04/2021 NSC

NewTom IOS EXACT.VISION

3D INTRAORAL SCANNER





BU Medical Equipment Sede legale ed amministrativa

CEFLA s.c.

Via Selice Provinciale 23/a ■ 40026 Imola ■ Italy t. +39 045 8202727 ■ 045 583500 info@newtom.it

Stabilimento Plant

Newsom 3D Imaging

Via Bicocca, 14/c 40026 Imola - Bo (Italy) tel. +39 0542 653441 fax +39 0542 653601 newtom.it





PERFECTLY SHARP DETAIL.

3D scanner that integrates seamlessly with the technology of dental surgeries. Our goal: to improve the patient experience and optimise workflows.

In a dental surgery equipped with state-of-the-art instruments, a 3D intraoral scanner is a real must. The resulting digital impression is extremely accurate and immediately available for the subsequent treatment phases. Digital scanning avoids manual impression taking with the resulting patient discomfort, since it requires no invasive actions.

NewTom IOS is a latest-generation 3D intraoral scanner, extremely lightweight and accurate, suitable for integration with all the other NewTom instruments and compatible with the main systems currently in use.



VERSATILITY

Prosthetic, conservative dentistry, orthodontics and prosthetic implants. NewTom IOS covers many treatment areas - for dental surgeries that aim to offer excellence in dental care.



PRECISION

Two high resolution cameras and innovative software that guarantees considerable development potential. With Active Stereo Imaging and Fire Fusion, each impression is accurate down to the smallest details.



ERGONOMICS

At just 150 grams, the handpiece of NewTom IOS ensures outstanding ergonomics and performance.



CONNECTIVITY

NewTom IOS allows for real-time interaction with the dental technicians' lab and, thanks to 3D CBCT data, helps users to plan optimised project strategies.



ALTOGETHER UNIQUE.

One instrument for many applications.

The 3D impression made with NewTom IOS can be used in many treatment applications within a dental surgery, ensuring the greatest accuracy even in the most difficult conditions.

The main beneficiary is the patient, who won't have to endure the discomfort of manual impression taking and whose waiting time will be halved. Each impression is immediately available for use in formats suitable for sharing with the dental technicians, who can then give their feedback in real time, while the patient is still in the chair.



APPLICATION FIELDS

Intraoral scanning with NewTom IOS is used extensively in several fields. Not only does it allow for the production of dental prostheses and braces, it is also extremely useful in implantology operations and cosmetic dentistry.



FULL DIGITAL.

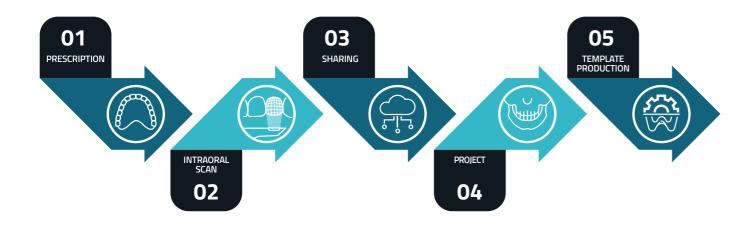
Maximum efficiency with fully digital workflows.

NewTom IOS is integrated into NNT, NewTom's all-in-one software. 3D impressions are therefore immediately available for any processing and use within the dental surgery.

Unlike a traditional impression, a 3D impression can be immediately shared with the dental technician's lab, minimising time requirements and errors. The image can be exported in STL, PLY or OBJ formats. The files are compatible with the most common sharing systems, also via e-mail.

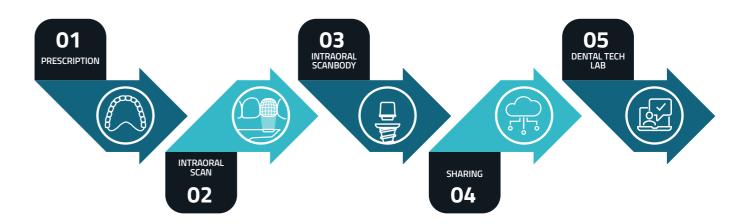
ORTHODONTIC DEVICES

NewTom IOS allows complete arches to be scanned ensuring precision, speed and comfort for the patient. Bi-lateral vestibular scanning is activated automatically for correct occlusal adjustment.



