



### BLEACHING TREATMENTS

Motivate, quantify, prove



### FIXED PROSTHETICS

Crown, bridges, veneers



### CHAIRSIDE TREATMENTS

CAD/CAM, composites



### REMOVABLE PROSTHETICS

Dentures, prefabricated teeth



**COBRA**  
SHADE SCAN

The versatile shade scanner !



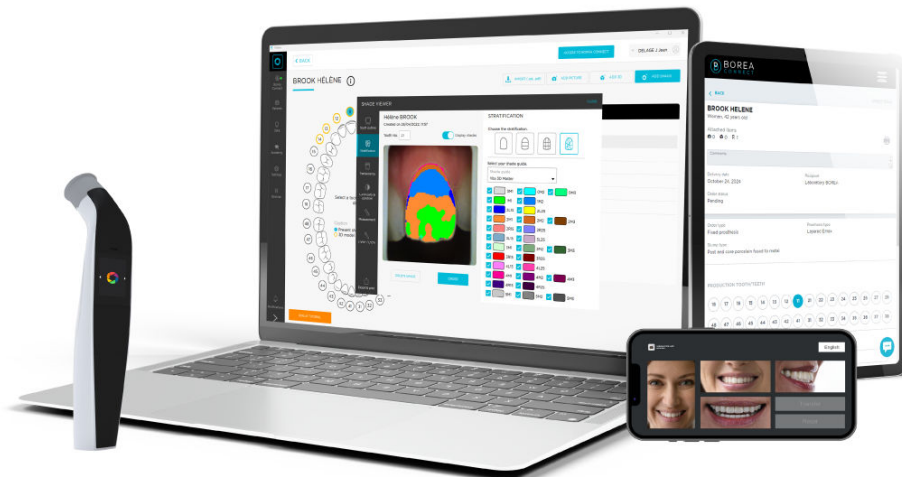
**BOREA**  
THE SHADE COMPANY



# COBRA

SHADE SCAN

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MADE IN FRANCE



## CHOOSING THE COBRA SHADE SCANNER SOLUTION MEANS:

### JOIN THE COBRA SHADE SCAN COMMUNITY

A validated and recognized solution, take advantage of the experience of the previous Handy and the new features provided by the Cobra.

### AIMING FOR QUALITY WITHOUT ADDITIONAL COST

Our products have a 2 years warranty, parts and labor.

Our solution includes the handpiece, the Vision software and the Borea Connect platform.

No hidden costs, no annual fees.

### ENJOY MEDICAL GRADE MANUFACTURING & KNOW-HOW

Our products are medical devices made in France. We favor local and national suppliers. Our mission: to develop, innovate and design in compliance with quality standards. BOREA is ISO 13485 certified.

### MASTER THE TECHNOLOGY

BOREA is made up of a team of experts who work on possible developments to offer you the best of technology. BOREA has also patented all its innovations.

## The concept



### COBRA SHADE SCAN

For the production of a dental prosthesis, two information are essential to transmit to the laboratory for a perfect integration in the mouth.

The dimensional information digitized with precision thanks to your intraoral scanner.

The colorimetric information recorded then transmitted thanks to the spectrophotometer and the Borea Vision software.

Thus you benefit for the first time from an all-digital workflow and its many advantages.



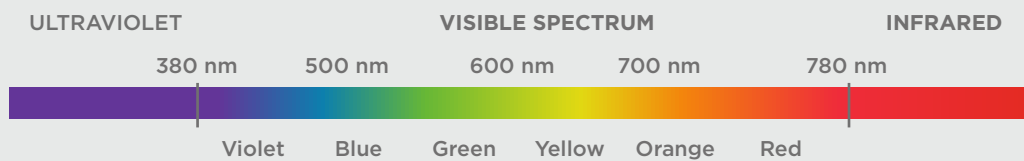
The instantaneous transmission of color in the patient file of the Vision software, its reliability and reproducibility make it the essential tool for everyone.

To easily communicate with your laboratory and ensure simple and rapid monitoring of your dental prosthesis orders, benefit from free access to our community platform, Borea Connect.

