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I-Max 3D presentation

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I-max 3D

The universally accessible 3D/2D panoramic system

I-Max 3D

Key points

- 3D Cone Beam
- Lightest on market: 66kg
- Wall-mounted concept
- Multi-FOV 9x9 to 5x5 cm
- 16 3D programmes
- HD: 87 µm
- « face to face »
- CAD/CAM Ready
- 3D digital models
- Surgical guides
- The best performance/investment ratio

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I-Max 3D

Product Information

Multi FOV 3D Cone Beam

- Can be adapted for use with all kinds of dental practices
- Implantology: 93x86mm (full mouth), 50x86mm (full arch)
- Endodontic: 50x50mm

HD images

- 3D sensor resolution: voxel 87 µm (smallest cross-section)

16 3D programmes

- Complete dental volume
- Left / right TMJ
- Sinus
- Maxillary volume / Mandibular volume
- Frontal maxillary
- Left / right premolar maxillary
- Left / right molar maxillary
- Frontal mandibular
- Left / right premolar mandibular
- Left / right molar mandibular

I-Max 3D

Product Information

Creation of surgical guides

- Scan of impression trays, plaster models and radiological guides
- Overlay of STL and DICOM files
- With the I-Max 3D / Quickvision 3D combination, fully autonomous creation of surgical guides

Lightweight and sophisticated design

- The lightest 3D panoramic unit on the market: 66kg
- Attach it to a wall and you have an intraoral generator
- Takes up zero floor space
- Stylish: makes surgery look good to patients

Easy to use

Demo video:
https://www.youtube.com/watch?v=0_ctFc1lR-0

- “Face-to-face” patient positioning
- Easy to handle equipment
- Intuitive user interface
- Imaging tools and enhancing filters automatically integrated into the control software.

I-Max 3D

Product Information

Quick and easy to install in your surgery

Demo video:
https://www.youtube.com/watch?v=HKjqPz_Uwy4

- Lightweight and compact unit delivered as one single package
- Exclusive “Easy-To-Install” system: the unit is delivered fully assembled with an “intelligent” system, requiring just one technician to fix it easily to the wall
- High degree of electronic optimisation; one main control device: easy maintenance, breakdown and troubleshooting operations
- Unit can be fully operated remotely

Controlled budget

- Unit optimised for manufacturing
- Lower installation costs, economical shipping costs
- Low breakdown rate
- The best Investment / Performance ratio

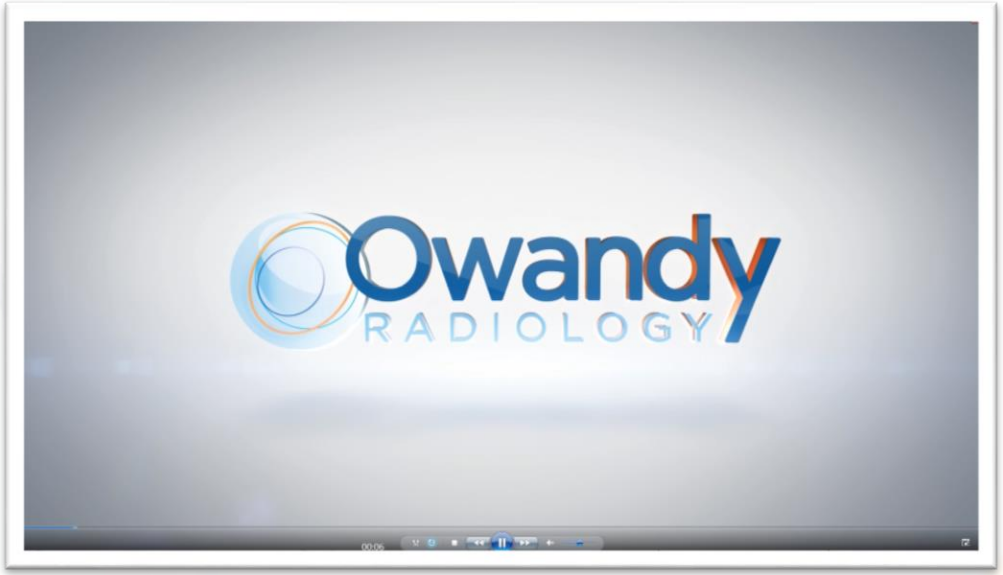
CAD / CAM ready

- Imports STL files from a dental impressions camera or lab scan
- Exports STL files for printing to a 3D printer or milling machine

I-Max 3D

Presentation vidéo

Available on our website,
our YouTube channel,
Owandy Radiology



I-Max 3D

One single package

COMPACT: delivered in just one box!

Packaging dimensions
120(L) x 100(D) x 75(H) cm

Total weight: 81kg + 13kg (pallet)

I-Max 3D

One single package

The first panoramic unit that fits into the boot of a standard-sized car!

I-Max 3D

Unit assembly

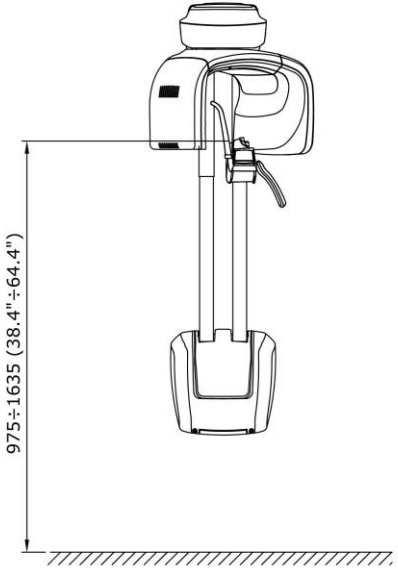
Machine ready to be wall-fitted

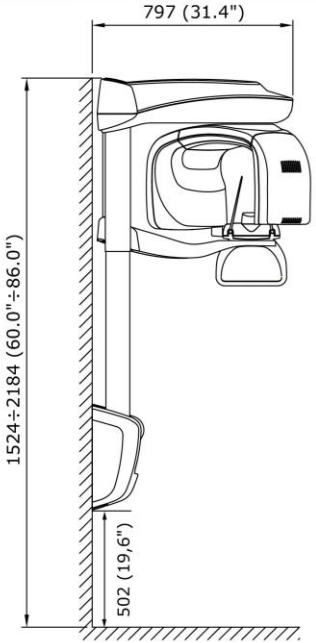
Wall-mounting bracket and "Easy to Install" system

Requires just one technician

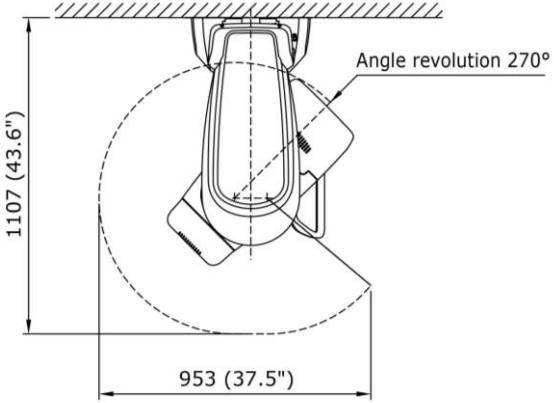
I-Max 3D

Overall dimensions layout for wall version





Max. overall dimensions:
1107 x 953mm, H max = 2184mm
That's just 1 sqm!



