BIT DENTAL

Zhermack®
CADCAM

Why CAD/CAM?

- Introduction and diffusion of CAD/CAM Technologies create premises for a radical change in conservative/prosthetic treatment
- Value for our companies' assets
- Business differentiation
- Marketing potential
- We will create innovative solution in material and hardware

Zmack

Sales forces prepared and focused

Intro courses Zmack

Road show

Demo in house

Live demo in training centre

continue educational program

After sales support

Alpha/Beta testers

Dentists

Lab Technicians

Marketing

CAD/CAM Events

Zmack world Tour

Courses

Advertising

Congresses

Media arthicles

Sales reps visuals

Zmack Viral marketing

Zmack club

Patients (15%)

20% of total Dentists/Lab Technicians

Lab cooperation

Zmack Postcard

Essence

Build today a winning professionality for tomorrow

Key concept

Zmack is a FAST (1 hour), SIMPLE (5 simple steps) and FUNCTIONAL CAD/CAM system for dentists and dental labs.

Dentists and dental labs can have crowns ,bridges, inlays, veeners to satisfy their needs.

When

New technology friendly, >10 crowns/months or 40 for lab, age 35/55,

Why

Zmack makes ceramic restoration in

a FAST,SIMPLE,CONVENIENT way

How

5 simple steps in 1 hour and 1 session

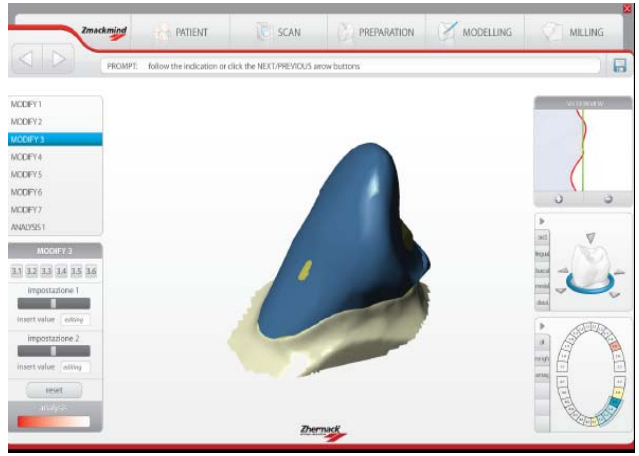
Avvia il browser Internet Explorer.lnk

The modular solution

Zmack View and Zmack Scan Full HD (intraoral camera and 1 lab Scanner) The solution to scan teeth (from 1 to 4 elements) like COS,E4D, Cerec or (Cercon Eye or InEos for labs)

Zmack mind 1.0 (software)
State of art of software like Evolution 4d or Cerec 3.01 or dental designer for practice and dental lab

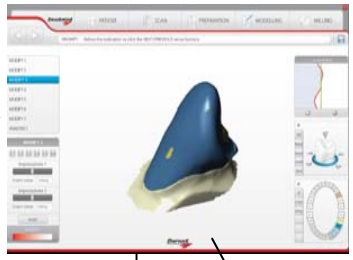
The modular solution



Zmack Crea 3lab-Zmack Crea 4lab- Zmack Crea 5lab.
3 milling unit, precise, easy to use and fast form 3 to 6 axis for labs and dentist.

Zmack Global Service – Milling Centre
outsourcing centre like Lava (in Milano and Naples).

The modular solution Zhermack



M 270

Zhermack modular system

- Our client will buy only one instrument if requested (milling unit or scanner) and web or mail interface with external centre or milling centre like Zmack Global Service.

- Choice of an open software or closed software if you purchase the whole system (we will certify only the closed system)

Zmack View

Acquisition unit Zmack view (dentist)

- Easy
- Fast
- Functional

Zmack View

Required caractheristic of Zmack View

- Precise at least as Sirona, Cos (3M/Brontes), Itero (Cadent), Evolution 4d (D4D)
- Fast at least as Sirona, Cos (3M/Brontes), Itero (Cadent), Evolution 4d (D4D)
- Functional at least as Sirona, Cos (3M/Brontes), Itero (Cadent), Evolution 4d (D4D)

Zmack View

- Acquisition time now 160 ms: target 80 ms

  3° generation of intraoral Camera with 4 fringe projectors

What we scan with Zmack view

- Crowns
- Pontics (multiples shots)
- Inlays
- Veneer
- Check-bite
- Multi-Die (multiple shots)