[1] "A comparative in vivo study of new shade matching procedures"  
Hampé-Kautz, Salehi, Senger, Etienne 2020;23(4):317-323  
**The International Journal of Computerized Dentistry**

## The spectrophotometer, a validated and approved technology

A spectrophotometer allows the acquisition of spectral data at any point of the tooth. The wavelengths are analyzed and then compared to a database in order to deduce the color of a tooth. The Cobra performs an analysis in the visible spectrum of 380 nm and 780 nm.



## The color coordinates

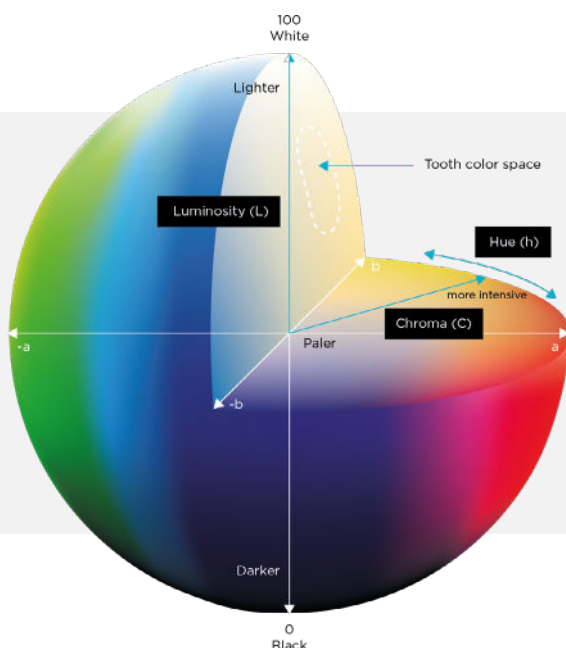
### CIE L\*a\*b\* et L\*C\*h

CIE L\*a\*b\* coordinates are a colorimetric standard defined by the Commission Internationale de l'Éclairage (CIE) in 1976. It allows a multitude of functionalities and standardized communication with your laboratory.

- Calculation of colorimetric differences ( $\Delta E$ ).
- Quantification of bleaching treatments.
- Editing help.
- Comparison of natural tooth and prosthesis in the mouth.
- Compatibility with manufacturing recipe applications.



**Spectrophotometers are the best-adapted tools for shade matching since they record the L\*, a\*, and b\* values of one color.” [1]**



### What is CIE L\*a\*b\* ?

This space expresses the color in three values:

- L\* for the brightness indicated between black (0) and white (100)
- a\* from green (-) to red (+)
- b\* from blue (-) to yellow (+)

Based on a three-dimensional representation, the CIE Lab system allows a more precise description of colors and approaches the properties of the human eye. It is thus easy to quantify color deviations or to dissociate and study the luminosity (L) of a color.

# Become objective and gain in comfort

with an accurate and repeatable solution

COBRA  
SHADE SCAN



“  
Cobra offers optimal  
and objective color definition”

From the simplest monochrome prosthesis to the superb multi-layered set, Cobra potentiates each of your choice of materials and optimizes your aesthetic experience to transmit **true information** to your laboratory in a single simplified gesture.

A multipoint spectrophotometer ensures working comfort and serenity. Indeed, manual shade guides, although mostly used, have many limiting factors. An analysis performed with a shade guide is influenced by **human characteristics** and **external factors**. This act is subjective because it depends on the ocular physiology, the experience and the interpretation of each one. Added to this is the influence of the surrounding light, the color of the walls and even the clothes of your patients.



Realize  
a complete shade taking  
in a few seconds!



Delete  
scraps for  
color defects



Optimise  
your time and return  
on investment

## The advantages of the Cobra:

- **Ergonomics:** Light weight and compact autocalibrated device. Remote video stream.
- **Accuracy:** Multispectral analysis. Cmos sensor 648 x 648 px.
- **Digital:** 100% integrated, objectivity and traceability.
- **Hygienic:** Sterilizable tips.
- **Educational:** Easy communication with your patients.

## Work with peace of mind

Thanks to automatic calibration

### A multifunction tip combined with a patented measuring head:

- **Accuracy:** It allows automatic control of all your acquisitions.
- **Objective:** It frees from all external light disturbances.
- **Assisted:** It ensures precise positioning of the device on the tooth and control of the working distance for perfect acquisition.
- **Hygienic:** It eliminates all cross-contamination and is designed for 100 sterilization cycles!



