



IDS 2023 Highlights

BenQ Aligner Solution – DentCare Q Smile

- AI detection (I Denti. Fi) & DSD (Preteeth)
- Aligner Software (PrintInAligner) & Slicing Software (Q-Slicer PRO)
- 3D Printer & Printing Resin
- Pressure Forming Machine & Clear Aligner Films
- Dental Milling & Trimming Machine
- Micro Art Bracket Collection

BenQ AB DentCare Corp.

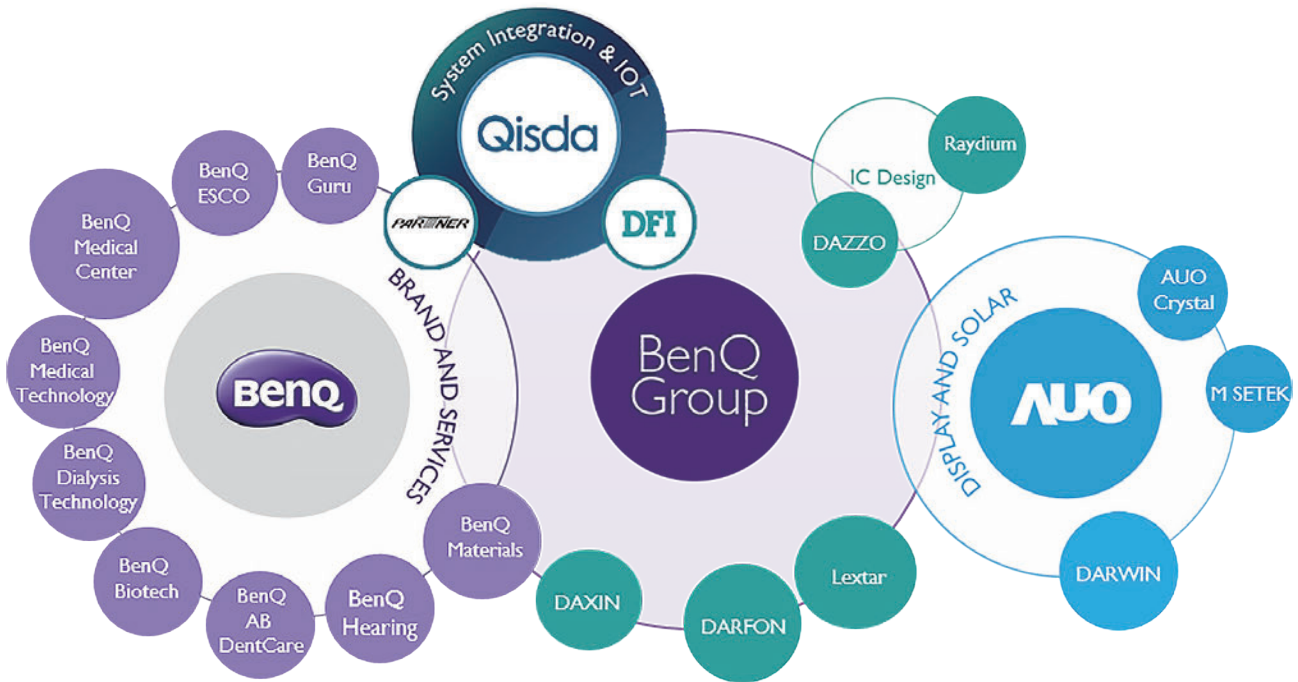
BenQ Qisda Group



Brand & Service

Technology & System Integration

Key Components



Milestones

2001 – Establishment of BenQ

BenQ was established in 2001. Our commitment to excellence and ongoing pursuit to discover breakthroughs have resulted in great strides that have been made from scientific fields to the medical industry, with a variety of new products and services, all in order to create better lives for people.

2010 – A brand new start in the medical field for BenQ

This year was one of the milestones for BenQ. Trident Medical Corp., a leading medical equipment manufacturing brand with numerous awards and international certifications, joined BenQ and was officially changed to “BenQ Medical Technology Corporation” in 2010. The new organization focuses on R&D and also acts as a distributor in the field of accuracy and professional medical instruments. Now, BenQ Medical Technology, which is the largest medical corporation in Taiwan, provides the best medical solutions domestically and internationally.

2014 – A big step forward for BenQ into the dental industry 2020

As our mission is to pursue breakthroughs, we took another step forward into the dental industry in 2014. BenQ Medical Technology, a well-known brand in the domestic region, established “BenQ AB Dentcare Corporation.” Our mission is to lead a new way into the dental industry.

2020 – Taiwan’s first intraoral scanners were launched on the market.

2022 – NaBiQ and the digital dental equipment brand DentCare had been established to provide a full range of dental products.



Company Overview

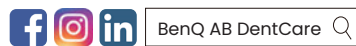
“Thinking globally, rooting locally” BenQ AB DentCare is your most reliable partner

“Because it matters” is our philosophy and BenQ AB DentCare’s guide towards growth.