I-Max 3D

New Human/Machine Interface

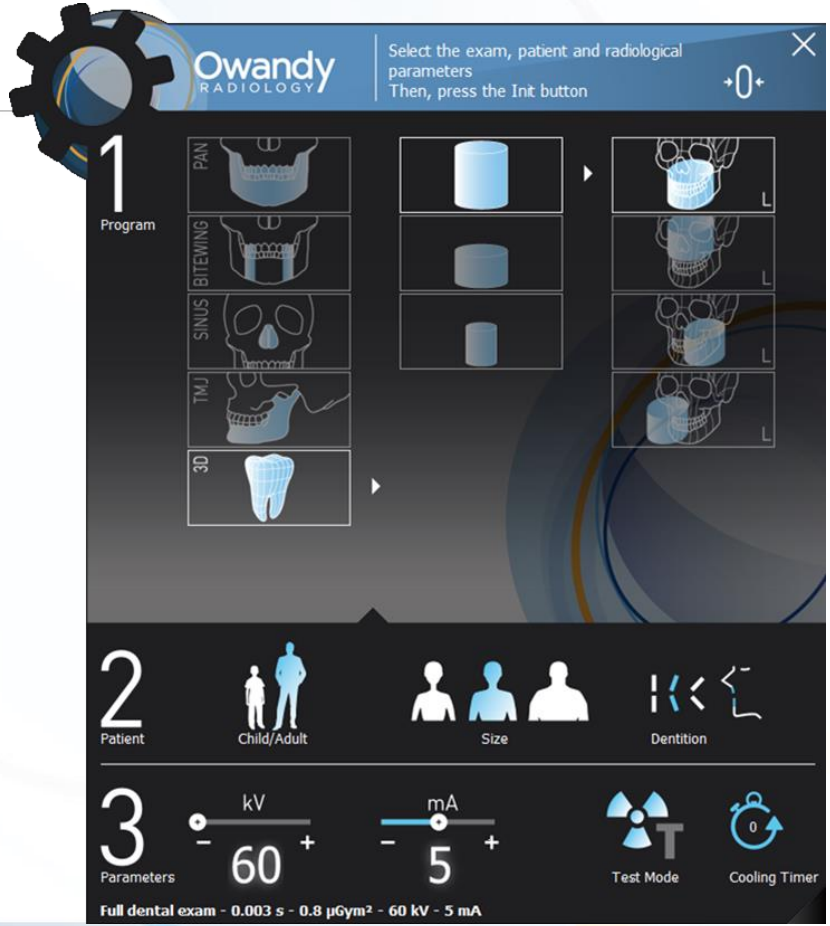
Main user window:

- Exam selection via configurable default settings,
- Machine status colour-coded bar:
  - Blue = to choose the exam you want
  - Green = unit ready for use
  - Orange = exam in progress
  - Red = error message
- Unit configurations with step-by-step interface:
  1- Programme, 2-Patient, 3-Machine
- Real time image display zone

I-Max 3D

New Human/Machine Interface

- Window in “expansion” mode
- Fully configured for exams by programme families and sub-families: PAN, BITEWING, ATM, IMPLANT, SINUS, 3D



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New Human/Machine Interface

- View exam type selected

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New Human/Machine Interface

- Live image display

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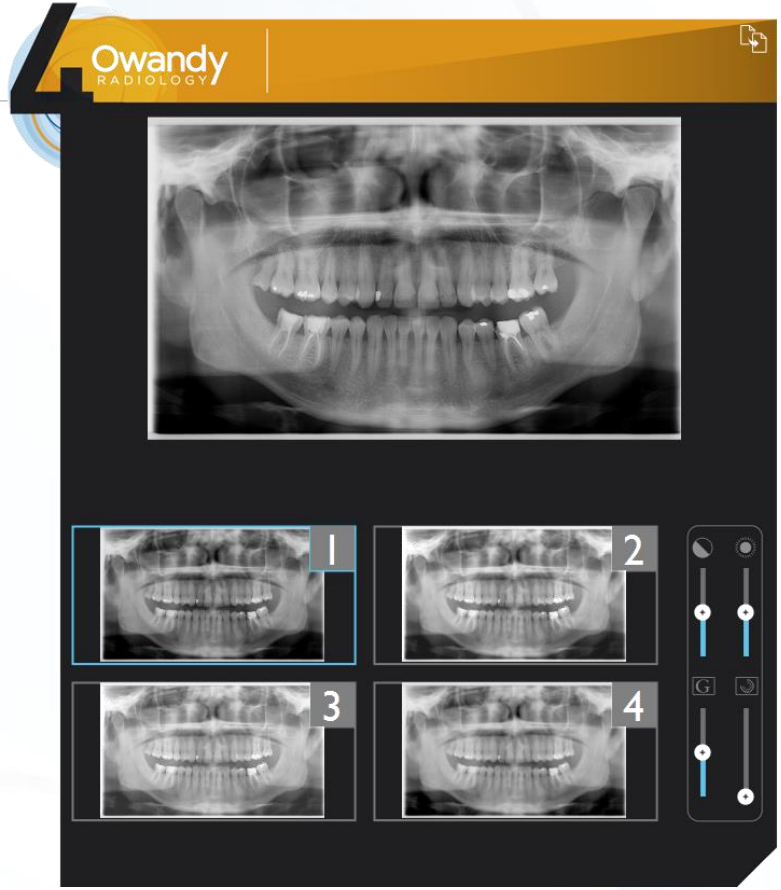
New Human/Machine Interface

Optional “imaging” window:

- Presentation of 4 pre-configured miniature views
- Adjustment of contrast / brightness / gamma / enhancement filters
- Fully configurable from the user configuration menu



I-Max 3D

Presentation of control panel

Unit controls and operation:

- Raise / Lower
- Laser positioning
- Temple clamps
- Light indicators: Xray Ready, Xray ON, PC connection

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Automatically positioning chin support

Motorised chin support with LED detection system.