# A complete mapping of the tooth in one acquisition

Polarized picture

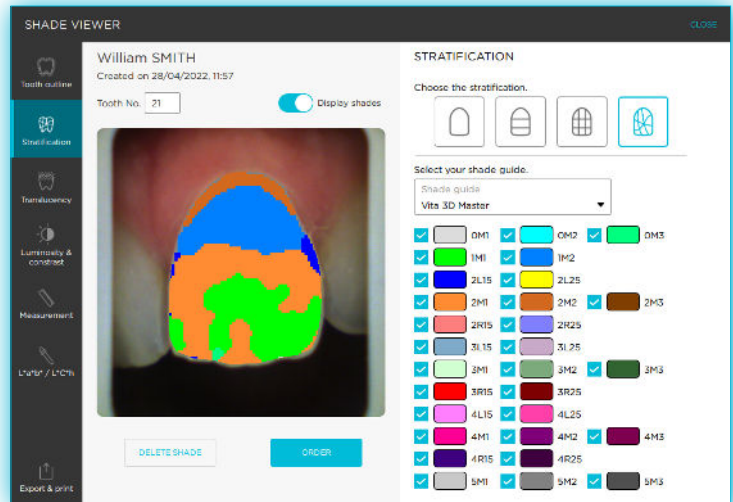
Overall shade

3 parts mapping

9 parts mapping

Detailed mapping

Translucency

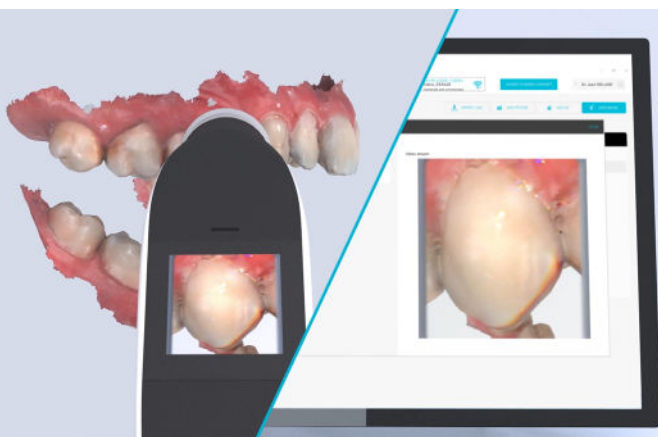


## Instant conversion to different reference shade-guides:

- VITA classical A1-D4®
- VITA Toothguide 3D-MASTER®
- VITA Bleachedguide 3D-MASTER®
- IVOCLAR Chromascop
- IVOCLAR A-D Shade Guide
- SHOFU Vintage
- KURARAY Noritake
- Aidite 3D Pro Zir
- Prettau 2 & 3 Dispersive-Zirkonzhan
- ...



***The shade scanner is the unique complement to your intraoral scanner for a 100% digital workflow!***



## PRODUCT HIGHLIGHT:

- Positioning assistance with a live video on the device screen and on your computer screen.
- A real didactic and motivational experience with your patients.
- Improve the brand image of your dental clinic.

# Vision software

Analysis, management, traceability



**Perform colorimetric analyzes and optimize your patient data management.”**

The Vision software allows the recovery, analysis and archiving of shade cases obtained with the Cobra.

This complementary tool to the spectrophotometer makes it possible to centralize patient aesthetic data (shade analysis, photos, comparison and bleaching reports, etc.).

This software is installed in the dental office and/or the laboratory in order to deepen the study and analysis of the most relevant data for the production of dental prostheses (luminosity, chromaticity, hue, translucency).

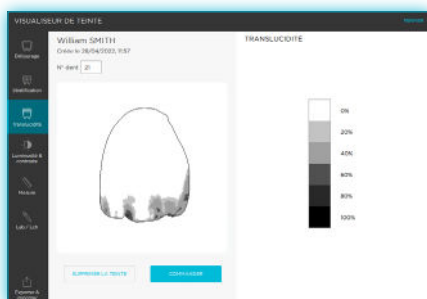


Free downloads and updates

## The advantages of the Vision:

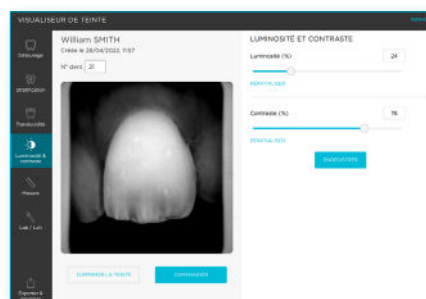
- Free and open software available to everyone (dental office and laboratory).
- No additional cost of operation or update.
- The possibility of multi-station access (server for a network installation).
- Classification per patient for simplified data management.
- Easy editing of complete shade, comparison or bleaching reports in pdf format.

