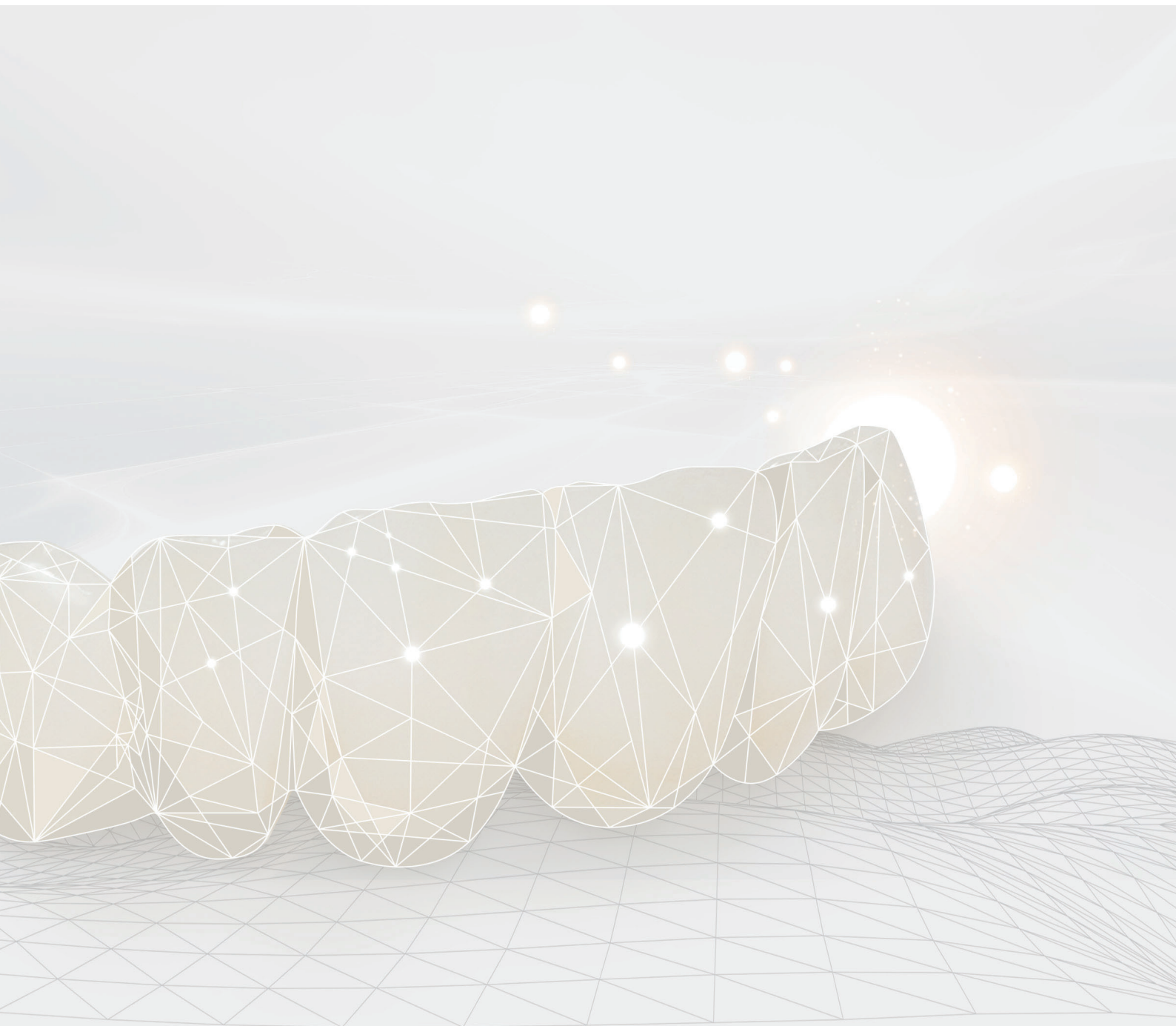


# DIO *Ecosystem*

The First Digital Prosthetic Solution Ever  
to Reach the Peak of Innovation



# **DIO** *Ecosystem*

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# Experience the 1-hour wonder, **DIO Ecosystem**

'DIO Ecosystem' is an optimal digital prosthetic solution designed entirely 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 for a final prosthesis can be completed in just one hour, making it a must-have solution for prostheses care.