Small volume examinations.

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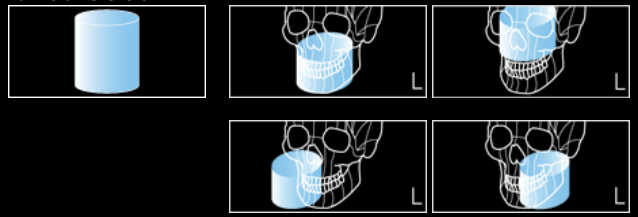
3D examination configurations

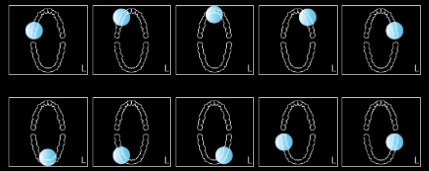
3D
Programmes range

Full volume: 9x9 cm



Half volume : 9x5 cm

Small volume: 5x5 cm



Scan of radiological guides

Scan of impression trays

Scan of plasters models

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QuickVision 3D software

QuickVision 3D

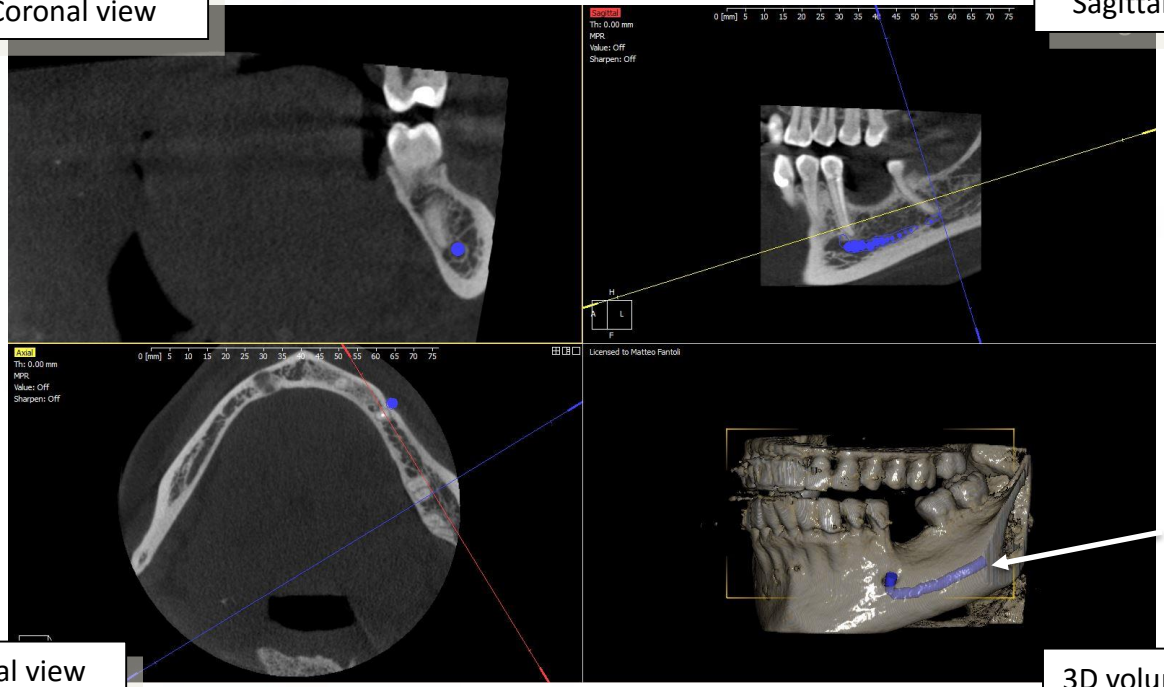
DICOM viewer

Independent rotation of the various axes in each of the 4 screens, to display the area required.

Identifies the nerve and selects the right size and shape of implant.

Demo video:

https://www.youtube.com/watch?v=GT_2Ii-d5S8



Selection of nerve colour and diameter according to preferences

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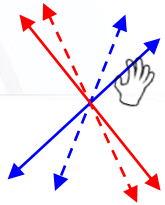
QuickVision 3D



DICOM viewer

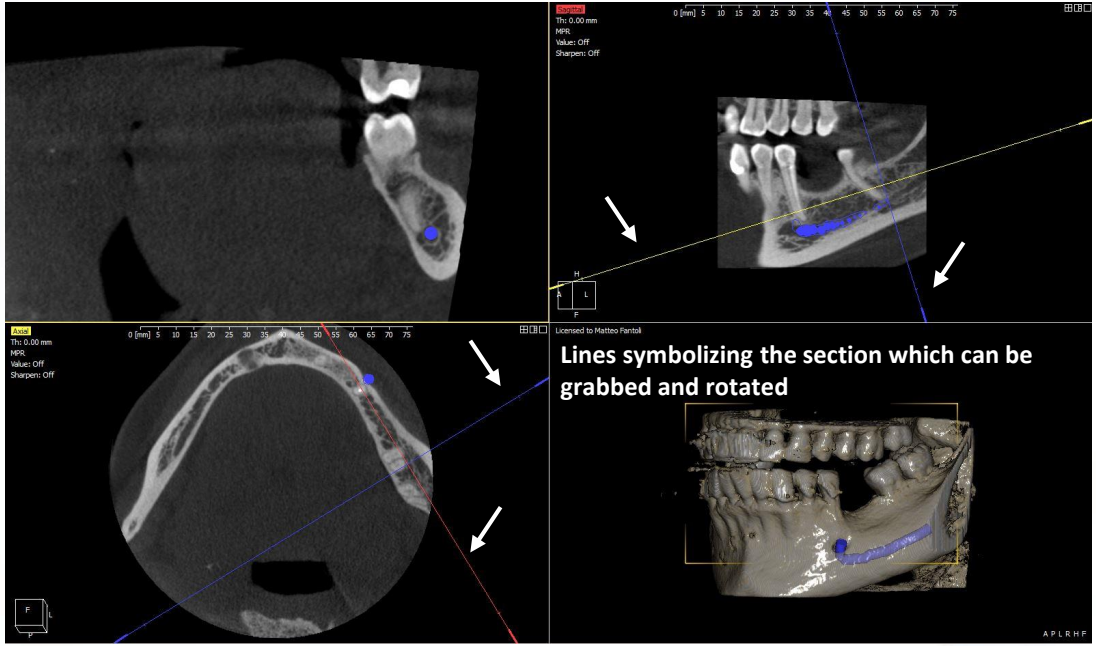
Sectioning plans automatically default to coplanar views with the global system (axial, sagittal and coronal)

Sectioning plan angles can be adjusted by entering the line relating to the section. Because these plans can be rotated, it's easy to analyse cross-sections from any position.