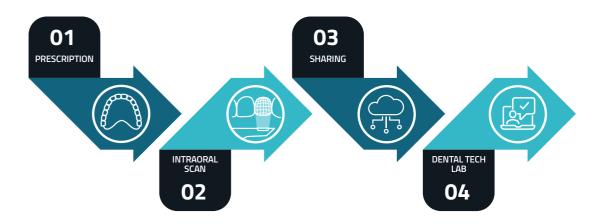
IMPLANT PROSTHETICS

The benefits of digital intraoral scans are even more obvious in the case of prosthetic implant applications. NewTom IOS allows impressions to be taken on implants according to a much less invasive procedure for the patient. Additionally, the NewTom IOS software supplements a workflow in which gum scans and scanbody features are automatically superimposed, to ensure painstakingly accurate designs.



PROSTHESES

NewTom IOS optimises the scanning process in all applications where intraoral scanning is indicated. Impressions can be sent to the dental technicians' lab straight after scanning, in order to immediately receive any feedback.



HI-TECH IMPRESSION.

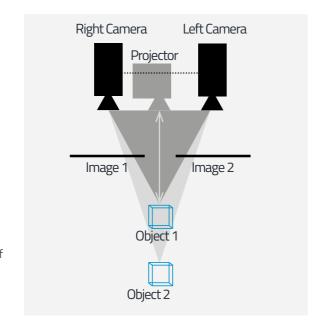
Innovative technologies: whenever only excellence will do. NewTom IOS includes hardware and software components that meet the highest currently available standards, such as the two high-definition colour cameras and LED projector.

No detail, however small, has been overlooked in order to equip dental surgeries with a tool that meets the highest expectations.

ACTIVE STEREO IMAGING

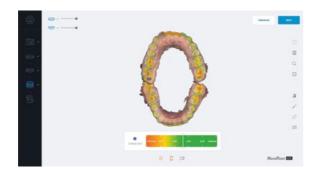
NewTom IOS relies on a modern, patented evolution version of the Active Stereo Imaging technology, now universally established in various fields of application of 3D imaging. All the components have been miniaturized and made lighter to be contained in an extremely compact and practical handpiece. In addition, Active Stereo Imaging does not require the use of powders and does not require calibration.

FireFusion is a new 3D processing software technology allowing a huge volume of 3D data to be stored in real time. This has a positive impact in terms not just of performance and speed, but also of resolution, quality of 3D reproduction and accuracy.



OCCLUSAL COLOUR MAP

A digital articulating paper strip with progressive colouring helps the clinician to accurately analyse the patient's occlusion.



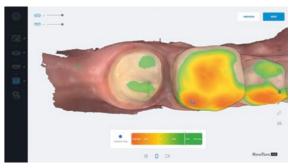
COLOUR SCANNING

The 3D model is displayed in a matter of instants. The obtained image is extremely detailed, with vivid and realistic colours. This ensures optimal interpretation of the site of interest.



PREPARATION ANALYSIS

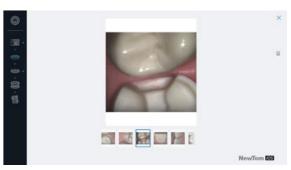
NewTom IOS is a valuable diagnostic tool. Two software features detect undercuts in the preparations and the distance between the prosthetic die and its antagonist. These are two critical aspects to take into consideration for a successful prosthetic preparation, hard to evaluate, however, without the help of a 3D scanner.





2D VIDEO CAMERA

NewTom IOS also allows high resolution photos to be taken and automatically saved and shared with the dental technicians' lab.



USB 3.0

The USB 3.0 port allows connecting to both a workstation and a notebook.



EXACT.VISION

ERGONOMIC DESIGN.

Lightweight, versatile, functional. For total operating comfort.

has a very light handpiece, designed to adapt to different handles. Scanning is easy for the doctor and non-invasive for the patient.

