Digital Solutions

For more serenity

GlobalD

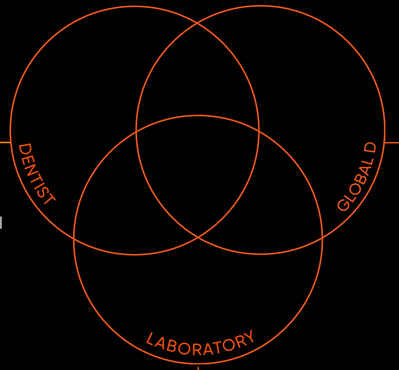
ABOUT Global D

Since 2013, **Global D** has been helping dental surgeons and dental prosthesis laboratories to organise the implementation of our **digital solutions**.
From optical impression to the new **pilot** or **guided surgery** protocols, **Global D** proposes comprehensive, open and tested solutions.
They are upgradable to adapt to the changes in your practice.

Global D has opted to provide a digital range that is compatible with most of the tools available on the market.

Three skills, the key factors of success for your **implant-based** restorations

We aim to encourage an **overall** work approach in a **collaborative** environment.



Your clinical skill

Preservation of peri-implant tissue capital
Durability of rehabilitations

Our industrial skill

High-tech manufacture of implantable medical devices
Customised assistance for dentists and prosthesis laboratories

Prosthetic skills

Prosthesis customised using CAD/CAM or conventional prosthesis
Preservation of prosthetic interfaces

These three types of skills are closely related and must be combined to **optimise the overall result** of the restoration, both aesthetically and functionally.
At Global D, we are particularly attentive **to this overall vision, which guarantees a successful and durable treatment plan**; it serves as our reference system for the development of our products.

Global D has always been in favour of the opening of digital technology, proposing **simple, tested solutions** so that you can focus on your practice and patient satisfaction.

Between the many sources of communication, the different contacts and partners of the dental surgery and laboratory, it can be difficult to link up all the steps of the digital workflow; this situation can sometimes cause confusion between the dentist and the prosthetist.

Global D, as a committed digital partner, strives to establish clear links between the tasks of the dental surgery and the laboratory actions, and helps you to identify how each step of the workflow contributes to **the satisfaction of your patients**.

For more serenity, allow us to guide you through your digital processes.

Global D works closely with your **sales manager** and our team of **expert prosthetists**, with additional assistance provided by our office-based **technical support** team.

Contents.

01. Assistance with the treatment plan / design p10

02. Pilot surgery p15

03. Guided surgery p18

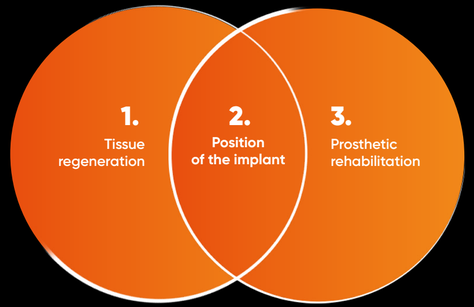
04. Optical impression & printed models p20

05. Single & multiple digital prostheses p23

A **global** approach focused on the **aesthetic** & **functional** durability **of your rehabilitations**

Analysis and preparation of the implantable space

1. The volume and quality of the hard and soft tissues must be able to ensure the mechanical anchorage, immune response and aesthetic appearance of the implant-based restoration. An adequately prepared tissue environment is a prerequisite for the dental implant to ensure reliable performance of its biomechanical function.



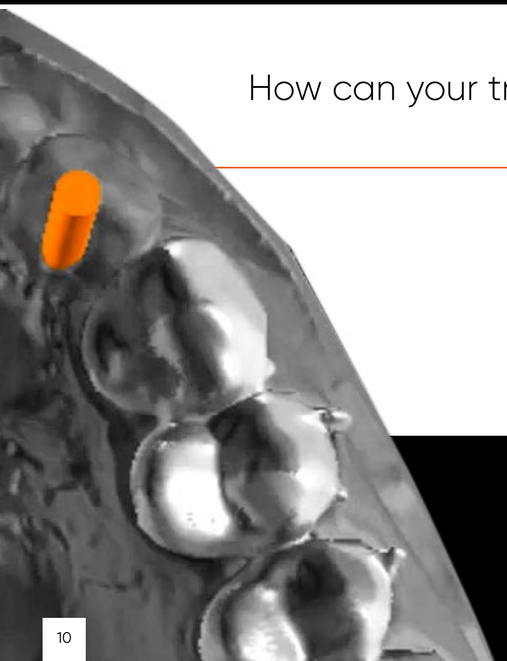
Respect of positioning

2. Three dimensional positioning of the implant is determined both by the tissue environment defining the "implantable space" and by the rehabilitation plan defining the "prosthetic space". The implant emergence axis must fulfil the requirements specific to each of these two spaces to ensure the stability of the restoration in the long term. The design associated with pilot or guided surgery will help you to respect the positioning.