The original view can be restored by using the re-set command.

Demo video:

https://www.youtube.com/watch?v=CDcMqOG_aQ0

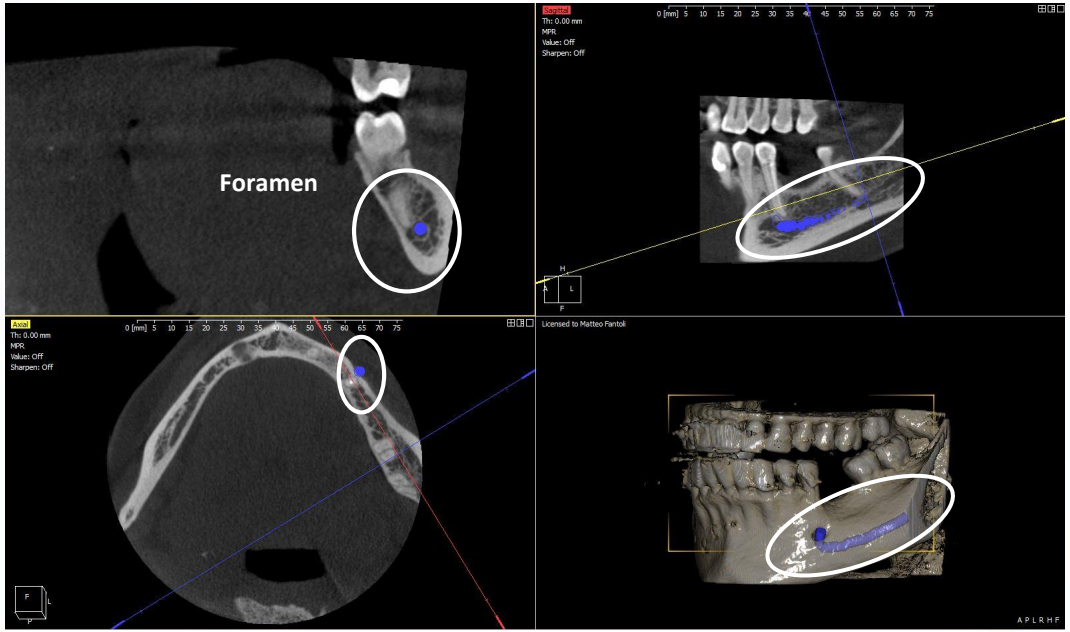


QuickVision 3D

DICOM viewer

The mandibular nerve can be drawn in, to avoid touching it during the operation. 3 stages to obtain the mandibular nerve:

- Sectioning plan positioning so as to highlight foramina
- Selecting the point to highlight the section of the canal for various cross-sections
- Confirming operation



Demo video:

https://www.youtube.com/watch?v=tU5inXAc9bI

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QuickVision 3D

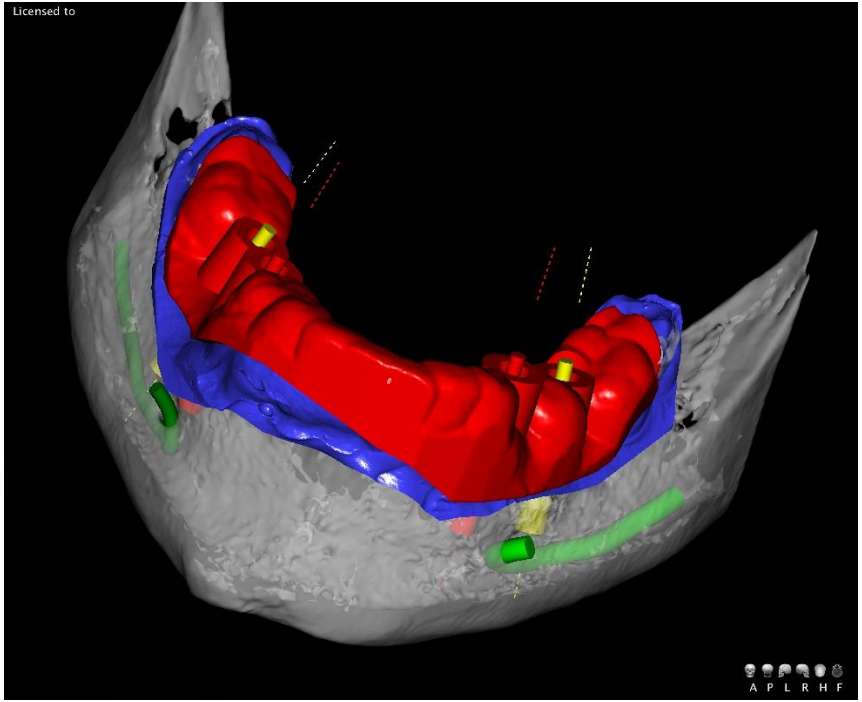
DICOM viewer

Option to create implants or import them from a library (Nobel®, etc.).

Option to rotate radiological images around the implant.

Demo video:

