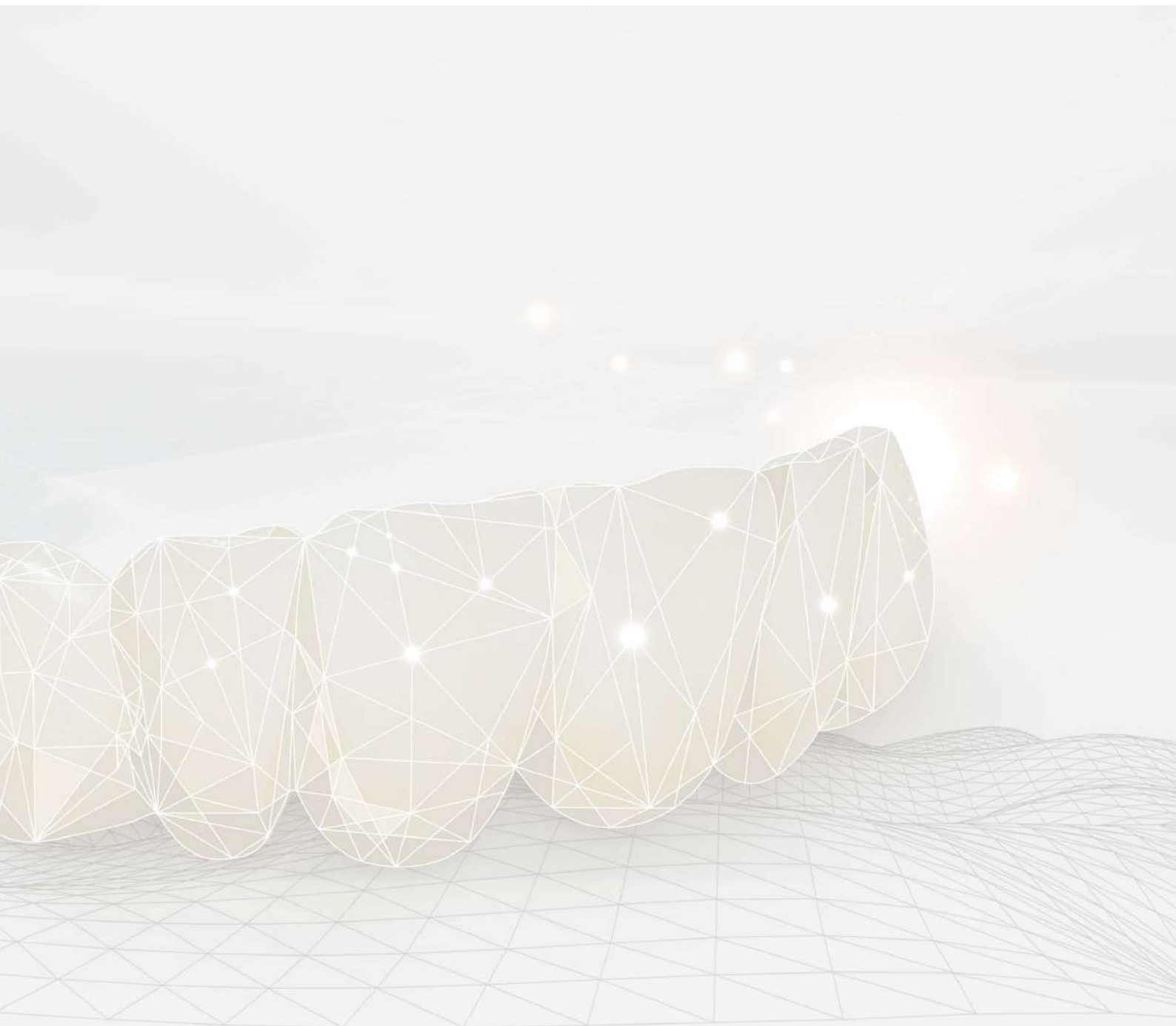


# **DIO** *Ecosystem*

The Full Digital Solution Ever  
to Reach the Peak of Innovation



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Experience the Extraordinary Everyday!  
Full Digital Solution

# DIO Ecosystem

'DIO Ecosystem' is an optimal full digital prosthetic solution developed in a completely new design by combining digital big data and artificial intelligence (AI) technologies.

The hardware and software of 'DIO Ecosystem' deliver the most efficient, reasonable, faster, and more precise prosthesis.