We see the trend and future of the dental industry and we are eager to bring the best of it to the global markets. BenQ AB DentCare Corp., a subsidiary of BenQ Qisda Group, is an expert in the field of dental device. In 2020, BenQ intraoral scanners and lightweight reusable instruments were launched on the market. In 2022, the oral care brand NaBiQ and the digital dental equipment brand DentCare had been established to provide a full range of dental products.

In the field of dentistry, we provide BenQ integrated digital solutions for clear aligners, implants, and prosthetic treatment. We provide complete solutions for clear aligners, Q Smile Solutions, including BenQ intra-oral scanners, Ortho SW (PrintInAligner and Q-Slicer PRO), 3D printers, easyDU orthodontic material, pressure forming machines, dental milling & trimming machines.

“Thinking globally, rooting locally” BenQ AB DentCare is your most reliable partner.



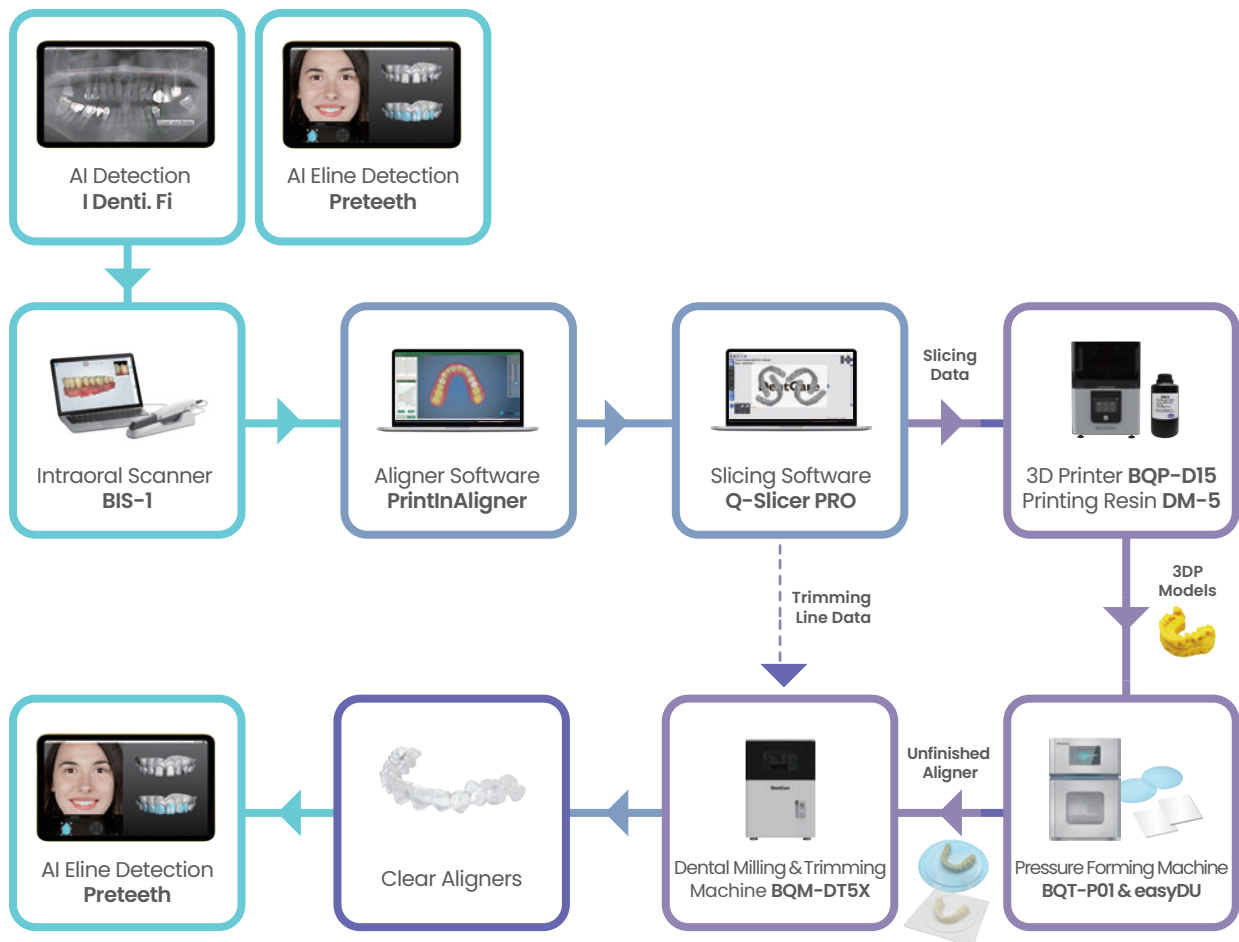
www.benqabdentcare.com

BenQ Aligner Solutions

DentCare Q Smile

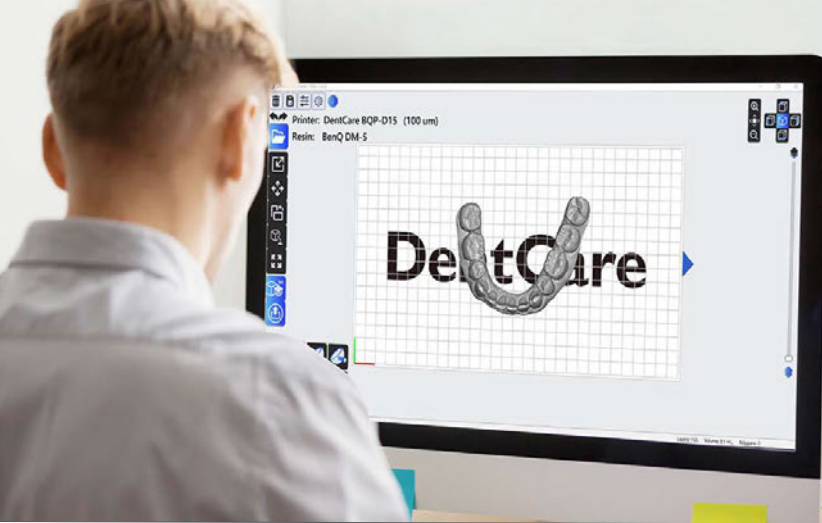


Workflow | BenQ Aligner Solutions – DentCare Q Smile



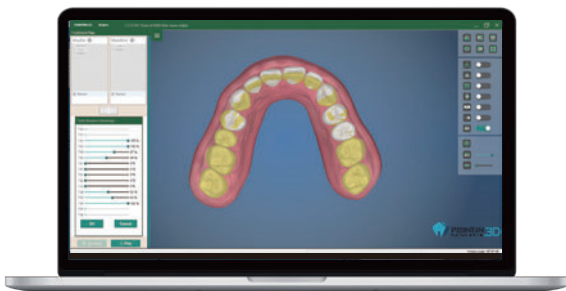
More Solutions





BenQ Orthodontic Software

DentCare PrintInAligner & Q-Slicer PRO



BenQ Aligner Software (DentCare PrintInAligner)

- AI Crown Segmentation
 - Several shape attachments
 - Auto Align
- Using dental arch that drew by dentist to implement auto align
- Output Trimming Lines
 - Magnetic Setup



BenQ Slicing Software (DentCare Q-Slicer PRO)

- Automatic model bottoming
- Model Edit: Hollow, Punch Hole, Basic repair, Cut, Dental Model Build, Text, Strengthened pillar
- Smart support editing: Automatic identify feature (avoid necessary/key features), Automatic printing angle calculation