https://www.youtube.com/watch?v=BRoCjlbUD5g



QuickVision 3D

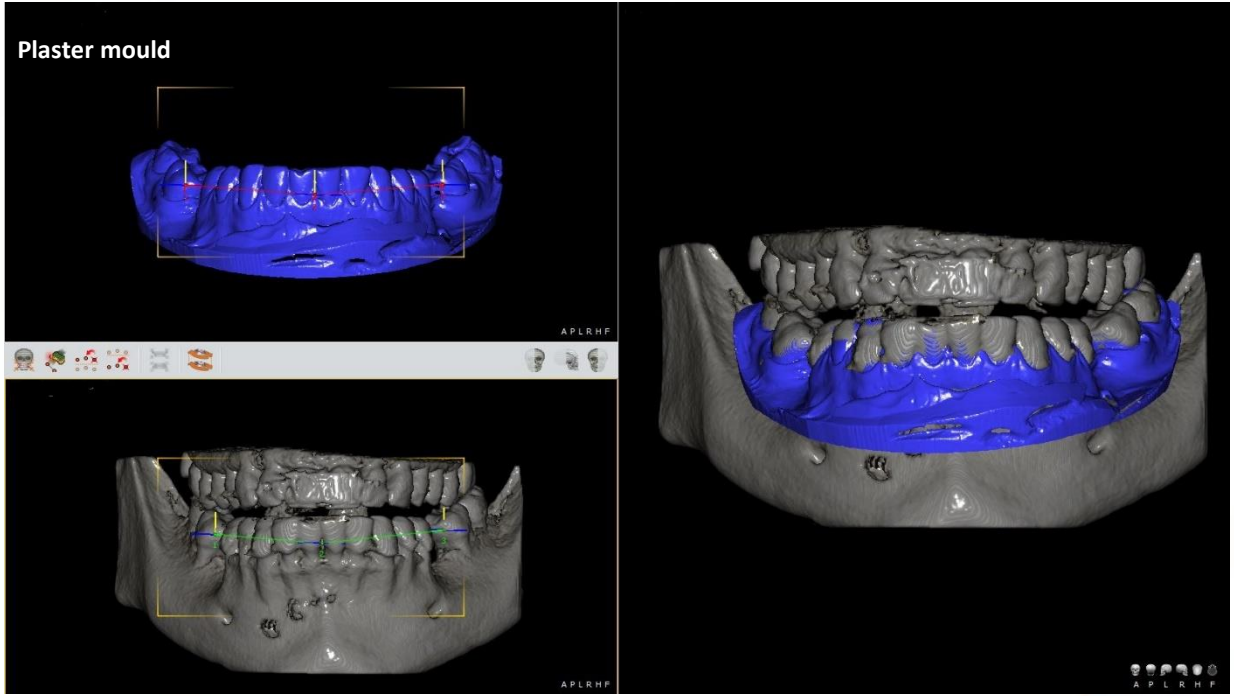
Overlaying

In this view, various objects can be overlaid when reconstructing the 3D patient volume.

This can be very useful, in order to correctly position the plaster mould used to model the surgical guide on, or to adjust the implant fixations or other positioning elements.

Demo video:

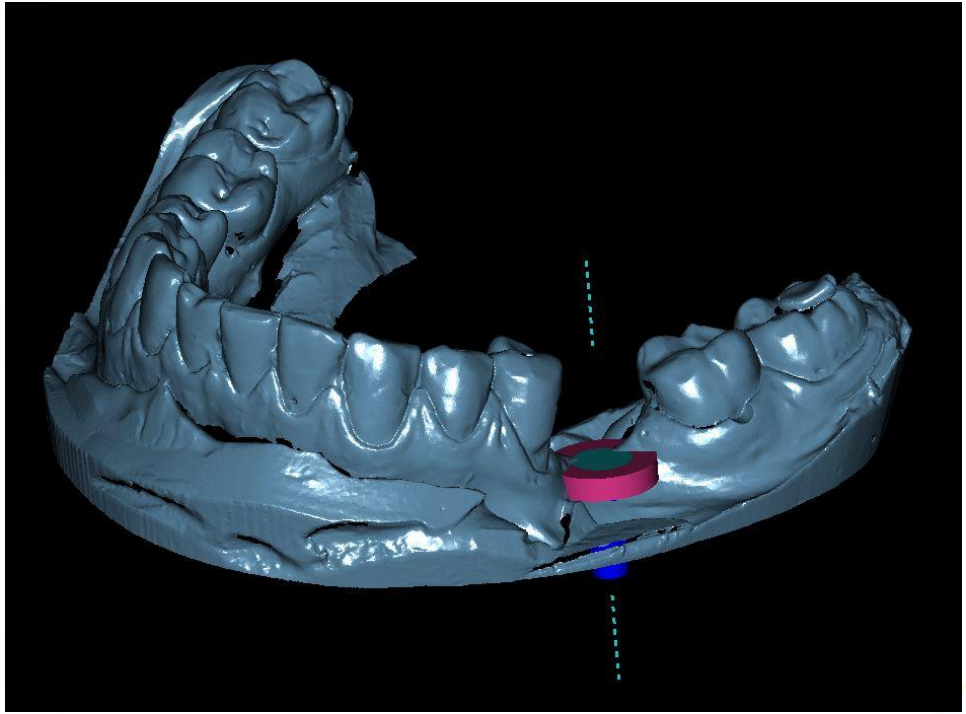
https://www.youtube.com/watch?v=1e1yvv3kN70



QuickVision 3D

Overlaying

This can hide the reconstruction of the patient's 3D volume in order to be able to see one or more elements.

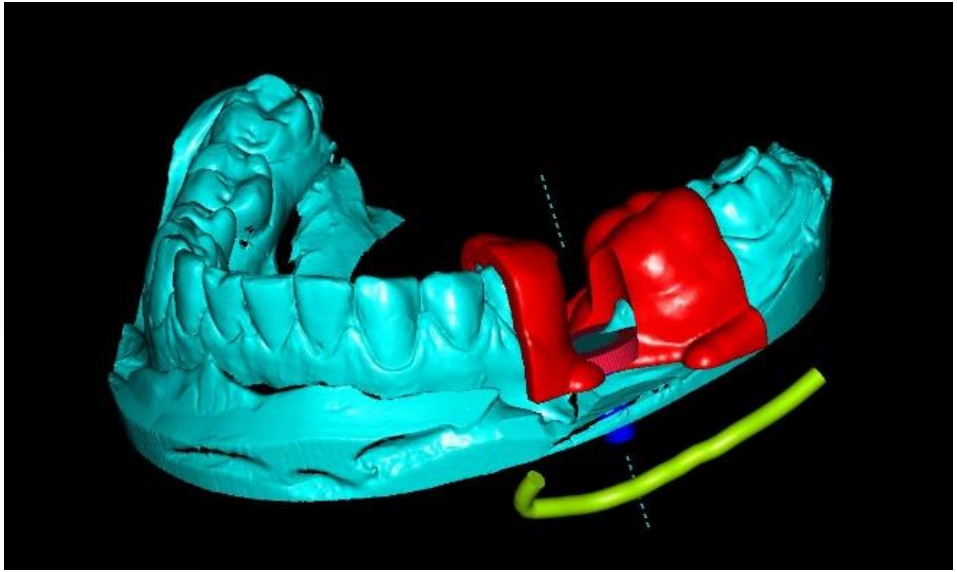


QuickVision 3D

Surgical guide design

Demo video:

https://www.youtube.com/watch?v=Vvsflthu9yo



Stage 1:

Draw the mandibular nerve.