From scanning, designing to fabrication, the entire workflow can be done in the clinic to fabricate surgical guide and prosthesis. DIO Ecosystem is set to become the must-have solution for digital dentistry.



# The Perfect Beginning of Your Digital Dentistry

## DIO Ecosystem

With the power of perfectly designed technology,  
DIO Ecosystem will lead you to the peak of innovation.

DIO Ecosystem demonstrates the peak of digital innovation that makes scanning, guided surgery and prosthetic treatment possible in a single seamless workflow.

The convenience of a true digital workflows is an entirely different experience compared to partially digitalized procedure.

Enjoy the whole new level of efficient and convenient practice at your clinic, brought by DIO's perfected technology of digital dentistry.

### Perfect Line-up

Complete your digital clinic with perfect line-up of digital dentistry devices

### Most Simple

Designing your own crowns has never been easier! AI-supported software will do the magic.

### Just 1 hour

Unbelievably fast! Only one hour is enough for the prosthesis

### Extreme Hardness

The new bio-friendly 3D printing materials make the prostheses that are close to natural teeth

### Best Choice

A smarter choice, now it's easy to make prostheses in the clinic, not in a dental lab

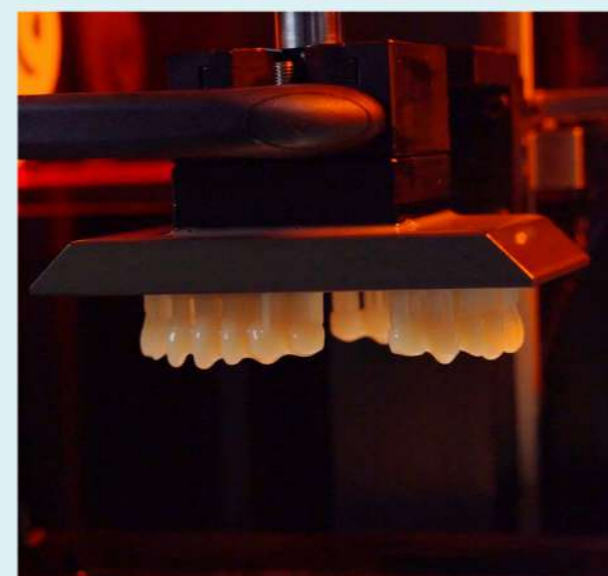
# DIO Ecosystem DIGITAL WORKFLOW



Surgical Guide Printing



Crown



01

## Scanning

Scan the patient's mouth condition to obtain impression data.

02

## Designing

**Surgical Guide Printing**

Design the surgical guide at the DIOnavi. Center, and print the surgical guide at the clinic.

**Crown**

DIO ECO CAD S/W makes it easy to design prostheses similar to the patient's natural teeth.

03

## 3D Printing / Curing

DIO PROBO Z prints out high-quality surgical guide.

High-quality crown is printed using DIOnavi-P. MAX.

04

## Completion & Usage

Digitally navigated implantation using surgical guide

Connect the esthetically printed crown.

# 01

## SCANNING Medit i700

Provides comfort to both the patient and the clinician with easy scanning.

### Start of a digital clinic



#### Amazing Speed

The two high-speed cameras on Medit i700 materializes fast and effective scan speed. The artificial intelligence-based scan algorithm quickly recognizes the scan area and supports flawless smooth scanning. Also with the high-speed video function, a lot of data can be shot in a short time.



#### Scanning without Powder Coating

There's no need to coat with powder when scanning a regular case, so the scanning process is simple, and this provides a more comfortable environment for the patients.



#### Small Scan-tip

The scan-tip is designed to be the minimal size considering the scanning area. Not only that, but the lightweight and the grip shape for long-hour usage enables comfortable scanning for both the patients and the clinicians.



#### High-resolution Scan

HD high-resolution camera captures the scanned teeth image in detail and distinguishes the margin of the prepped teeth, which then increases the suitability of the prosthesis. It can also express a scan image color real enough to separate the soft tissue and plaque.



# 02

## DESIGNING DIO ECO CAD Software

Powerful AI feature instantly renders your crown designs and morphs as you wish.