- Advanced Slicing: Preview material weight, Multi-Slicing parameters.
- Trimming Add-On: Automatic trimming detection



BenQ Intraoral Scanner (BIS-1)

- Best value digital scanner
- The leading brand of DLP technology
- Motion sensor menu
- AI intelligent data optimization
- High accuracy & Color scanning
- Open file format - STL or OBJ scan data
- Powder free & Active defogging



BenQ 3D Printer

DentCare BQP-D15



BenQ is the leader of DLP projector solution provider, that use this technology for the key part of DLP 3D printer at the same time. BQP-D15 adopt DLP light curing technology of high resolution, that the advantage of high accuracy, large printing area, high working efficiency, and stability of working consumables.

Features

- Made especially for dental application
- Superior optical design to achieve excellent sharpness
- Z-axis liner motion guide provide high rigidity and stability
- The Z-axis creates high accuracy and high printing speed
- Unique design of resin tank
- Easy to detach the picker and resin tank
- Resin tank lifetime reaches 15 kg
(The lifetime depends on different resins)
- More user friendly and intuitive software



BenQ DM-5 | Printing Resin

BenQ has devoted itself in polymer science for many years. DM-5 is a 3D printing resin made especially for orthodontic models. It can be printed in high speed with superior resolution. By using DM-5, clear aligners can be thermoformed directly from 3D printed orthodontic models due to its high temperature resistance, ultra-high surface hardness and edge stability.



Features

- High precision and accuracy.
- Low shrinkage rate (<1%), and high hardness.
- Low viscosity and easy to operate.
- Suitable for DLP and LCD light sources.
- Correspond to UV wavelength : 365-405 nm.

