reference only

5 Finish



PIOCREAT



Learn More

www.piocreat3d.com

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