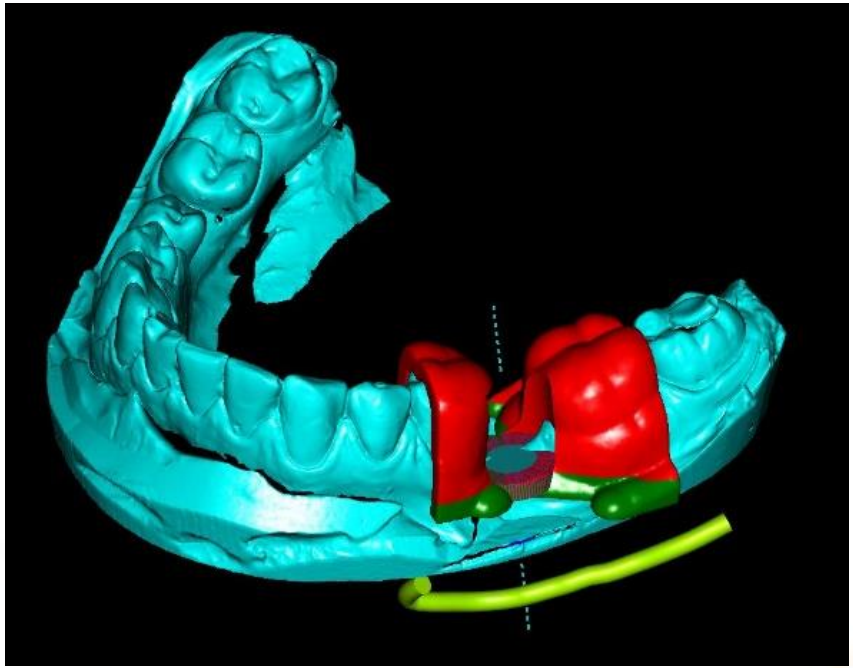
Select the fixations, position them and adjust their size.

Overlay the plaster model scan.

Add the ring, the insert and the surgical guide.

QuickVision 3D

Surgical guide design



Stage 2 :

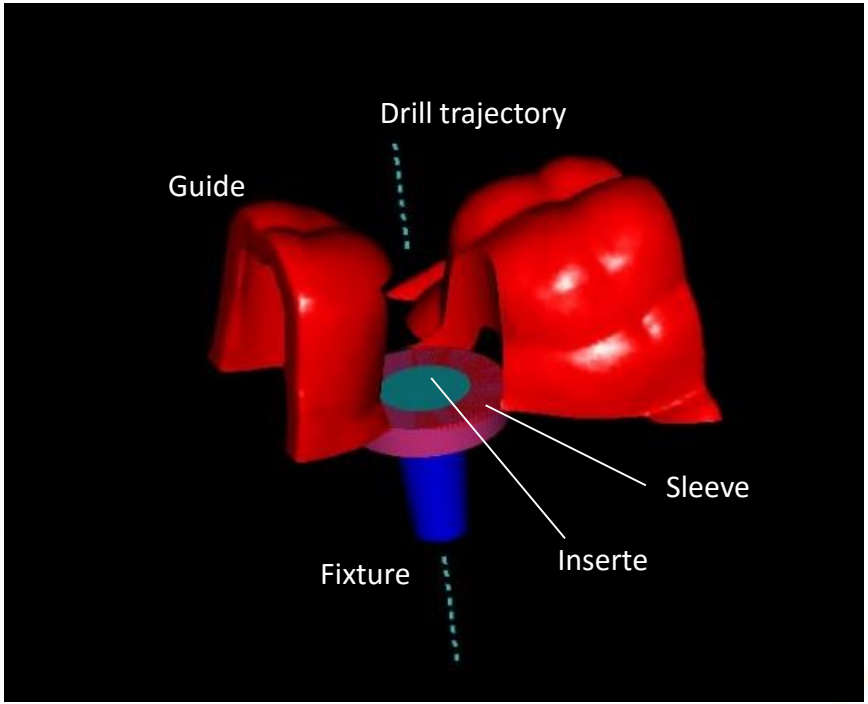
Finalise the surgical guide by adapting it to the plaster model.

QuickVision 3D

Surgical guide design

Stage 3 :

Select a view that will display the final model of the surgical guide.



QuickVision 3D

Surgical guide design

Stage 4 :

Download the project in order to generate an STL file and to print your drill template in 3D.

Alternatively, you can send the patient's plaster mould and 3D volume to the specialist centre, which will be able to both plan the implant and create the drill template for you.

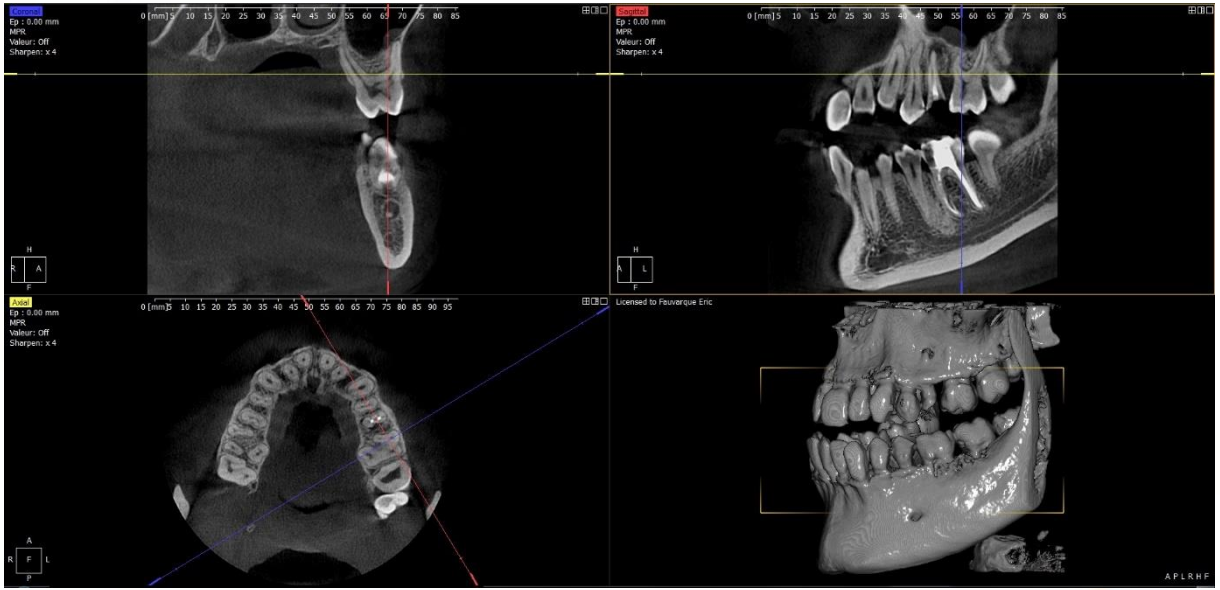
The 5 stages of guided surgery

STAGE 1

3D imaging to produce a DICOM image

Full-mouth imaging in just one exposure (3D I-Max).