Specification

| DentCare BQP-D15 | |
|-------------------------|--------------------|
| Technology | DLP |
| Printing Area (WxDxH) | 150 x 84.3 x 75mm |
| XY Res. | 58µm |
| Z-axis Layer Thickness | 5-200µm |
| Wavelength(LED) | 405nm |
| Light Engine Pixels | 2560 x 1440 pixels |
| Connectivity | USB, Ethernet |
| Dimension | 30 x 40 x 43cm |
| Weight | ≈ 20 kg |
| Power supply | 100-240V, 50/60 Hz |

| BenQ DM-5 | | | |
|---------------------|-------------------|------------|--------|
| Item | Unit | Standard | Data |
| Color | | | Yellow |
| Hardness | Shore D | ASTM D2240 | 90 |
| Density | g/cm ³ | ASTM D792 | 1.19 |
| Viscosity | cp @ 25 °C | ASTM D2556 | 150 |
| Tensile Strength | MPa | ASTM D638 | 37 |
| Elongation at break | % | ASTM D638 | 5.6 |
| Young's Modulus | MPa | ASTM D638 | 1087 |

1. Suitable for DLP and LCD light sources
2. Correspond to UV wavelength : 365-405 nm
3. Solvent recommendations for curing treatment - Either 95% alcohol or isopropyl alcohol

BenQ Orthodontic Material

easyDU preformed tooth positioner



Delightful
Less visible appearance fitting anyone's lifestyle

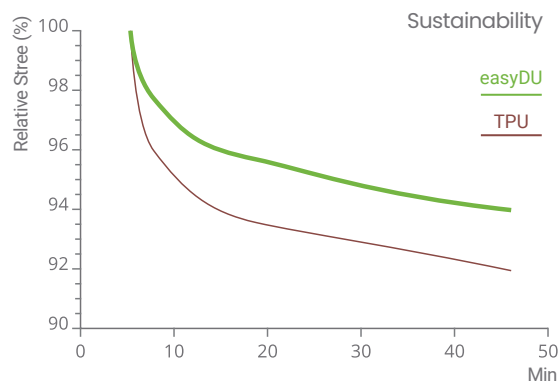
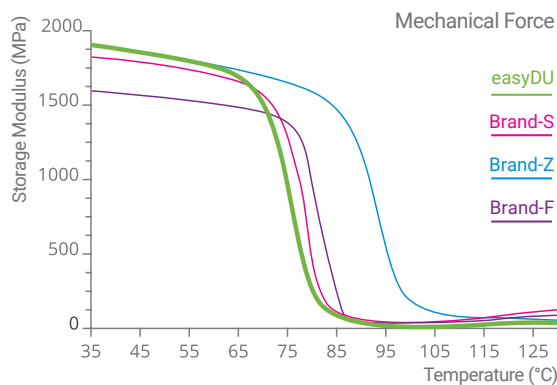
Considerate
Certified biocompatibility for patient safety

Reliable
Effective and long lasting orthodontic forces



Physical

easyDU Preformed Tooth Positioner is easily to be thermoformed into aligner brace and keeps superior orthodontic force*1 under normal oral temperature. easyDU Preformed Tooth Positioner has outstanding sustainability*2 to strike a balance between alignment effectiveness and wearing comfortability.



*1 Refer to Storage Modulus measured from Dynamic Mechanical Analyzer (DMA)

*2 Refer to Relaxation Modulation measured from Dynamic Mechanical Analyzer (DMA)

Bio-compatibility

A Clear tooth aligner can be applied on patient about 20~22 hours up to 7~14 days.*3 Hence, biocompatibility and any possible precipitation of plasticizer are critical points to be verified. easyDU Preformed Tooth Positioner has been approved of biocompatibility by third-party authority*4 and certified the product in compliance with the following:

- ISO 10993-5: Cytotoxicity Test
 - ISO 10993-11: Acute Systemic toxicity in mice Test
 - ISO 10993-11: Pyrogen Test in Rabbit
 - ISO 10993-10: Skin Sensitization Test
 - ISO 10993-10: Oral Mucosa Irritation Test
- It has been confirmed without Phthalate Esters (PAEs)

*3 Wearing time will be varied in accordance with treatment plan made by orthodontist.

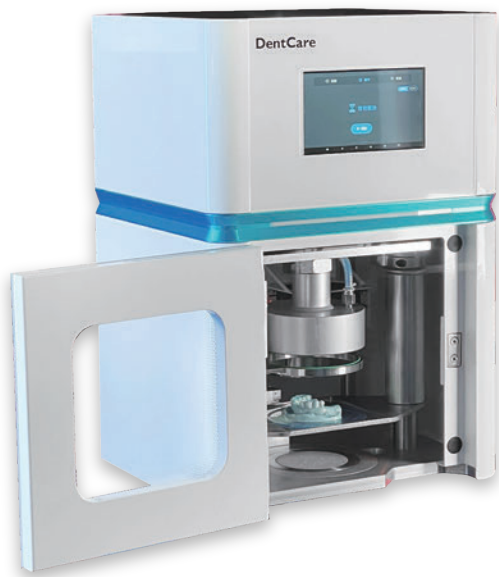
*4 The biocompatibility test was conducted by MASTER LABORATORY CO., LTD in Taiwan.

