

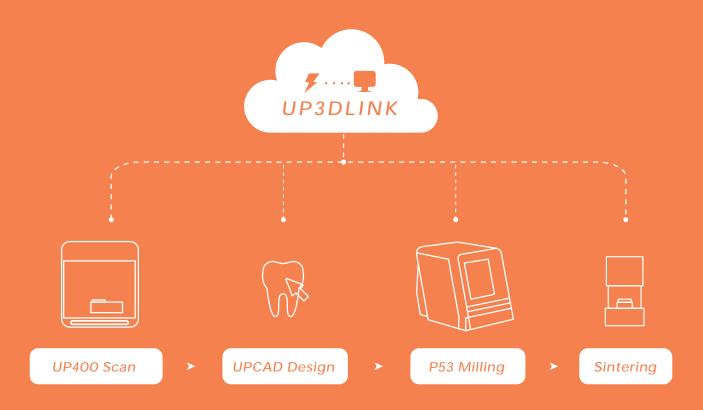
# UP3D Smart Dental Laboratory

**Intelligent Manufacturing System** 





# UP3D intelligent manufacturing system





# To build smart dental laboratory,

UP3D launches intelligent Manufacturing system:

UP3DLINK intelligent platform enables to control whole process of machines to make the process visible and quantifiable.

Real-time monitoring of production conditions to help scale production







UP3DLINK

Intelligent management platform

# **UP3DLINK**

## Helping the digital transformation of laboratories



# Helping large-scale

You can view the working status and processing conditions of multiple devices at the same time,

Real-time monitoring to realize intelligent production



## **Build smart dental laboratory**

Only need UP3DLINK platform to control and view the working status of the entire system



## Improve management efficiency

It helps laboratories to sort out and track orders through order completion and rework rate.

Perform big data analysis and order report monthly to comprehensively improve the efficiency of factory management.

01

## Ultra high speed scanning

Only 12 seconds to scan full arch

02

#### **Unsectioned model**

It can scan the narrow gap model, orthodontic and unsectioned models very well

03

#### True color texture

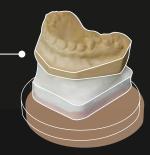
Restore texture color perfectly

Enables to import true color texture model as PLY format in 3shape and Exocad software

### Virtual occlusion function

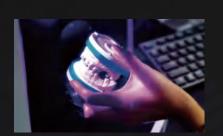
Obtain accurate jaw motion simply and quickly,

Reducing the adjustment time



# New upgrade scanning method

Handheld occlusion, only 3 seconds can acquire the occlusion



# **UP400**

High-speed model scanner

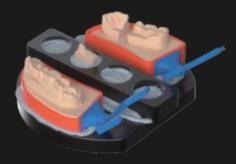


## All in one

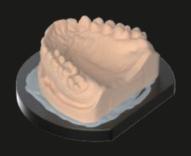
Compared with traditional way.

UP400 only needs 2 steps can

scan all in one model. Save your 50% of working time.



**Unsectioned model** 



High-speed model scanner



# UPCAD

# Self-developed dental design software



Crown (Bridge)



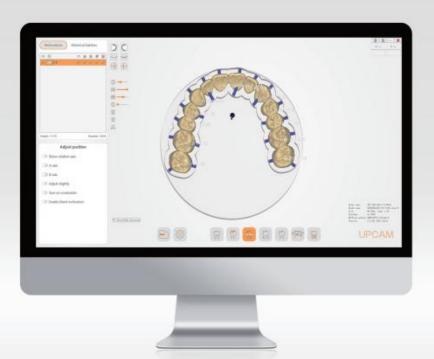
Coping Veneer





Inlay/Onlay

UPCAD is an independently engineered dental design software by UP3D since 2011, specially customized for dental technicians, and easy to learn and use. Enables users to upload database.





Quality assurance (Germany Core)



Fast calculation



Easy operation



**Customized solution** 

# UPCAM

#### **UPCAM** software

UPCAM is a dental CAM software which is developed by UP3D and ModuleWorks from Germany. (ModuleWorks is one of the most advanced CAM core algorithm supplier in the world).

Suitable for all UP3D mills.UPCAM supports all types of dental restoration processing.

# **P53**

5-axis milling machine
Helping intelligent and scale production.



P53 integrates with UP3DLINK to Increase productivity and achieve efficient management.



# Full CAD/CAM hardware and software are developed by UP3D

#### **Remote connection**

All software and hardware are independently developed by UP3D with core technology, intelligent control system and a perfect combination of integrated.

One platform controls full process machines, and enables to real-time monitoring the production status of multiple machines.



#### Simple installation

DIY installation needs only 10 mins.



#### **RESUME**

Avoiding repeated work, increasing 80% of your working efficiency



#### Intelligent initialization

The first milling machine with fully automatic calibration and intelligent initialization in China.



#### LED light progress bar

Machine will display the processing progress. Reduce personnel inspection time.

#### **Applications**

Crown, bridge, coping, implant, full denture and other restoration cases. Support kinds of soft materials, Zirconia, wax, PEEK, PMMA, etc.