Zhermack's advantages vs. competitors

- Complete system
- Maximum flexibility and integration:
  - The system allows the dentist either to execute the works directly or to send it to a lab for processing
  - Furthermore, the data (STL) are compatible with any CAD CAM system
- Modular system maximum flexibility and integration:
  - The client will buy only one instrument if requested (milling unit or scanner) and web or mail interface with external centre or milling centre like Zmack Global service
  - Choice of an open software or closed software if you purchase the whole system
    (we will certify only the closed system)

Zhermack's advantages vs. competitors

- Vast choice of materials
- Wide range of workmanships available
- Ease of use with step by step guide
- Speed of execution through a software simple and largely automated
- Accuracy and precision equal or higher than competitors
- Effective with less images
- Considerable potential for development and expansion
- Partnership with major industry leading companies

Zmack Scan Full HD

Structured white light

- Precision : around 10 micron
- Speed: 1,5 for a single crown
- Automatic process
- Easy and accurate calibration system
- 2 axis
- Third generation scanner

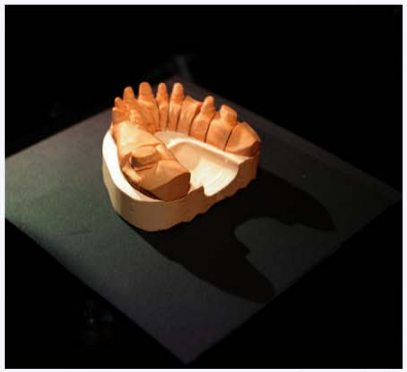
Zmack Scan Full HD

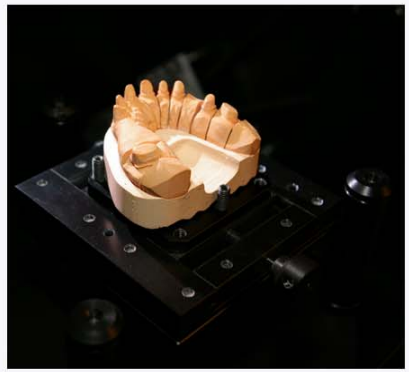
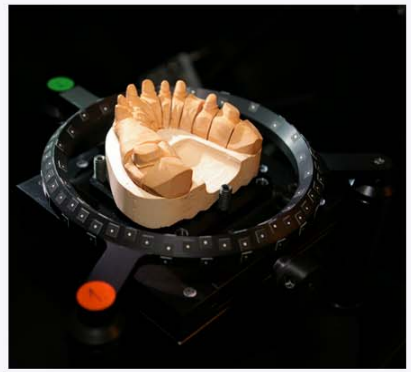
Precision : target 8 micron accepted 15 micron