Specification

| easyDU Preformed Tooth Positioner | | |
|-----------------------------------|--|----------------|
| Material | PETG (Polyethyleneterephthalat Glycol copolymer) | |
| Diameter | Round shape / 125 mm | |
| Effective Thickness | 0.50 mm | 1.00 mm |
| | 0.75 mm | |
| Packing | 20 pks / bag ; | 20 pks / bag ; |
| | 20 bags / box | 16 bags / box |

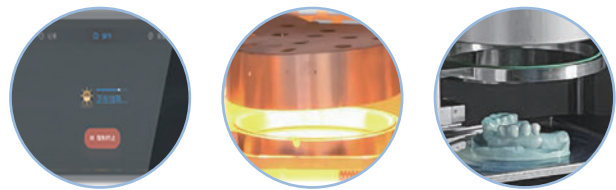
BenQ Pressure Forming Machine







DentCare BQT-P01



Features

- 7" Touch Screen
- Door Protection
- Automatic Pressing and Filming
- Intelligent Temperature Control
- Fast / Evenly Heated / Accurate / Efficient
- Status Reminder and Easy Trouble Shooting Tips
- Fits All Types of Films in the Market: Square and Round








| | | |
|--|--|--|
|  One-click |  Suitable |  Short time |
|  Intelligent Temp. Control |  Door-opening Protection |  Status Reminder |

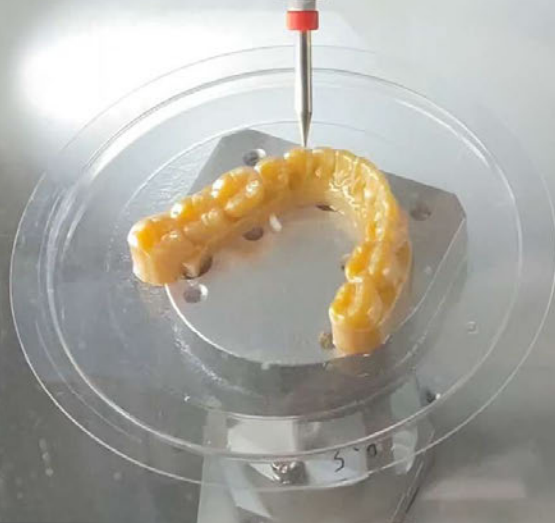


SPECIFICATION

| DentCare BQT-P01 | |
|--|---|
| Dimension | 375*345*562mm |
| Power | 800W |
| Pressure | 4.0-4.5bar |
| Time | 1-2min |
| Control System | 7" Touch Screen Android System |
| Weight | 46KG |
| Thermoforming Foils Size | Round Discs: 125mm Square Discs: 127*127mm |
| * Note: Air Compressor required (minimum recommended spec) Working Pressure: 0.7Mpa, Motors: 2, Capacity: 50L Voltage: 220v, Volume Flow: 54L/min, Power: 800w*2 | |

COMPARISON

| | DentCare BQT-P01 | Other Brand |
|----------------------------------|--|---------------------------------------|
| Operation | Automatic (One Button Starting)  | Manual (Multiple Steps) |
| Parameter Setting | Not Required (3mm below)  | Required |
| Safety | Door Protection  | Without Door Protection |
| Operating Personnel Required | General Operator  | Skilled Lab Technician |
| Required Foils & Accept Diameter | Fit All Types of Films Square 127x127mm  Round 120 & 125mm | Accept Single Shape and Diameter Only |