### Magical result in one click

Easy and simple design software makes a hassle-free process

#### Optimized Auto-Design

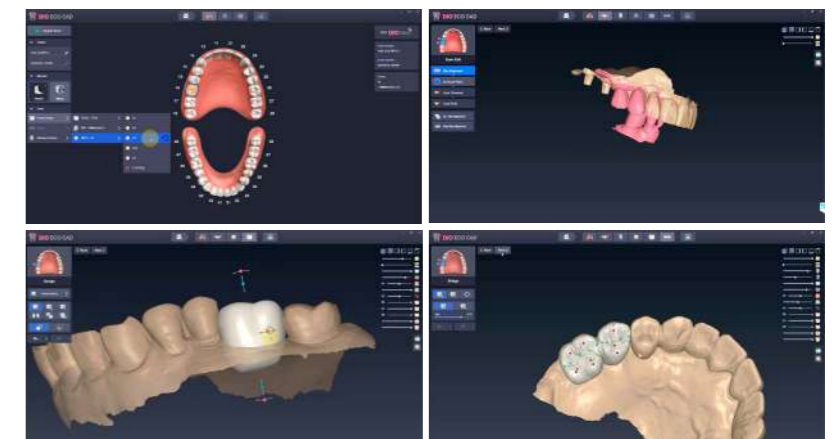
With DIO ECO CAD which was applied with big data and AI fusion technology, anyone can easily design dental prostheses.

#### Smart Abutment Library

Data of the Scan adaptor and the customized abutment is transferred to different individual libraries, which allows anyone to easily and accurately design implant prostheses.

#### Various Indications

Various types of prostheses can be designed such as Onlay, Inlay, Single Crown, and Bridge Crown.



# 03

## 3D PRINTING / CURING DIO PROBO Z / Cure2

Unstoppable evolution of performance.

This is the endgame for the most precise 3D printer.

Meet the most precise output possible with a 3D printer in the history of DIO with the precision degree of  $\pm 50\mu\text{m}$ . Faster and more powerful DIO PROBO Z shows top performance out of all other printers on the market.

### High Resolution & Accuracy

Can print a Full HD (1920 x 1080) DLP of high-quality prostheses.

### Increase in Precision and Speed

With the precision degree of  $\pm 50\mu\text{m}$ , it takes 25 minutes using "DIONavi-P. MAX" for batch printing 40 single crowns.

### Touch Screen & Intuitive UI

Touch panel and user-friendly UI increases user convenience.

### A Rational and Wise Choice

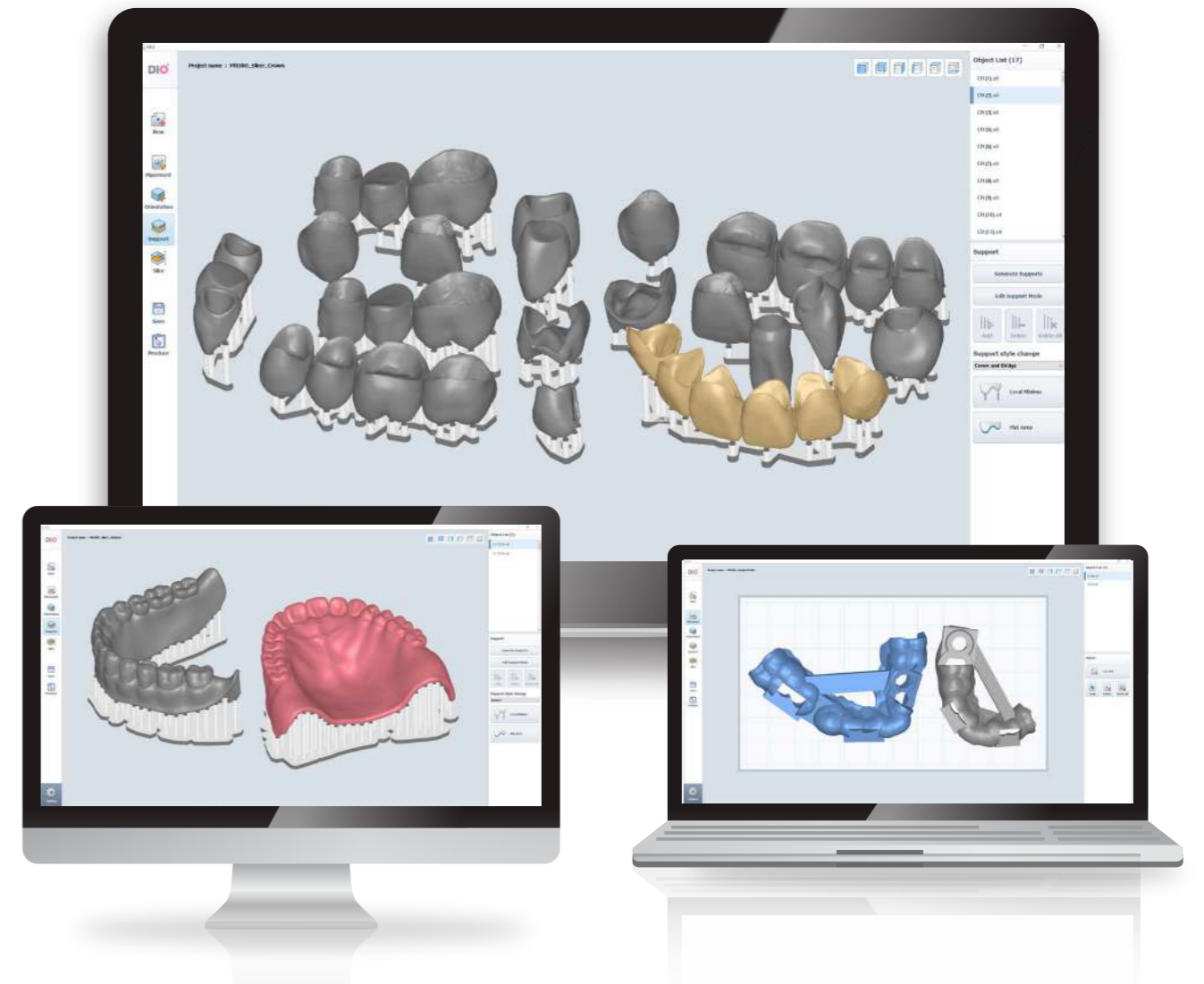
This can allow easy and economical prostheses printing in the clinic.