Speed: target 1,5 minutes accepted 3 minutes
for a single crown

Zmack Scan Full HD

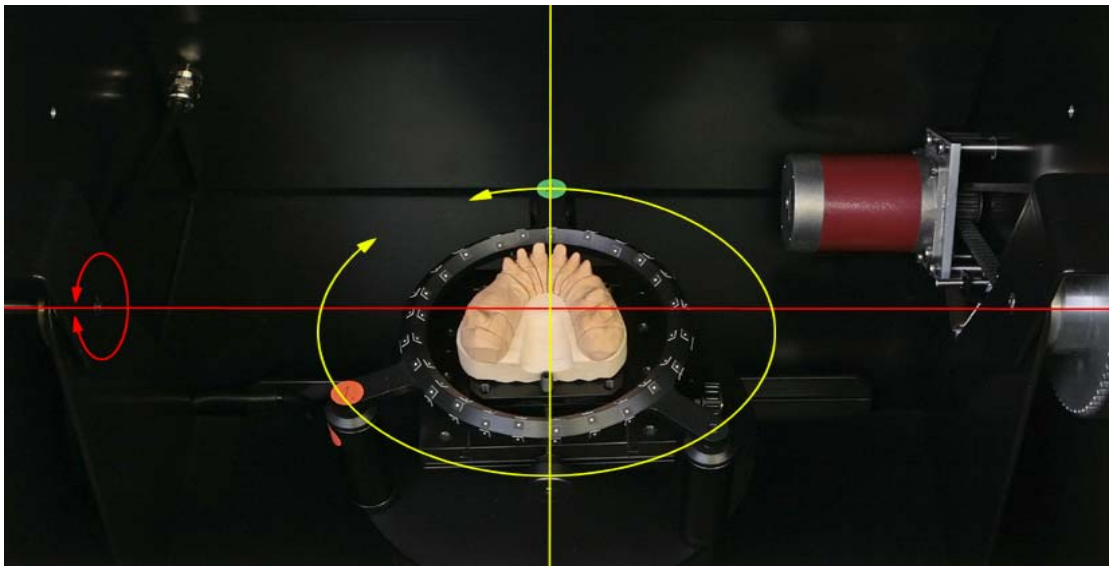
Dental model in its support



Zmack Scan Full HD

2 axis (fully automated) system



Zmack Crea 3 / 4 / 5 lab

- 1 motor 3 to 5 axis depending on requests
- Precision (1-3 micron) better then Lava milling centre (3 axis), Wieland 4820 (4axis), Kavo Everest (5 axis)
- Speed 20 min for elements (oxide zirconium)
- Materials:oxide zirconium, feldspar ceramic , wax, Poliammide
- Air system and water system
- From 1 to 2 disc and pin

Zmack Crea 3 / 4 / 5 lab

Technical description

- A unique family of milling machines designed for dental applications
- Body structure made in south african granite to have, in a compact shape, a strongness typical of bigger and heavier milling machine
- Proprietary double processor based numerical control with standard Windows XP or Vista graphic user interface

Zmack Crea 3 / 4 / 5 lab

Technical description

Driven by the most up to date digital motion techniques

Submicron movements to achieve the highest resolution available on the market

- Rotating axes driven by unique Harmonic Drive® spline reduction devices
- Large selection of professional spindles starting from 0,3 Kw to 4,5 Kw with rotating speed between 30.000 to 60.000 Rpm
- Professional Automatic tool changer, with automatic tool preset and integrity control, even in the entry level milling machines
- Speed and movement efficiency allowing very high daily production

Zmack Crea 3lab

The Zmack Crea 3lab has been designed specifically for dental applications having in mind to be productive and effective and, more, to fits the typical needs of medium size labs.

Description	Technical specifications
Body structure	South African black granite
Axis movements	3 + 1
Maximum speed	0,1 ÷ 150 mm/sec
Axis resolution	0,001 mm (1 micron)
Accuracy	0,003 mm (3 micron)
Motor drive tecnique	nanoStepping® digital steppers
Potenza e velocità mandrini	0,3 KW – 40.000 Rpm **(Productiva)** 1,6 Kw – 60.000 Rpm **(Metalica)**
Overall size (WxHxD)	780 x 1700 (2300) x 850 mm
Weight	300 Kg approx.
Pneumatic requirements	Very dry filtered air 6 bar 16lt/h
Controllo numerico	**µPulse®**
Interpolation	Linear, circular and helicoidal
Communication interface	USB, Ethernet 10-100-1000 Mb, WiFi 802b
Power supply	110 or 220 Vac – 50-60 Hz - 3 Kw/h maximum

Zmack Crea 3lab

Precision target 3 micron accepted 5 micron, Speed target 20 minutes accepted 25 min for Vita Triluxe (feldspar ceramic) target 20 minutes for YZ cube Vita (oxide zirconium) accepted 25 30 elements a day

Zmack Crea 4lab

The **Zmack Crea 4 Lab** has been designed specifically for dental applications having in mind to be productive and effective but, at the same time, sophisticated enough to make it possible to produce easily even the most complicated bridges or abutments with undercuts.

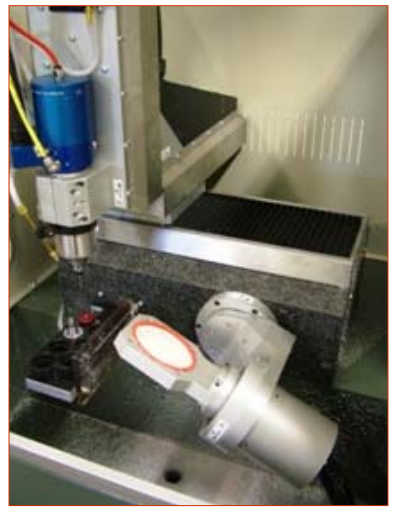
The **Zmack Crea 4 Lab** has been designed for dental labs having a medium-high production needs and, as for all our Zmack **family,** it can mill continously even overnight thanks to the tool integrity control and the automatic tool changer.