# 4-axies Wet Dental Mill



4 axis

3 pieces

6 tools

wet mill

01

## Small in size

space saving, to realize true "desktop" restoration

All software and hardware are independently developed by Shenzhen UP3D Technology Co.,ltd. with core technology, intelligent control system and a perfect combination of integrated structure.



# Powerful grinding machine

supports grinding of multiple materials and wide application on restorations.

It can process glass ceramics, Pre-milled titanium blank and other materials to support the process ing of multiple types of restorations such as crown, inlay, veneer, and implant abutments.



# 3 Automatic tool changer with 6 tool library

2 sets of different types of tools can be pre-placed

Glass ceramic and Pre-milled titanium blank milling tools can be preset at the same time to improve production efficiency.





- High automation, the intelligent control system is combined with the machine
- · Enable to one-click calibration
- · Small in size, save your working space





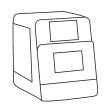
Model	UP400
Size:	305*310*550 (mm)
Weight:	14 k g
Cameras:	Dual 3.0 MP (High frame rate)
Accuracy:	< 6 microns
Projector:	Customized blue light
	multi-color scanning
Interface:	USB 3.0
Output format:	STL; UM; PLY; OBJ
Power supply:	AC110-240V, 50HZ
Functions:	All-in-one scan
	One click scanning triple tray
	Detect margin line
	True color texture scan
	Impression scan
	Unsectioned models scan
Full arch	12 s
12-units die	2 4 s
All-in-one	16s
Triple tray	70s





Model	P53
Dimension	620×430×560 (mm)
Weight	79Kg
Input voltage	AC 100~235V、50~60Hz
Max power	0.8KW
Spindle power	O.52KW (max)
Axis	5-axis simultaneous motion
Milling range	X/Y/Z: 165/135/70mm A: ±30° B: 360°
Milling mode	Dry milling
Max rotate speed	40,000~60,000rpm
Max feed rate	3000mm/min
Tools library	11
Tools changing	Automatic (Air pressure >0.5MPa)
Spindle cooling	Air compression (Air pressure 0.25~0.35MPa)
Milling materials	Zirconia, Wax, PMMA, PEEK and soft materials
Milling time	Coping: Zirconia-10min Wax- 4.5min
	Crown: Zirconia-13min Wax-5.5min
Tools diameter	2+1+0.6 (Ф4)



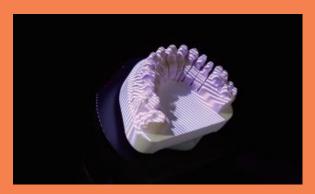


Model	P 41
Dimension	520×420×560 (mm)
Weight	70Kg
Input voltage	AC 100~235V \ 50~60Hz
Max power	0.9KW
Spindle power	0.8KW
Axis	4 axis
Milling range	X/Y/Z: 130/75/65.5mm A: ±360°
Milling mode	Wet milling
Max spindle speed	60,000rpm
Max feed rate	3000mm/min
Tool capacity	6
Tools changing	Automatic (air pressure>0.45MPa)
Spindle cooling	air compression (air pressure0.25~0.35MPa)
Miling materials	Glass ceramic. Pre-milled titanium blank
Miling time	crown: Glass ceramic 20min
	Veneer: Glass ceramic 18min
Tools diameter	2.5+1+0.6 (Glass ceramic)
	3+2+1.5 (Pre-milled titanium blank)

# Application- Bridge case

UP400 Scan





**UPCAD** Design

**UPCAM** Nesting





P53 Milling





# Application- Glass ceramic material

#### UP400 Scan





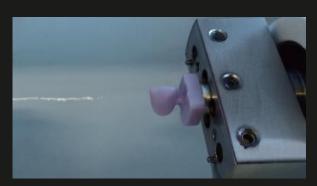
#### **UPCAD** Design

#### **UPCAM** Nesting





#### P41 Milling







# WE ARE FULL DENTAL CAD/CAM SOLUTION DEVELOPER AND MANUFACTURER

UP3D is a high tech company headquartered in Shenzhen since 2013.

As one of the only few companies in the world that are capable of developing a full dental CAD/CAM solution including software and hardware.

We are committed to provide our worldwide customers with high quality-dental CAD/CAM products to benefit from the digital dental revolution.



## UP3D **COMPANY DEVELOPMENT MILESTONE**

#### 2010

**UPCAD** project started

#### 2013

UPCAD beta version released

#### 2014

- Independent operation
- Model scanner project started
- · CAM project started
- · Released U1 in Dentech China, the first blue light scanner in China

#### 2017

- · UPMILL project started in 2017
- · Model scanner sales reached 500 sets

#### 2016

- · AcuBlu model released, the first scanner in the world with multi-color projection.

#### 2015

- · UP3D attended IDS cologne
- · CE & FCC certificate
- · UPCAM 1.0 released
- · UP3D reached staff member of 40. · UP3D Shenzhen headquarter established

#### 2018

- · Scanner UP300 released.
- · Scanner UP360 released.

#### 2020

- · UP560 released, ultra high speed, true color texture
- · P52 released, smart dental milling machine
- · Full dental CAD/CAM solution developer



**Independent R&D** 



Manufacturing capacity



Core Technology



Affordable price



Digital technology improves life