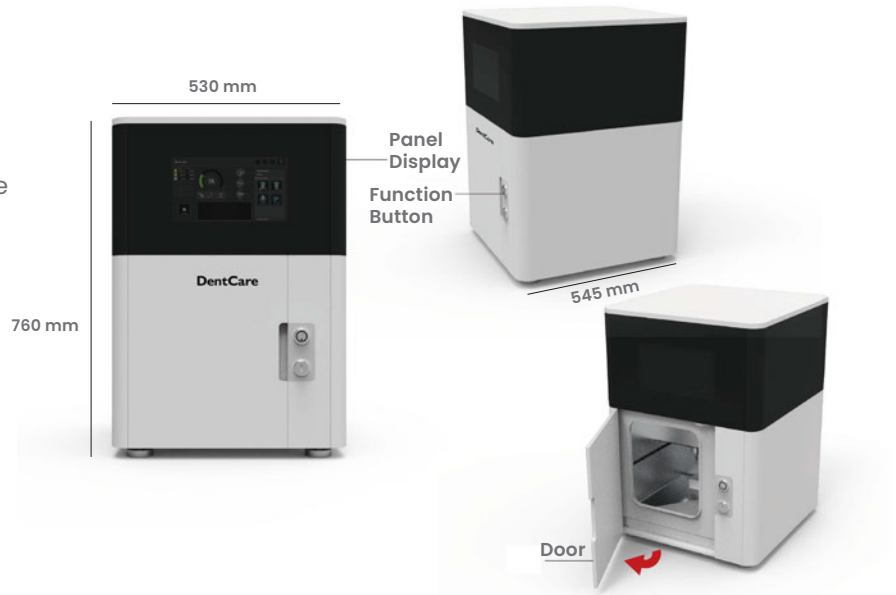


BenQ Dental Milling & Trimming Machine

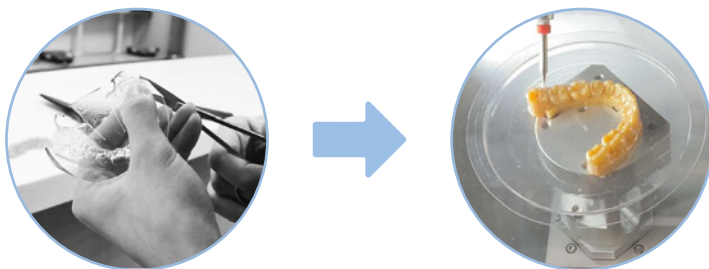
DentCare BQM-DT5X

Features

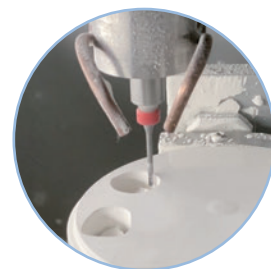
- 5 axes simultaneous machining milling
- Crown milling and aligner trimming dual purpose machine
- Integrated Linux based PC with 7" touchscreen



Aligner Trimming Machine



Crown Milling Machine



Specification

| DentCare BQM-DT5X | |
|---------------------------------------|--------------------------------|
| Number of axes and movement type | 5 axes, simultaneous machining |
| Angle of attack | A-axis 50° |
| Rotation angle | B-axis 360° |
| X,Y,Z Stroke | 210mm / 145mm / 132mm |
| Weight | 85 kg |
| Main voltage / Frequency / Power | 100-240V, 50-60Hz, |
| Monitor | Integrated 7" touchscreen |
| Tool Changer | 4-fold |
| Max. rotational speed / spindle power | 100,000 rpm / 400W |
| Integrated PC | Linux based |

Application



I Denti. Fi

Using machine learning to automated detection and classification of oral lesions.



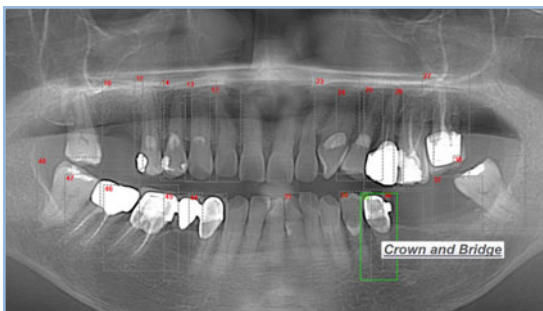
Innovative Artificial Intelligence Applications in Dentistry

Automated Detection and Classification of Oral Lesions

It can detect and classify 12 lesions:

Apical lesions, Crown & Bridges, Caries, Endodontic treatment, Filling material, Dental post, Suspected caries, Impacted tooth, Dental implant, Missing tooth, Periodontal destruction, Residual root, Normal tooth.

Accuracy around 96% and delivers results in milliseconds.

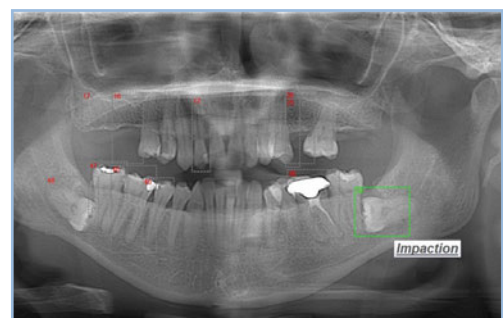
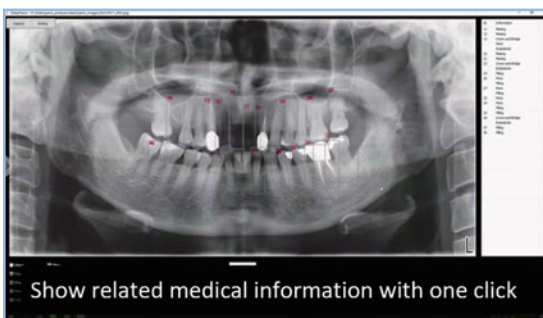


Dentist

- ✓ Save chair time (One-click result)
- ✓ Avoid negligence
- ✓ Assist health insurance application
- ✓ Full mouth exam result and report instantly

Around 96% Accuracy

Advanced Applications | AI assisted health education



Associated Application

Management (Clinic vs Chain Clinics)

- ✓ Efficiently assists dentists to design treatment plans
- ✓ Easily arrange following appointments
- ✓ Avoid image interpretation mistakes
- ✓ Evaluate work flow and improve
- ✓ Predict and arrange appropriate treatment chair time

Health Insurance company

- ✓ Filter false applications
- ✓ Save insurance expense
- ✓ Arrange appropriate referral



Preteeth AI

A handy and comprehend site DSD software.