Zmack Crea 4lab

Description	Technical specifications
Body structure	South African black granite
Axis movements	4 continous
Maximum speed	0,1 ÷ 450 mm/sec
Axis resolution	0,001 mm (1 micron)
Accuracy	0,003 mm (3 micron)
Motor drive tecnique	**V**ery **H**igh **R**esolution digital brushless
Potenza e velocità mandrini	1,6 Kw – 60.000 Rpm **(Metalica)**
Overall size (WxHxD)	780 x 1700 (2300) x 850 mm
Weight	350 Kg approx.
Pneumatic requirements	Very dry filtered air 6 bar 16lt/h
Controllo numerico	**Pulse®**
Interpolation	Linear, circular and helicoidal
Communication interface	USB, Ethernet 10-100-1000 Mb, WiFi 802b
Power supply	110 or 220 Vac – 50-60 Hz - 3 Kw/h maximum

Zmack Crea 5lab

The Zmack Crea 5 Lab can easily produce, **in one run**, all kind of dental stuffs even the most complicated ; it can mill innovative dental material such as : zirconia, alumina, wax, PMMA, polyamidic.. As for the other Zmack machines it's supplied with a full guard for clean and quiet room environment. The Zmack 5 Lab target are sophisticated users having very high expectations in terms of quality and production quantities and medium size dental labs who need a versatile CAD CAM system to fulfill all their requirements.



Zmack Crea 5lab

Description	Technical specifications
Body structure	South African black granite
Axis movements	5 continous
Maximum speed	0,1 ÷ 450 mm/sec
Axis resolution	0,001 mm (1 micron)
Accuracy	0,003 mm (3 micron)
Motor drive tecnique	**V**ery **H**igh **R**esolution **AC** digital brushless
Potenza e velocità mandrini	1,6 Kw – 60.000 Rpm **(Metalica)**
Overall size (WxHxD)	780 x 1700 (2300) x 850 mm
Weight	400 Kg approx.
Pneumatic requirements	Very dry filtered air 6 bar 16lt/h
Controllo numerico	**Pulse®**
Interpolation	Linear, circular and helicoidal
Communication interface	USB, Ethernet 10-100-1000 Mb, WiFi 802b
Power supply	110 or 220 Vac – 50-60 Hz - 3 Kw/h maximum

Zmack Crea 5lab

	Zmack Crea 5 Lab		Kavo Everest	
Body structure	Black South African Granite	√	Concrete casting	
Axes controlled	5 continous	√	3 + 2	
Motor drive technology	VHR digital brushless	√	??	
Axes resolution	0,001 mm (1 micron)	√	Not declared !	
Accuracy	0,003 mm (3 micron)	√	Not declared !	
Speed	0,1 ÷ 450 mm/sec	√	Not declared !	
Spindle	1,6 Kw @ 60.000 Rpm Automatic taper tool changer	√	Spindle with direct tool changer	
Materials machinable	Green Zirconia Wax - PMMA - Polyammide	√	Zirconia -polyammide -feldspar	
Blanks allowed	two Ø 98 mm		one Ø 98 mm	
Typical products	Crowns, bridges, arches up to 14 elements, bars, Toront bridges and abutments	√	Crowns, bridges and small arches	
Daily production	40 ÷ 60 crowns		15 ÷ 30 crowns	
CAM driven	Proprietary code (CLOSED SYSTEM)	√	Proprietary code (CLOSED SYSTEM)	
Price	€ 90.000 depending on the CAM software	√	€ 130.000	
After sale service	Given directly by the manufacturer	√	Depend on the service needed	

Zmack Crea 3 / 4 / 5 lab

How Zmack Crea 3,4,5 lab differentiate from competitors

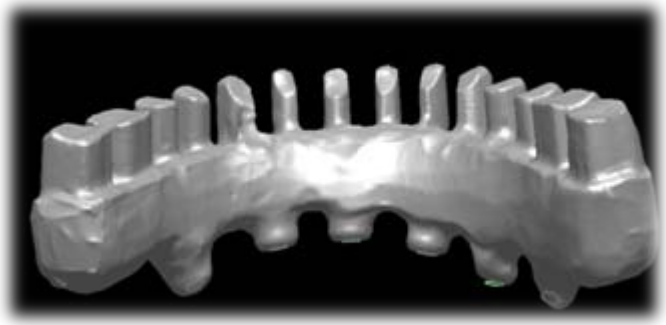
Strenght

- High versatility of materials and motors
- Low exercise cost
- High precision
- High quality of construction materials
- Excellent value for money ratio

