APPLICATION GUIDE

FOR DIMA PRINT STONE GRAY

Version 06.2022

dima ▶

Print Stone gray

Lichthärtende Flüssigkeit
für 3D-Druck
Light curing liquid
for 3D-printing

1000 g

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Equipment you need

Design software
CAD design software (3shape) and exocad

Print resin for 3D printing
dima Print Stone gray

3D printer
cara Print 4.0 pro

Wash unit
cara Print Clean pro or ultra sonic bath

Post curing unit
cara Print LEDcure or HiLite power 3D

1. Design notes

Recommended settings for exocad **exocad**

Plateless model design					
Dies	Pin height	Preparation margin	Seating width	Shaft taper	Taper height limit
	2.5 mm	0 mm	1.5 mm	0°	10 mm
	☑ Add concavity		☑ Die bottom parallel to model base		
Settings	Base				
	Horizontal shaft gap		Vertical shaft gap		Pedestal height
	−0.015 mm		−0.015 mm		0 mm
	☑ Hollow model				
	Wall thickness		Bottom sill		Cavity fill diameter
	3 mm		1 mm		0 mm

Recommended settings for 3Shape **3shape**

Model recommended wall thickness	Partial model minimum wall thickness
3–4 mm	2 mm

2. CAM design for cara Print 4.0 pro with cara CAM 2.0

Print position (angle and orientation)
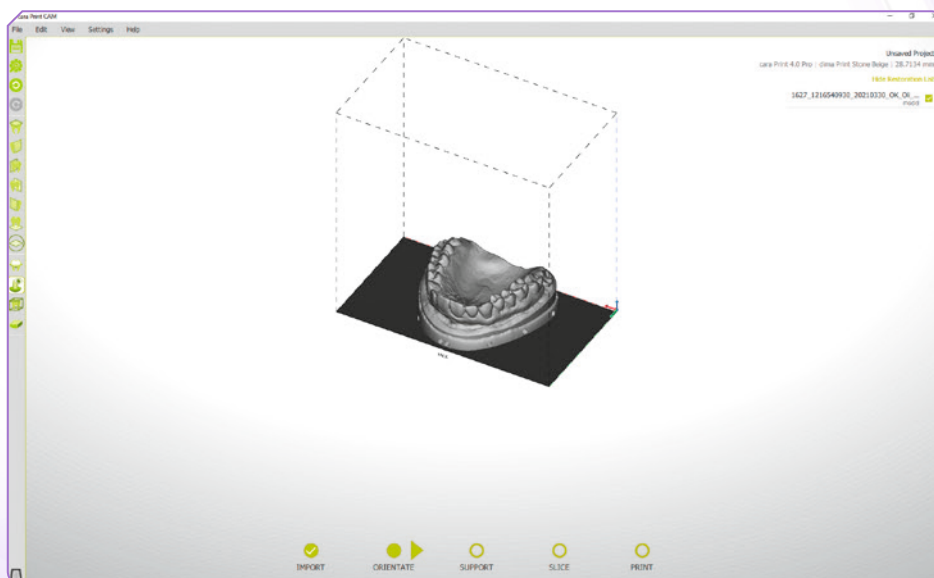
The recommended orientation is flat on the build table with 0° angle for all model types.