Integrated and optimised system for implant planning.



The 5 stages of guided surgery

STAGE 2

Create an STL file of the dental impression

Méthod 1	Méthod 2	Méthod 3	Méthod 4
Traditional dental impression ↓ Create the plaster model ↓ Scan plaster model in a lab to obtain an STL file ↓ Import the STL file into QuickVision	Traditional dental impression ↓ Create the plaster model ↓ Scan plaster model with I-Max 3D (DICOM) ↓ Convert the DICOM file into an STL file	Traditional dental impression ↓ Scan dental impression with 3D I-Max (DICOM) ↓ Convert the DICOM file into an STL file	Dental impression taken directly using an intraoral camera (STL file) ↓ Import the STL file into QuickVision

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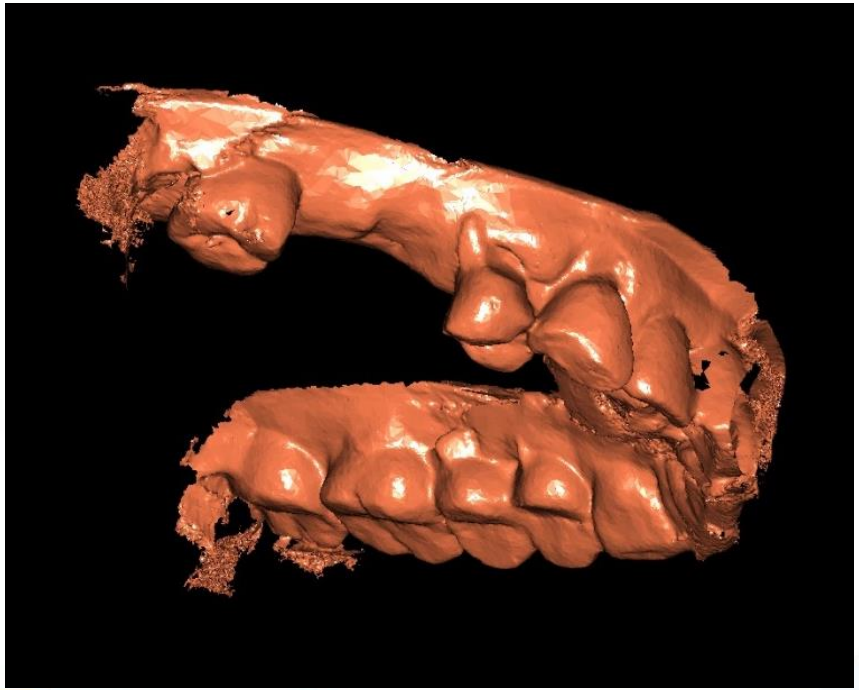
The 5 stages of guided surgery

STAGE 2

Create an STL file of the dental impression

Result of the 4 methods: STL file



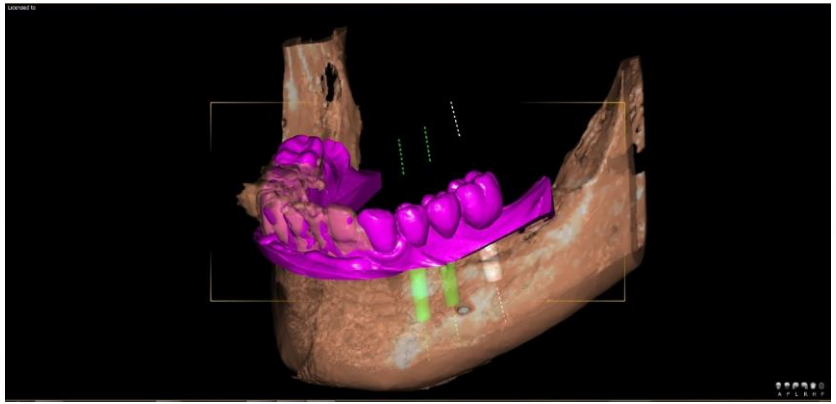
The 5 stages of guided surgery

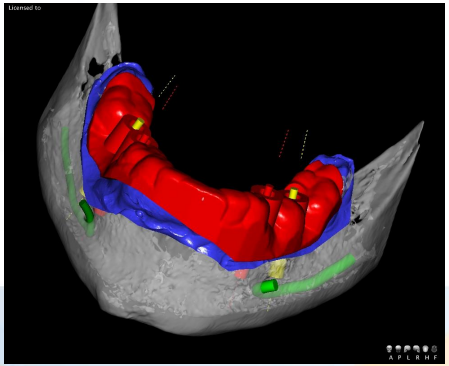
STAGE 3

QuickVision 3D: overlaying, planning and creating the guide

1. Overlay DICOM and STL files to obtain a complete image with soft and hard tissue. Demo video available on our YouTube channel Owandy Radiology (Superimpositioning_OWANDY RADIOLOGY_QuickVision 3D)

2. Quick, easy and intuitive implant treatment planning Demo video available on our YouTube channel Owandy Radiology (Implant create and place_OWANDY RADIOLOGY_QuickVision 3D)





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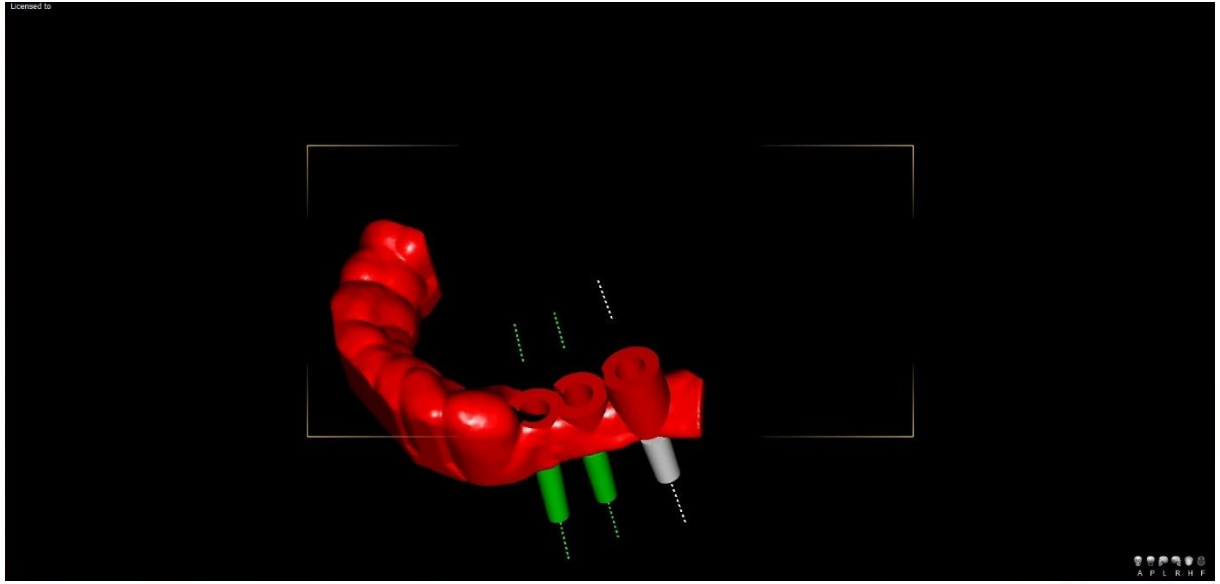
The 5 stages of guided surgery