## Simply access many tools for an in-depth analysis



### Translucency analysis

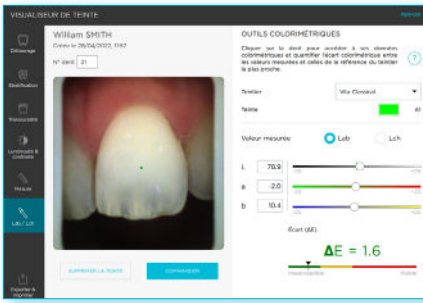
- Easily view a tooth translucency mapping.
- A gray scale indicates the presence of translucency on a scale from 0% to 100%.



### Black and white analysis

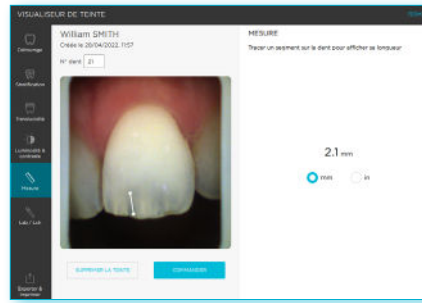
- Convert color polarized photo to grayscale
- Change brightness and contrast settings.
- Bring out the distribution of dentin, enamel, characterize the surface condition, highlight the remarkable characteristics of the analyzed tooth.





## CIE L\*a\*b\* / L\*C\*h analysis

- Determine pixel-by-pixel color coordinates according to CIE L\*a\*b\* or L\*C\*h standards.
- Easily calculate to the pixel the colorimetric difference «Delta E or ΔE» between the actual shade of the tooth and the closest shade according to the reference shade guide.



## Measuring tool

- Locate and measure remarkable characteristics of a tooth.

### PRODUCT HIGHLIGHT:

Describe the general aesthetic context just as simply thanks to the photo application «Vision Pics App Solution»

Free downloads from  
Apple store & Play store



## Bleaching treatments

Motivate your patients and generate reports in a few seconds



“  
**Easily create  
bleaching reports  
and improve  
communication  
with your patients!**”

The Vision software allows the comparison between several acquisitions. This shade comparator allows a visual and colorimetric comparison (L\*a\*b\*) with the referenced shade guides.

It is the ideal tool to evaluate and quantify bleaching treatments but also to help with correction by allowing you to adjust your achievements based on objective criteria.

### Bleaching reports:

- Visual comparison of the polarized images.
- Comparison per date.
- Comparison based on L\*a\*b\* values.



# Join the community

simplified communication between the practice and the laboratory



*Simplified access to color information while optimizing the management of your orders.”*

- A free platform for creating and managing orders (Dental practice and laboratory access).
- Easy sending of your aesthetic data prescription with shades, patient photos and digital impression.
- Total accessibility from an internet browser on computer, smartphone, tablet.

## Integrate Borea Connect community:

- Follow the progress of your prosthesis orders in real time.
- Receive native files and generate complete pdf order forms.
- Benefit from a free and regularly updated platform.
- Bring visibility to your activity on a community platform where everyone can be visible at their convenience.



**Cobra:**

**Spectrophotometer :** measuring range 400-700 nm  
**Screen :** OLED touch screen 1,5”  
**Resolution :** 128 x 128 RGB  
**CMOS sensor :** 648 x 648 px  
**Battery :** Lithium-Ion  
**Dimensions of the handpiece :** L. 200 x L. 42 x H. 35 mm  
**Dimensions of the measuring head :** L. 76 mm  
**Diameter of the measuring head :** Ø 25 mm  
**Weight of the handpiece :** 169 g  
**Processor :** IMX8 Quad cores 1,8 Ghz  
**Communication :** Wifi 802.11 b/g/n/ac

**Dimensions of the dock :** L. 80 x l. 75 x. H. 55 mm  
**Weight of the dock :** 124 g  
**Supply :** 5V 2.1Ah / USB A to Type C