Weakness

- Brand reputation
- Only ceramic (metal optional)

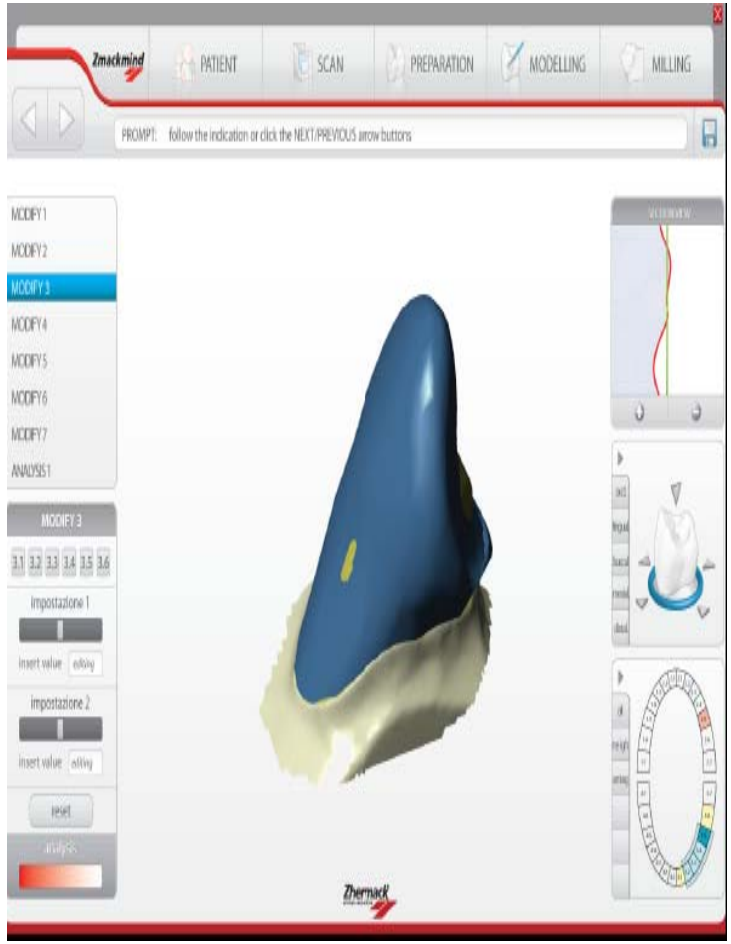
Web service and Zmack Global Service



- Increase of sales of intraoral cameras and desk top scanners and software
- Laser sintering metal (EOS)
- Zmack Crea 4 or 5 Lab for others
- Gradual approach at CAD/CAM and service

Characteristic of software Zmack mind 1.0

- Easy to use like Cerec 3.01 or dental designer for lab
- Indication: crown, inlay,onlay, veneer, multiple,pontic, framework, wax,gum
- Eventually you can import (or export) STL file
- Open or closed architecture
- Unique feautures: automatic margin line, wax function, gum function, chance to mill the internal die, anatomical and framework structure



Patient selection

File Window Help

Zmackmind | PATIENT | SCAN | PREPARATION | MODELLING | MILLING

PROMPT: follow the indication or click the NEXT/PREVIOUS arrow buttons

PATIENTS LIST

Search to:

doctor: editing area

surname: editing area

name: editing area

NEW PROFILE | DELETE PROFILE

surname	name	date of birth
surname_1	name_1	date_1
surname_2	name_2	date_2
surname_3	name_3	date_3
surname_4	name_4	date_4