# The Peak of Innovation, DIO Ecosystem

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

DIO Ecosystem is a prosthetic treatment solution,  
which takes just one hour from scanning to fabrication.

The experience of digital workflows is certainly different from the past.

The dental clinic will be filled with special experiences of completed technology.







## Perfect Precision

Unrivalled accuracy  
in prosthesis design

## Easy to Use

AI-supported  
prosthesis design has  
never been easier

## Just 1 hour

Unbelievably fast!  
Only one hour is enough  
for the final prosthesis

## Extreme Hardness

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

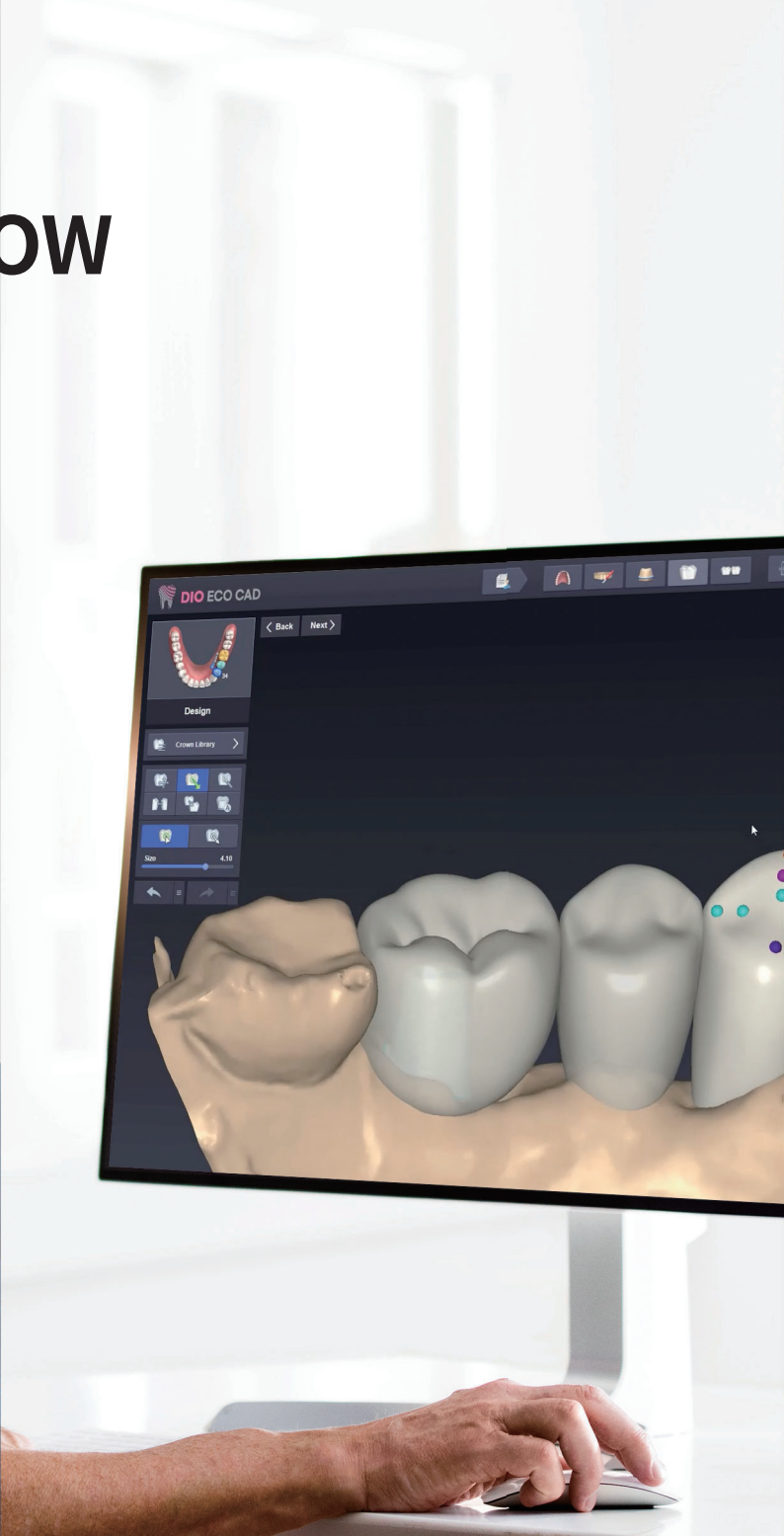
## Best Choice

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



# DIO Ecosystem

## DIGITAL WORKFLOW



01

### Scanning

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

02

### Designing

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 the final prosthesis of the highest quality.