# 04

## DIO PROBO Z Slicer Software

The slicing software is DIO's proprietary software optimized for DIO PROBO Z for compatibility and usability. With fast data processing feature, DIO PROBO Z performs with maximum efficiency and productivity.



## 3D PRINTING MATERIAL DIOnavi-P. MAX

Unlimited DIOnavi-P. MAX  
Firmer than any material, Stronger from the beginning.

DIOnavi-P. MAX uses hybrid nano technology to dramatically boost the already top-of-its-class durability once again.



### 190MPa

Prostheses with high strength and high elasticity of 190Mpa were developed with a 3D printer PROBO Z in the DIO lab.

### 10g

Extremely lightweight, less than 10g. (per single arch)

### Realization of Aesthetics

Prostheses design that is optimized for patients' oral cavity.

DIOnavi-P. MAX		Hardness (Shore D)	Strength (MPa)
PEKK		91	190
PEEK		89	200
PAI	PPS	-	-
PC	PA	-	-
PMMA		85	120

### DIOnavi-P. MAX vs PAEK Family Polymer

\*PEKK Poly Ether Ketone Ketone: A new Polymeryc material with high physical properties used for aerospace and medical implant applications, recently being used to fabricate dental fixed prostheses, post, temporary abutment, and attachment.

[JDT, Sept 9, 2019, Surface characteristics and bonding performance of polymer restorative materials for dental CAD/CAM systems / J Adv Res. 2020 Sep, PEKK, An emerging biomaterial for oral implants and dental prostheses]

\*Hardness and flexural strength tested on prostheses fabricated using DIO PROBO 3D printer at DIO R&D Center.

## SPECIFICATIONS

### Medit i700

Dimensions	248 x 44 x 47.4 mm
Tip Size	22.2 x 15.9 mm
Weight	245g
Light Source	LED
Scan Area	15 x 13 mm
Connectivity	USB 3.1 Gen1 (C Power Delivery)
Accuracy (Full Arch)	10.9µm ± 0.98



### DIO PROBO Z

Dimensions	300 x 378 x 484mm
Build Size	105.6 x 59.4 x 80mm
Type	DLP
Resolutuon	XY 55µm, Z 100, 50, 25µm
Touch Screen	7inch touch screen
Weight	20kg



### DIO PROBO Cure2

Dimensions	249 x 320 x 216mm
Curing Volume	100 x 100 x 42mm
Light Source	405nm LED
Light Position	Top/Bottom
Weight	7.5kg



## DIOnavi-SG

DIOnavi-SG is a biocompatible photopolymer material developed for printing surgical guides used in patient-customized implant surgeries. It is a material that has been tested for toxicity and biological test on the human body as well as its strength.



**DIO** IMPLANT  
[www.dioimplant.com](http://www.dioimplant.com)

DIO Implant  
YouTube Channel