2.a   Die models
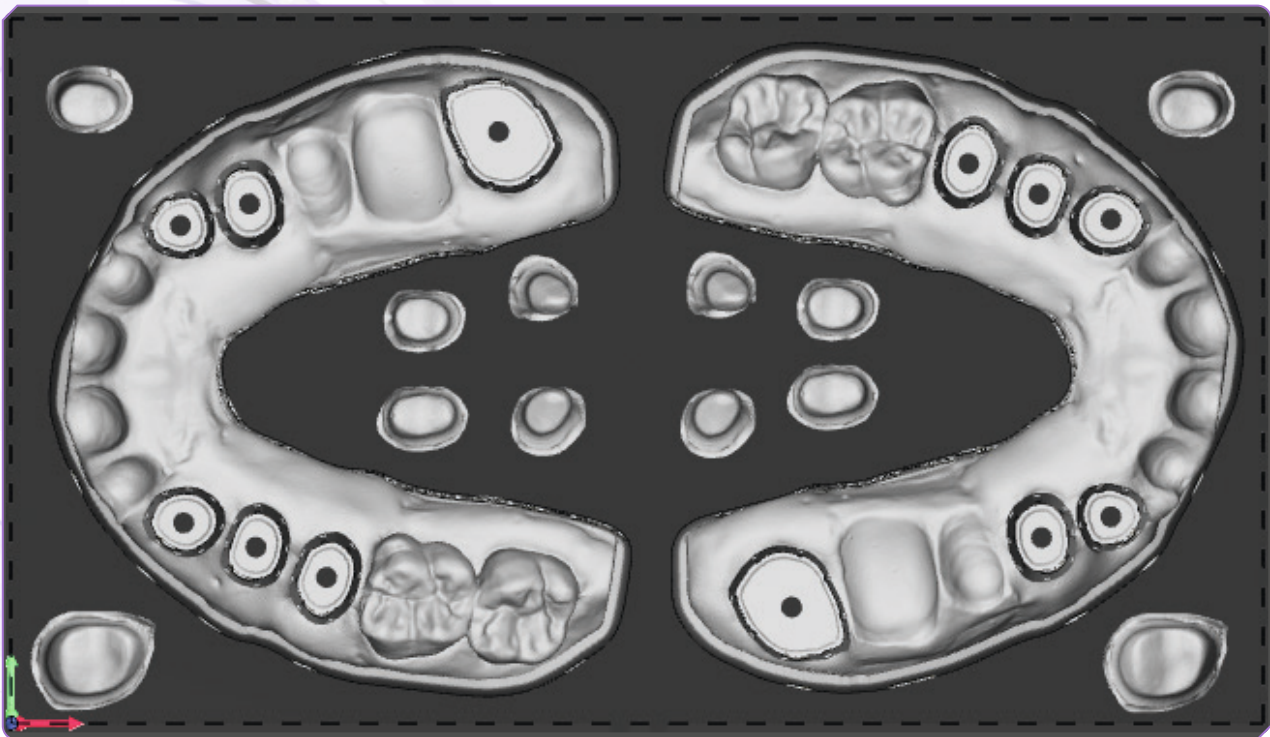
SUPPORTS: no supports needed.

Supports

Top view
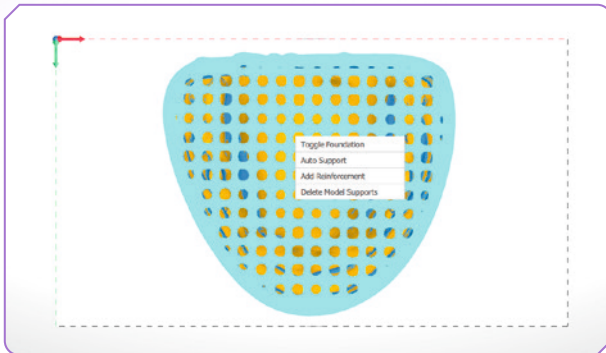

Bottom view

! NOTE:
NO SUPPORTS NEEDED IN THE YELLOW AREAS.