PATIENT DETAILS

surname: click on EDIT BUTTON to type on this area

name: click on EDIT BUTTON to type on this area

date of birth: click on EDIT BUTTON to type on this area

note: click on EDIT BUTTON to type on this area

EDIT

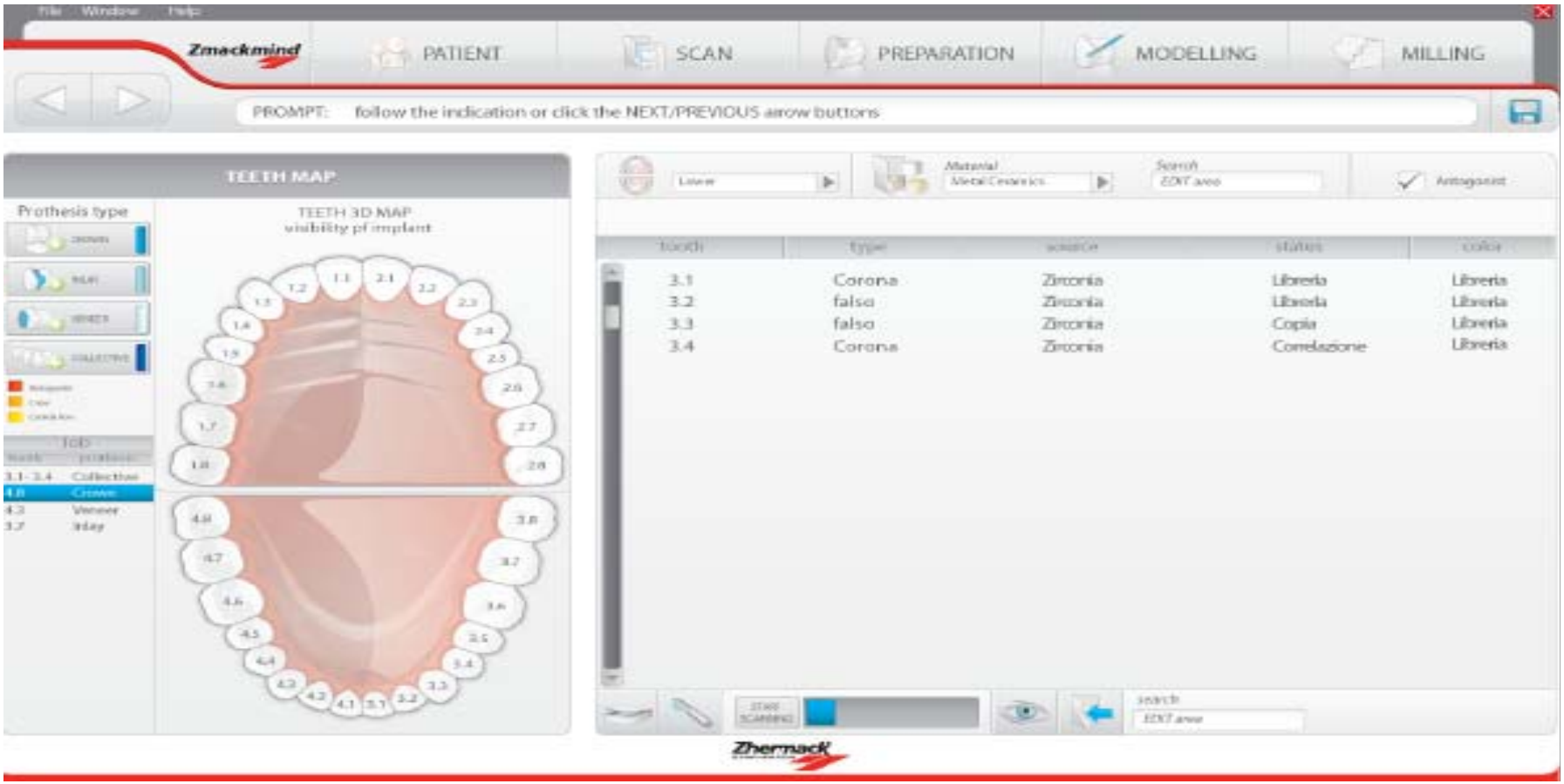