Operation is extremely fast and ensures the greatest accuracy - wherever the treatment site.

ULTRALIGHT HANDPIECE

At just 150 grams, this highly compact handpiece is easy to handle and does not cause any discomfort to the patient.



ADJUSTABLE TIP

The tip can be rotated without having to change the handle, so as to easily scan the upper and lower arches.



SCANNING BUTTON

The scan is started and stopped directly from the handpiece, via a special button.



SOLID BASE

The base of the scanner is sturdy and steady. It can be safely placed on a piece of furniture, on a drawer unit or even on the dental unit module.



ANTI-FOGGING SYSTEM

The handpiece contains an internal ventilation circuit which stops the prism fogging up.



AUTOCLAVABLE TIP

Newtom IOS is supplied with a set of 3 autoclavable tips (134°C/4 minutes).



COMPLETE CONNECTIVITY.

Excellent connectivity and integration with the modern systems adopted by NewTom. Workflow and clinical and diagnostic activities become much easier and high-performing.

REMOTE ASSISTANCE

By configuring the scanner to use the surgery's internet connection, it is possible to monitor the device and perform any remote technical servicing.

CAM

As an open system, NewTom IOS can interface with any CAD design software, and is therefore suitable for the production of devices and restorations on all open CAM milling devices or milling centres.

3D PRINTING

The open formats STL, PLY and OKJ allow scan files to be managed for designing and printing 3D models to support treatment planning, or finalise prosthetic restorations.

CAD

To facilitate and speed up communication between surgery and laboratory, scan files can be exported in dedicated formats, optimised for importing into the most popular dental CAD software tools.

ORTHO

The scan data can be imported not just in CAD software but also into orthodontic analysis and design software - increasingly popular and high-performing.



STL

The STL format, the most common and universally used, contains all the information on the 3D model and the occlusion.

In addition to 3D model and occlusion information, the PLY format also includes colour texture.

The OBJ format has the same characteristics as the PLY format and is the most widely used on various 3D graphic devices and applications, such as Face Scanner and 3D Printing.

USB AND CLOUD

The sending of scan files can be managed via cloud services, via email, or via USB. The transfer takes place in seconds because the files are quite light.

NNT: CERTIFIED SOFTWARE

NNT has been granted the ISDP© 10003 international scheme for data protection certification, to assess compliance with the European Regulation 2016/679 concerning the protection of individuals with regard to the processing of personal data.

TECHNICAL SPECIFICATIONS.

SCANNING	
Surface preparation	Without de-lustre powder
Rendering viewing	Colour
Scanning principle	Active Stereo Imaging
Scan depth	From 0 to 15 mm

SCANNER	
Handpiece dimensions (L x D x H)	265 x 45 x 45 mm
Base dimensions (L x D x H)	193 x 99 x 72 mm
Handpiece weight	150 g
Handpiece-base lead	1.8 m
Power supply	100-240 VAC 50/60 Hz
PC connection	1 x USB 3.0
Tip	Removable in autoclavable biocompatible polymer

SOFTWARE	
Outgoing file format	STL, PLY, OBJ
Touch Screen interface	
Implant scan	
Bi-Lateral vestibular scan	
3D measurements	
Scan correction	•

RECOMMENDED SYSTEM REQUIREMENTS*	
Processor	≥ 4 Core Intel i7 ≥ 2.1 Ghz clock or higher
RAM	16 GB DDR4
Video board	NVIDIA GeForce GTX ≥ 1070/RTX ≥2060
USB	1 USB 3.0 port + 1 USB port
Operating system	Windows 10 (not Windows 10 S)

*For its operation, the scanner must be directly connected to a PC. The recommended system requirements are applicable in case of PC Workstation. At the following link you can find the list of compatible Notebook: www.newtom.it/en/dentale/scanner/newtomios/

EQUIPMENT	
STANDARD	NewTom IOS Intraoral Scanner - 3 autoclavable tips 2 m USB 3.0 cable - 100-240 V power supply - NewTom IOS software
OPTIONAL	Autoclavable 3-tips pack