STAGE 3

QuickVision 3D: overlaying, planning and creating the guide

3. Create the surgical guide. Demo video available on our YouTube channel Owandy Radiology (Creating surgical guide_OWANDY RADIOLOGY_QuickVision 3D)



The 5 stages of guided surgery

STAGE 4

3D printing of the surgical guide on a Form 2 (Formlabs) type printer, or by the laboratory

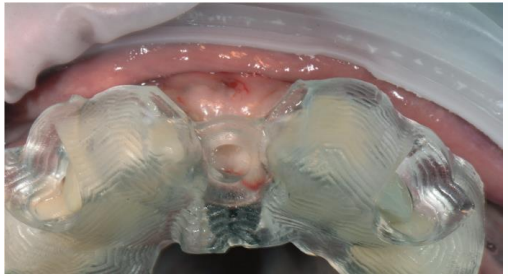
Top quality guided surgery.

Time-savings (no subcontracting).

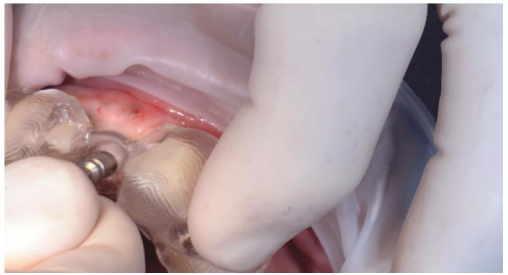
The 5 stages of guided surgery

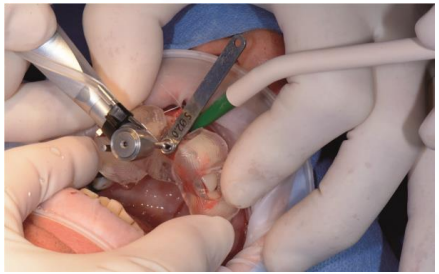
STAGE 5

Implant placement: a safe and accurate surgical operation



The guide is placed in the mouth and its position controlled using the windows.



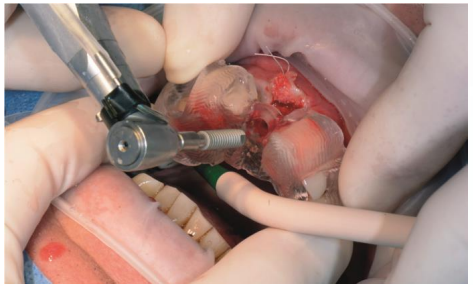


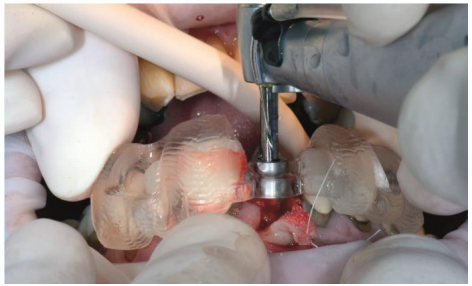
A circular scalpel is used to mark the gums, to carry out flapless surgery or, in this case, surgery with a small flap

The 5 stages of guided surgery

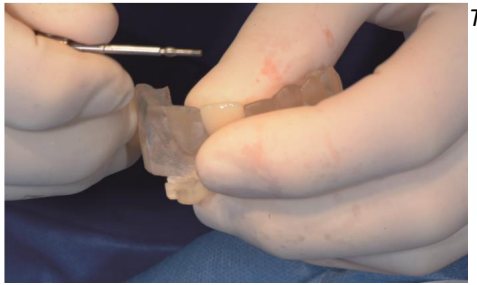
STAGE 5

Implant placement: a safe and accurate surgical operation





The implant is positioned using the guide, which ensures the perfect axial, vertical and rotational positioning with regard to the indexation.



The laboratory screw is removed.

The 5 stages of guided surgery

STAGE 5

Implant placement: a safe and accurate surgical operation

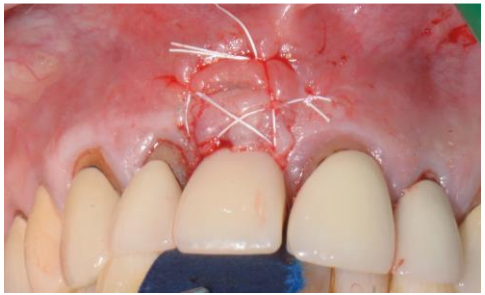
The prosthetic is placed and screwed onto the implant. It finds the right position in alignment with the other teeth.

Connective tissue roll is used to repair gum tissue.

The 5 stages of guided surgery

STAGE 5

Implant placement: a safe and accurate surgical operation



Stitches are done using PTFE 4/0 Cytoplast thread. The occlusal command is used to check the underbite.

QuickVision 3D

Key features

- Multilingual: 12 languages to date
- Multiple platforms: Windows / Mac
- CAD/CAM ready: Imports STL files from 3D camera / Exports STL files to 3D printer or milling machine
- Endo mode: oblique MPR view / rotation about an axis
- Autonomous guided surgery mode: creating straightforward surgical guides that your surgery can afford
- Multi-user licence
- Free and complete viewer

QuickVision 3D

Key features

- Free updates
- Implant library: Anthogyr, Camlog, IDT, Neobiotech, Zimmer, 3I, Alphabio, Astratech, Bego, Bicon, BioHorizons, Biomed, Biotech, Conmet, Dentium, Friadent, Leader, SoutherImplant, Straumann, TBR, MIS, Neodent, Niko, Nobel Biocare, Bluesky, Triologic

Marketing support

1. Launch document
2. Brochure
3. Owandy Tribune (November)
4. Presentation video

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Confidential – 2016 Edition

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