**Recommended computer configuration**

**Operating system :** Windows 10 64 bits  
**Processor :** Intel Core i7  
**RAM :** 8 Go  
**Hard disk :** SSD 500 Go  
**Screen resolution :** 1080 p  
**Internet :** High speed connection

**Compatibility :**   
**Vision Pics App Solution :**  



**Cobra chair unit:**

**Spectrophotometer :** measuring range 400-700 nm  
**Screen :** OLED touch screen 1,5”  
**Resolution :** 128 x 128 RGB  
**CMOS sensor :** 648 x 648 px  
**Supply :** Wired 5V 2A  
**Dimensions of the handpiece :** L. 200 x L. 42 x H. 35 mm  
**Dimensions of the measuring head :** L. 76 mm  
**Diameter of the measuring head :** Ø 25 mm

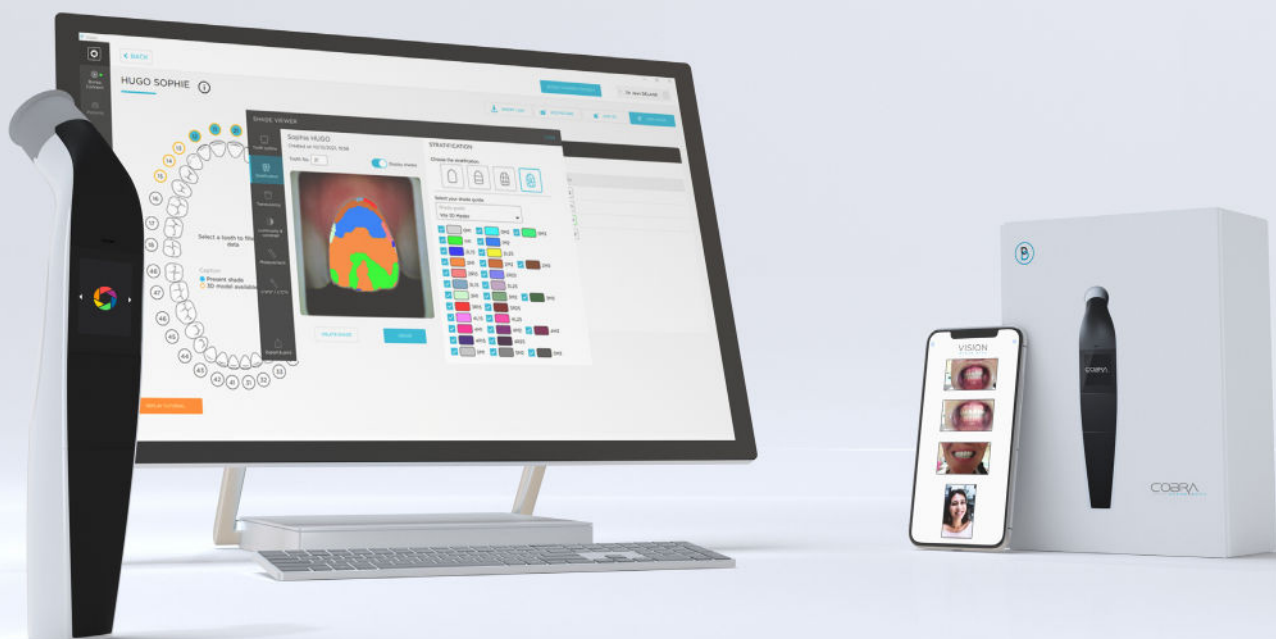
**Weight of the handpiece :** 169 g  
**Processor :** IMX8 Quad cores 1,8 Ghz  
**Communication :** Wifi 802.11 b/g/n/ac



**Package content :**

Cobra spectrophotometer  
 Docking station  
 Dongle  
 Power adaptor & USB C cable

Calibration Tips x6 (Sterilisable)  
 Disinfection and sterilization procedures  
 Quick Start Guide  
 Microfiber wipe






Any advice,  
any question ?

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87100 Limoges, FRANCE

Cobra is a medical device class I.  
It bears the CE mark in accordance with the European Medical Devices Regulation (EU) 2017/745.  
CE marking: 2022. For professional use only. Not reimbursed by health insurance funds.  
Read the instructions carefully before use.

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