Privacy

EXISTING DATUM | EXISTING DATUM

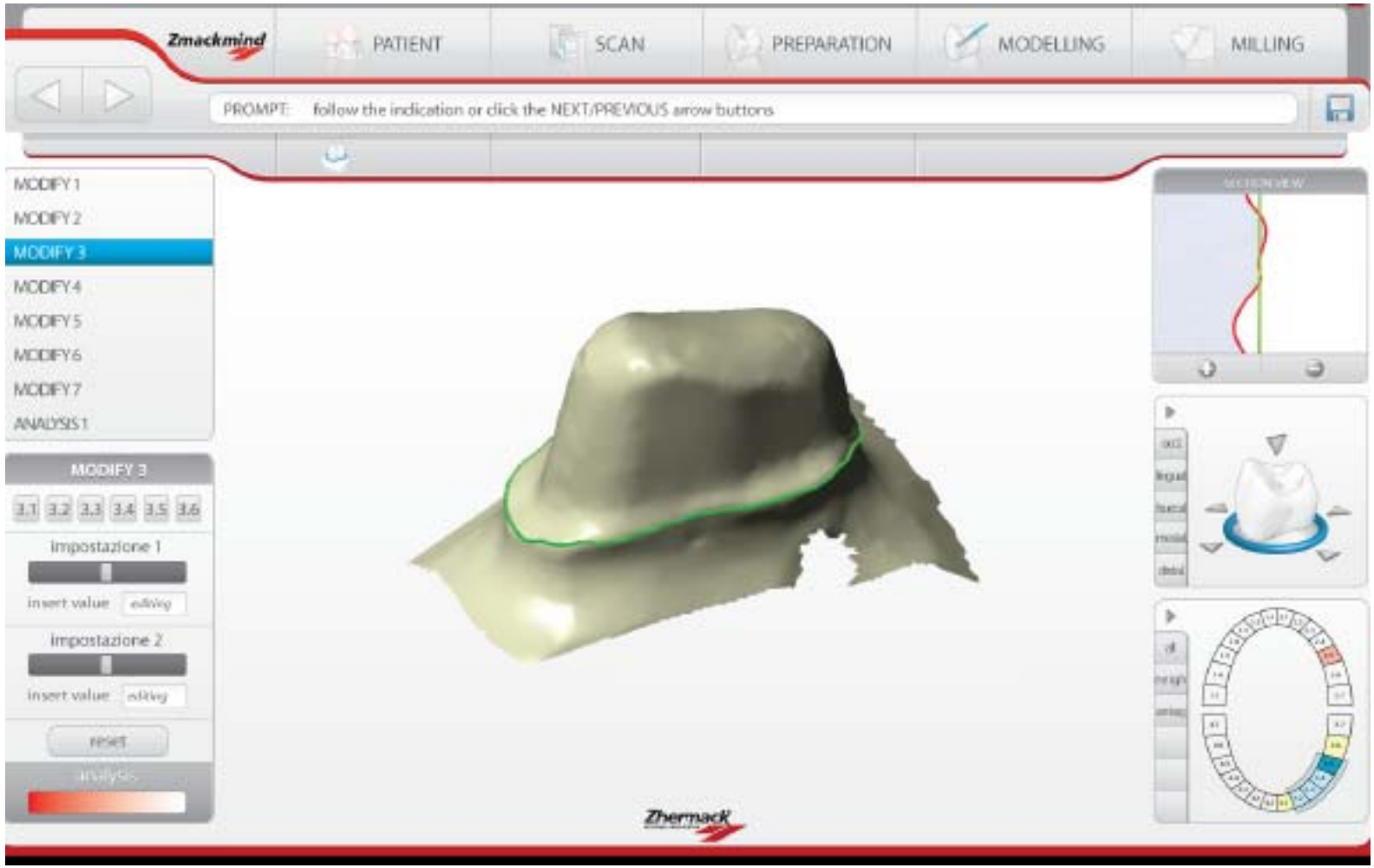
date	tooth - scanning data	prothesis	phase
date_4	3.4 - data 3	crown	external
date_3	3.4 - data 3	crown	preparation
date_2	3.4 - data 1	inlay	milling
date_1	3.4 - data 1	inlay	prothesis