A handy and comprehend site DSD software

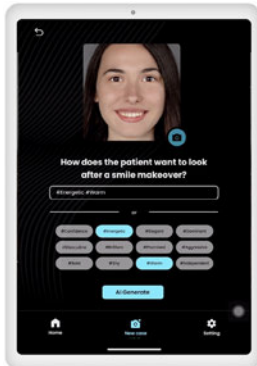
Preteeth AI makes dentists present the treatment plan at the first appointment.

- ✓ 1 minute auto-generate
- ✓ 1 appointment consultation
- ✓ Natural outcomes

Three simple steps in 2D

Dentists can transform patients' expectations from words into smile designs through AI.

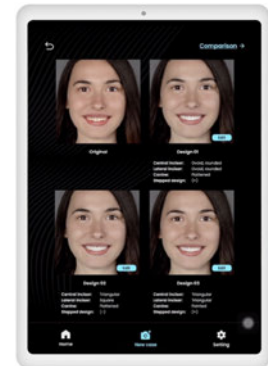
Input Data
Photos and Adjectives



AI Analysis
Point out problems



AI Simulation
Choose and adjust



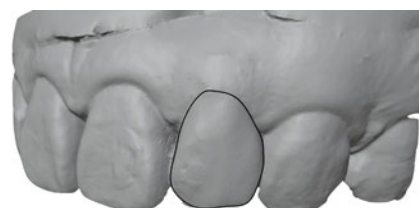
AI-base auto wax-up

Design in 2D, auto-generate in 3D. Revolutionize your esthetic cases with AI-powered tools. It boosts the efficiency of cases like veneers, direct composite filling after orthodontics treatments.

2D DSD + STL



AI-generated 3D model



Micro Art Bracket Collection

Q Lite, Q Star, Q Lingual, Xpress



2020 Ceramics

Q LITE | Self-ligation Bracket

- Manufactured with CIM technology for a high level precision.
- Made of pure alumina oxide to provide a 70% translucence.
- Circular arc design on body to provide more patient comfort.
- Metal slot design to reduce frictional resistance.



2018 Metal

Q LINGUAL | Mini Lingual Self-ligation Bracket

- Sheet metal slot design to reduce frictional resistance .
- Gingival offset design to prevent occlusal contacts
- Deep tie-wings design for the option of using O-ring.
- Available in slot .018 X .025 (5-5 Ribbon Arch)



2016 Metal

XPRESS | Self-ligation Bracket

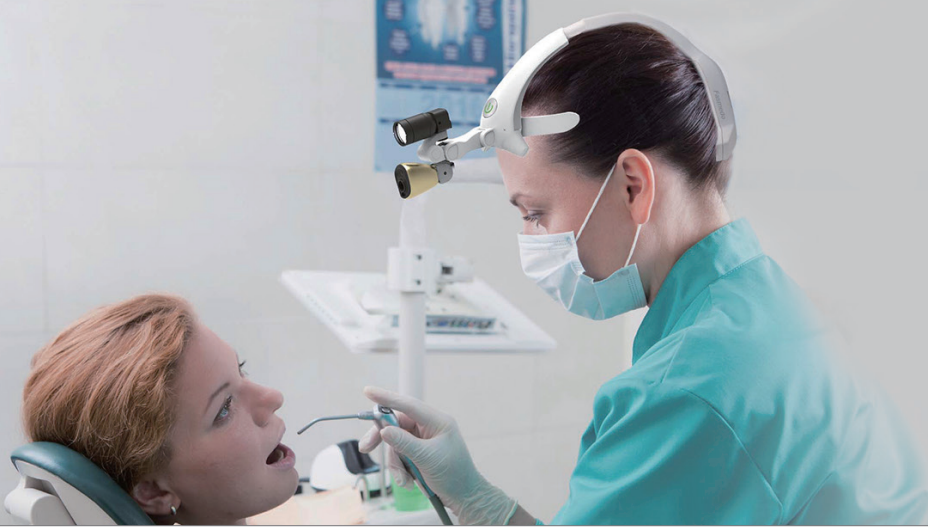
- Fully rounded contour design provide extra comfort.
- Extra small profile design to increase inter bracket distance.
- Sheet metal slot and rounded slot edge design to reduce frictional resistance .
- Laser mark on the base for easier identification of the bracket
- Available in Roth 5-5 .022X.028 & .018X.025



2015 Metal

Q STAR | Mini Self-ligation Bracket

- Manufactured with MIM technology for a high level precision.
- Patented locking mechanism allows it to open the gate with a regular probe and to close with a finger easily.
- Twin brackets design for the option of using O-ring.
- Deeper tie-wings undercut for efficient ligation.
- Rounded corners to provide more patient comfort.
- 80 mesh double layer base for superior bonding strength.
- Distal hook on 3s, 4s & 5s for versatility.