! NOTE:
THE BEST PRINTING RESULT FOR 2 MODELS CAN BE ACHIEVED BY POSITIONING THE U-SHAPED ARCHES AS IN THE PICTURE.
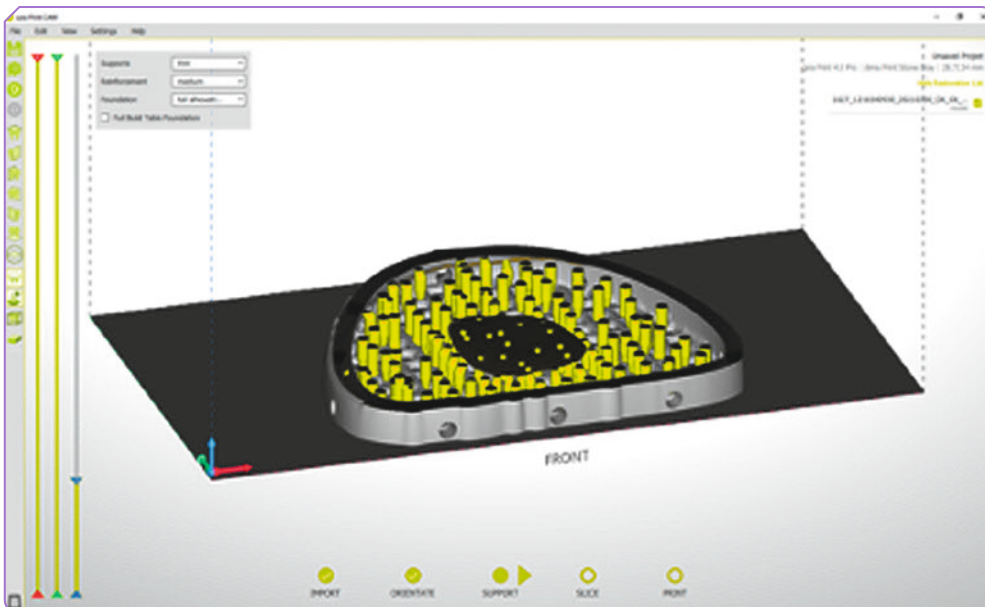
2.b   Full model — hollow

SUPPORTS: it is important to manually add supports to the inside of hollow models.

Right click to add supports

SUPPORTS: Set the supports automatically via a right click (in the yellow marked area).

Section view: with supports in the model

3.   Processing

Mixing of photopolymer

▶ Time: 5 min
▶ Shake well before pouring the liquid into printer vat
▶ Liquid is quite viscous, all contained pigments needed to be shaken up otherwise printing errors can occur

Printing parameters

▶ Choose printing parameters for dima Print Stone gray
▶ Resolution: 50 µm / 70 µm / 100 µm

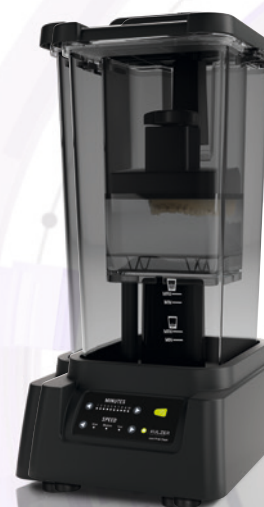## Printing performance overview

Example	Build height [mm]	Time [min] for 50 μm resolution	Time [min] for 70 μm resolution	Time [min] for 100 μm resolution	Material consumption [ml]
One upper jaw full (hollow)	28.7	66	44	30	29
One lower jaw full (hollow)	27.9	61	41	29	22.5
One upper jaw with 6 dies	23.2	55	37	26	27
One lower jaw with 7 dies	24.9	62	41	28	20.8

4. Cleaning and post-curing

Cleaning recommendations

Please use 99% IPA to clean dima Print Stone gray in a cleaning unit or an ultrasonic bath.

We generally recommend using cara Print Clean pro to wash printed objects. For more information, see the instructions for the cleaning unit on our website: kulzer.com/cleanpro.

	Cleaning	Curing	
Step	1.	2.	
	 cara Print Clean pro (or ultra sonic bath)	 cara Print LEDcure	**OR** HiLite Power 3D
	1. Pre-cleaning: 3 min. 2. Post-cleaning: 2 min.	Select dima Print Stone gray program (no turning of object necessary)	10 minutes (5 minutes front side + 5 minutes reverse side)

PERFECT MATCH:
DIMA PRINT STONE GRAY & HERACERAM SAPHIR

dima Print materials are light-curing monomers specially optimized for reliable results using the 3D-Printing pro Solution.

TESTED BY DENTAL EXPERTS

BROAD VARIETY OF INDICATIONS

IDEAL PROPERTIES FOR EACH INDICATION

VISIT

WWW.KULZER.COM/DIMA

FOR A COMPLETE OVERVIEW.

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LEARN MORE ABOUT DIMA PRINT STONE GRAY
KULZER.COM/STONEGRAY

Contact in Germany
Kulzer GmbH
Leipziger Straße 2
63450 Hanau, Germany

kulzer.com