Zhermack

Scanning phase



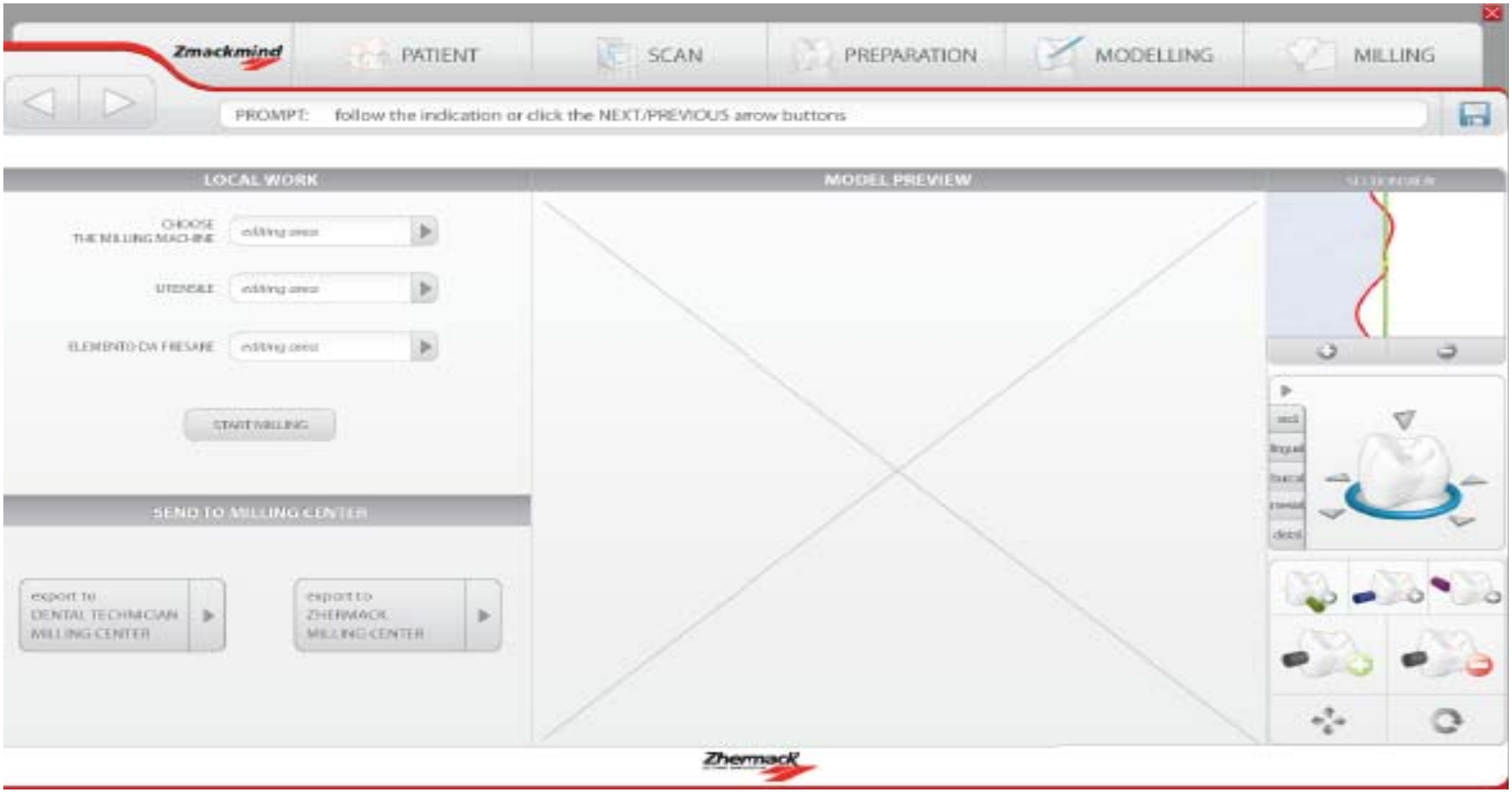
Preparation



Modelling

Zmackmind
PATIENT
SCAN
PREPARATION
MODELLING
MILLING
PROMPT: follow the indication or click the NEXT/PREVIOUS arrow buttons
MODIFY 1
MODIFY 2
MODIFY 3
MODIFY 4
MODIFY 5
MODIFY 6
MODIFY 7
ANALYSIS 1
MODIFY 3
3.1 3.2 3.3 3.4 3.5 3.6
Impostazione 1
Insert value
Impostazione 2
Insert value
reset
Zhermack

Milling


Zmackmind
PATIENT
SCAN
PREPARATION
MODELLING
MILLING
PROMPT: follow the indication or click the NEXT/PREVIOUS arrow buttons
LOCAL WORK
MODEL PREVIEW
CHOOSE THE MILLING MACHINE
UTENSILE
ELEMENTO DA FRESARE
START MILLING
SEND TO MILLING CENTER
export to DENTAL TECHNICIAN MILLING CENTER
export to ZHERMACK MILLING CENTER
Zhermack