BenQ Medical Camera with Lamp

Faspro FM-105HS & FL-210

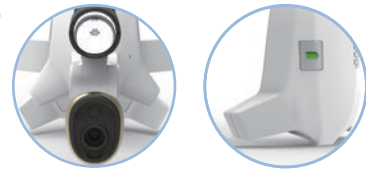
NEW

FM-105HS | Wireless Medical Camera with LED Lamp

- Auto Focus (5cm-Infinity)
- Wireless 802.11 b/g/n
- 3 levels of light intensity: 6,000 ~ 25,000 Lux
- Magnification ratio 6x, 3x, 2x
- FHD High-Quality Resolution with Audio
- Internal Storage (128 GB)
- Bluetooth Foot Pedal
- Live Streaming



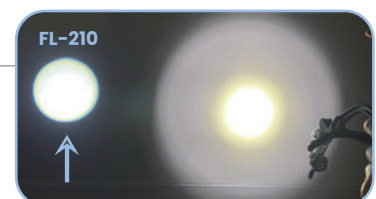
Detail



FL-210 | Cordless LED Lamp

- Working hours: 3-10hrs
- High performance wireless LED head light
- Weight: 200g
- Illuminance: 4,800 Lux – 72,000 Lux, continuous knob control
- Light field diameter: 75mm
- Colour temperature: 5,000K
- Uniform Light Spot:

Detail



BenQ Surgical Micro Camera Faspro D5

& BenQ NaBiQ Teeth Mousse



NEW

D5 | Surgical Micro Camera

- Supported Apps: Windows10 / iOS / Android / macOS
- Internal memory: 256GB
- Battery Capacity: 5,000mAh
- Focus: Autofocus(10cm~100cm)
- Illuminance: 3,000 Lux – 50,000 Lux, continuous knob control
- Recording video solution: FHD 1080P 30FPS
- Working hours: 3-5hrs
- Magnification: 8x, 6x, 4x
- Clinical applications:
 - Medical records
 - Surgical records
 - Medical declaration



BenQ NaBiQ Teeth Mousse & Kids Foam Toothpaste

2-in-1 mouthwash and toothpaste.

- Fine foam penetrates deep into the tooth
- A 50ml carry-on bottle easy to carry
- Neutral pH protects gums and teeth
- Can be used for patients with braces.

Teeth Mousse - QEP (NaBiQ energy peptide)

- Formula repairs oral mucosa
- Activate gums lamina propria
- Strengthen the periodontal ligament fibroblasts
- Synthesize collagen and extracellular matrix
- Repair injured collagen tissue & wounds
- Boost hyperplasia of receding gum tissue
- Ease symptoms of inflamed gums



BenQ Digital Dental Root Canal Orifices Detector

DentCare BQE-01

BenQ Dental Root Canal Orifices Detector

The Dental Root Canal Orifices Detector is a patented product. Built-in LED light, this tiny detector enables dentist easily locate the root canal orifices. The compact and easy-to-hold design make it simple to allow patients to visually understand your diagnosis.

- Crystal clear intraoral image.
- Lightweight and Ergonomic.
- Quick single button capturing images and videos.
- Slim design and right for root canal orifices detecting.
- Micro SD card slot provides portable and flexible storage capacity options for transfer to other devices or computer.
- HDMI output enables the patient to watch the image or video on TV or monitor when connected.
- Full height & half height Specular are available for Adult and Child.
- Build-in rechargeable battery enables portability and long hour operation in external conditions up to 4 hours (MAX.)
- Plug & Play Hand Piece Specular.



Specification



| Camera Features | |
|------------------------------------|--|
| Camera | Tube 2.3mm diameter build in one LED |
| Lens | Fixed Focus |
| Field of View (FOV) | 110° |
| Lens F/No | F5.0±5% |
| Depth of Field (DoF) | 5mm~50mm |
| Control system | |
| Function Buttons | Power / Snap / Record / Reset |
| Output Interface | SD card slot / USB2.0 Mass Storage |
| Image output interface | HDMI out |
| Display | 4.3" TFT-LCD with Touch Panel |
| Display resolution | RGB 800 x 480 |
| Auto Exposure Control (AEC) | Auto |
| White Balance | Manual |
| Image Format | JPEG |
| Video Format | MOV |
| Storage | Built-in 16 GB Micro SD card (up to 32 GB) |
| UI features | Preview / Playback / LED / Zoom Setting mode / Battery saving |
| Battery | 3.6V,3350mAh rechargeable Li-ion battery |
| Operating Temperature / Humidity | 10°C ~ +50°C (±10%) / 30% RH ~ 80% RH |
| Storage/Transportation environment | -20°C ~ +60°C (±10%) / 20% RH ~ 90% RH |
| Atmospheric pressure | 700-1060 |
| Water Proof (Specular) | IP67 |



BenQ AB DentCare Corp.

Tel: +886-2-2658-3588 Fax: +886-2-2658-9788

Email: Contact.ABD@BenQABDentcare.com

7FL, 52 Zhou-z St., Neihu Dist., Taipei | 1493, Taiwan

www.benqabdentcare.com



BenQ AB DentCare 🔍



DentCare Academy 🔍