04

## Prosthetic Connection

Connect the printed final prosthesis in the patient's mouth.



# 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.





# STEP 02

## DESIGNING DIO ECO CAD Software

Powerful artificial intelligence (AI) technology supports your design process.

What you think will be what you see in the screen.

### Magical result in one click

Easy and simple design software makes a hassle-free process

### Optimized Auto-Design

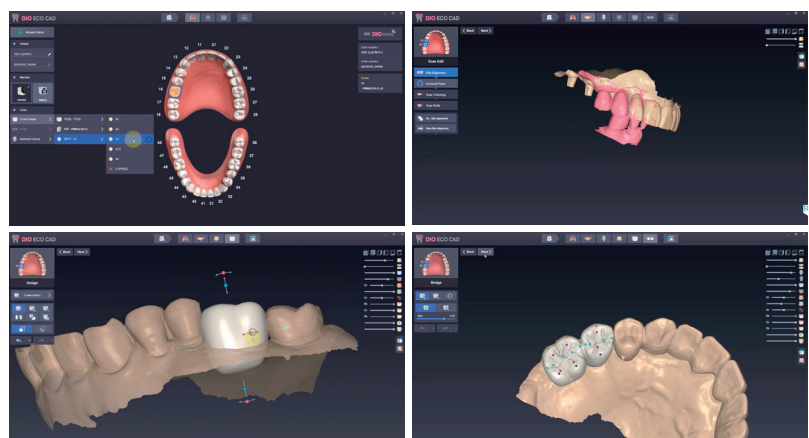
With DIO ECO CAD which was applied with big data and AI fusion technology, anyone can easily design dental prostheses.

### 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.





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

Unstoppable evolution of performance.

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 14 minutes using “DIOnavi-C&B” and 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.

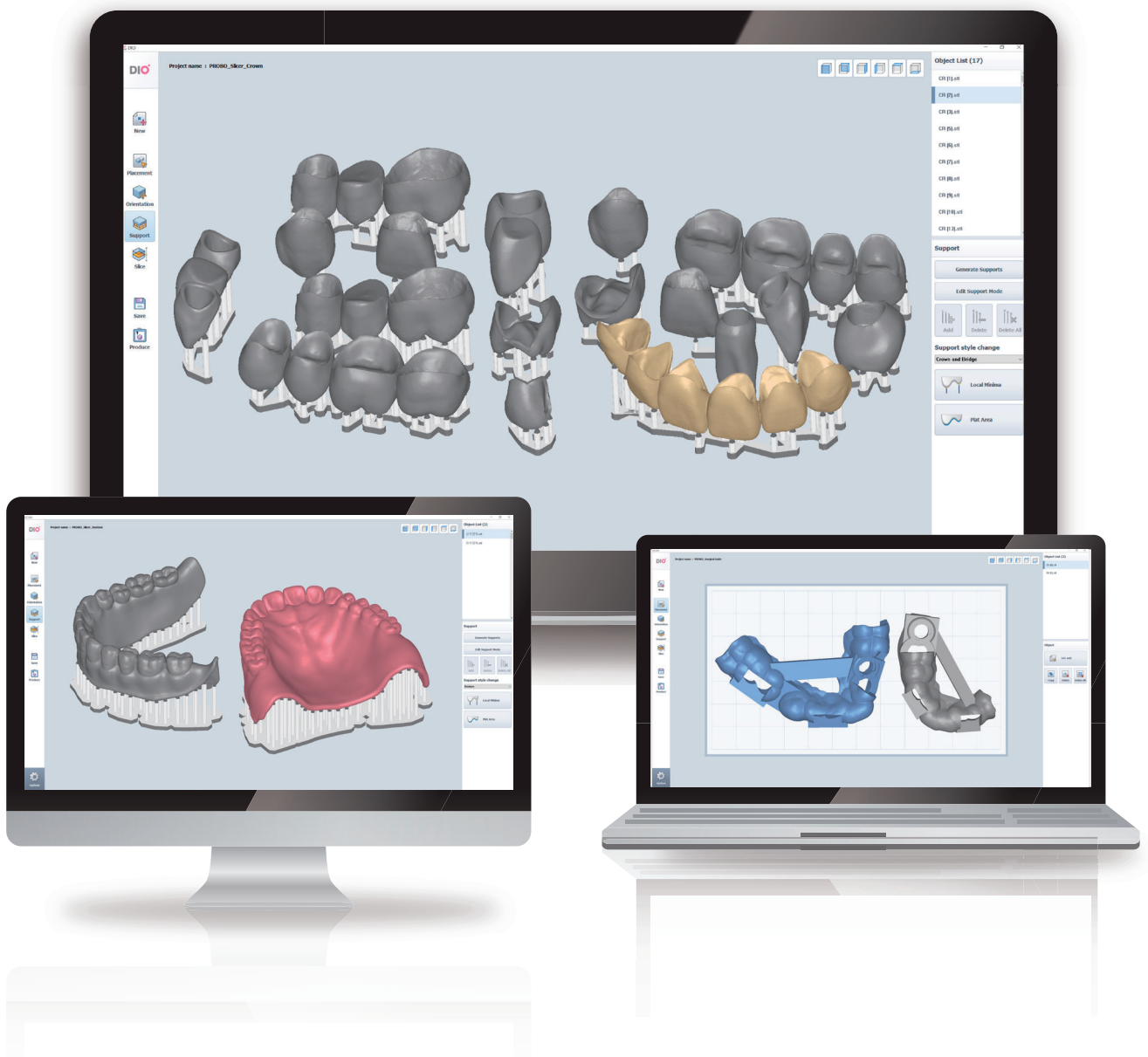
## A Rational and Wise Choice

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



# DIO PROBO Z Slicer Software

The slicing software is optimized for DIO PROBO and can maximize efficiency and productivity with easy use and fast data processing.





# STEP 04

## 3D PRINTING MATERIAL DIONavi-P. MAX

Unlimited DIONavi-P. MAX

Firmer than any material, Stronger from the beginning.

DIONavi-P. MAX is an innovative new material with excellent properties developed by DIO to make printing the most true quality prostheses a reality.



### 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.

		Hardness (Shore D)	Strength (MPa)
DIONavi-P. MAX		91	190
PEKK		89	200
PEEK		85	165
PAI	PPS	-	-
PC	PA	-	-
PMMA		85	120

### DIONavi-P. MAX vs PEAK Family Polymer

\*PEKK Poly Ether Ketone Ketone: A new Polymeric 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.

Property	Value
Color	A0, A1, A2, A3, B1
Flexural strength	Inner prostheses management standard : >80MPa ISO Approval standard : >50MPa
Water sorption	<40µg/mm <sup>2</sup>
Water solubility	<7.5 µg/mm <sup>2</sup>
Hardness shore D	>80

# 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





DIO Implant  
YouTube Channel