Analysis and design of the prosthetic space

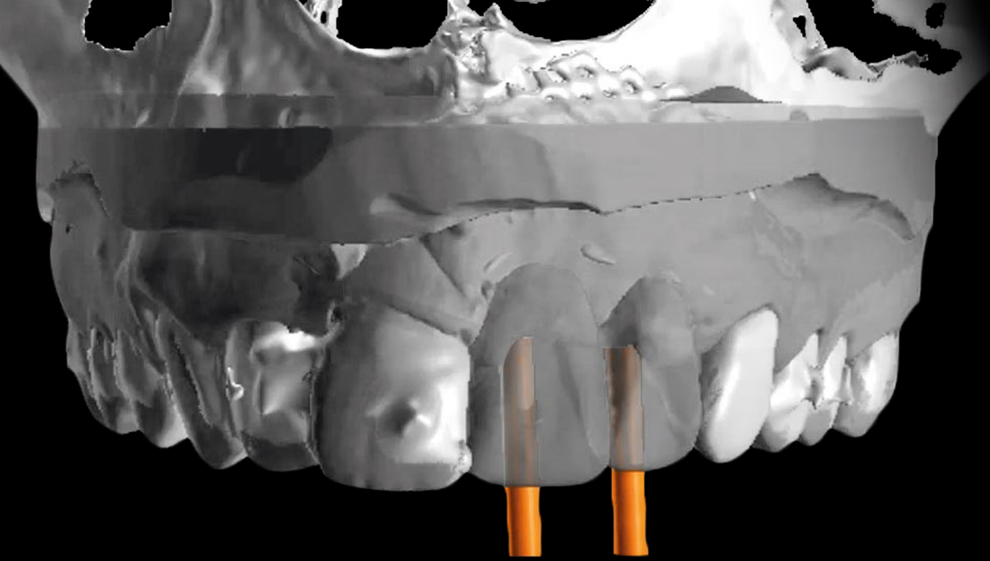
3. The prosthetic restoration is designed to ensure optimal preservation of **the health and stability of the peri-implant tissue capital.** The quality of assembly seal and stability, the passivity of frameworks, the choice of prosthetic materials, the occlusal adjustment and the clinical monitoring of restorations are all key factors for the success of prosthetic integration in the long term.[4]

01. Assistance with the **treatment plan / design**



How can your treatment plans be ***optimised***?

Our core concept: **three-dimensional positioning** of the implant is the key pre-requisite for long-term integration of the restoration with respect to the bone, as well as periodontal and mechanical aspects[1 & 2].
In this respect, guided or simply pilot surgery is a high added value technical solution; it also mitigates post-operative effects for the patient[3].
Installation of the prosthesis is taken into account from the design stage, thus ensuring optimisation.



Design & **guided** surgery

Implant positioning to suit the prosthesis **durability criterion**

- Sufficiently **thick**, **vascularised** bony septa
- **Vertical placement** that matches the **periodontal biotype** and the **prosthetic plan**
- Number, distribution and **positioning of mechanically reliable implants**
- An **emergence axis** that matches the **prosthetic plan**

All Global D dental implants:
NR (3.0), ST & WD platform In-Kone®, **EVL®** and **twinKon®** are included in most implant design software packages, including (non exhaustive list):

BlueSkyPlan.com
Powered by BlueSkyBio.com

dental wings
coDiagnostiX™

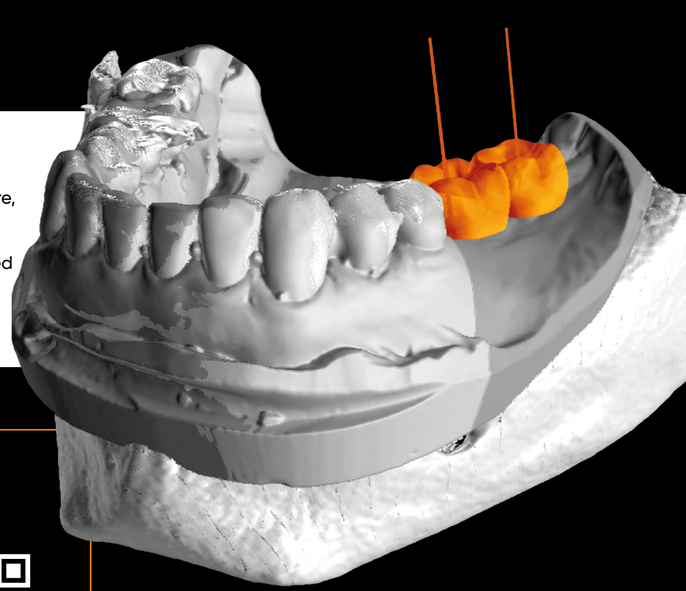
Planmeca Romexis software

smop
powered by swissmeda

RealGUIDE™
UNIVERSAL OPEN SYSTEM

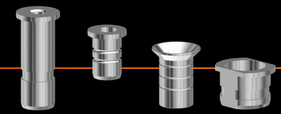
*The list of compatible software changes regularly, so please contact **Global D** if the software you use is not listed herein.*

Global D has added a broad range of prosthetic digital components whenever this is permitted by the design software, to **simplify the production of the temporary prosthesis** by your prosthetist before the surgery or to help you to optimise positioning of the implant virtually according to the associated future prosthetic component.



Global D proposes a range of sleeves adapted for the **pilot surgical guides** or **full guides** as well as for the **pins** and **screws:**

See our technical sheet on sleeves



02.

Pilot surgery

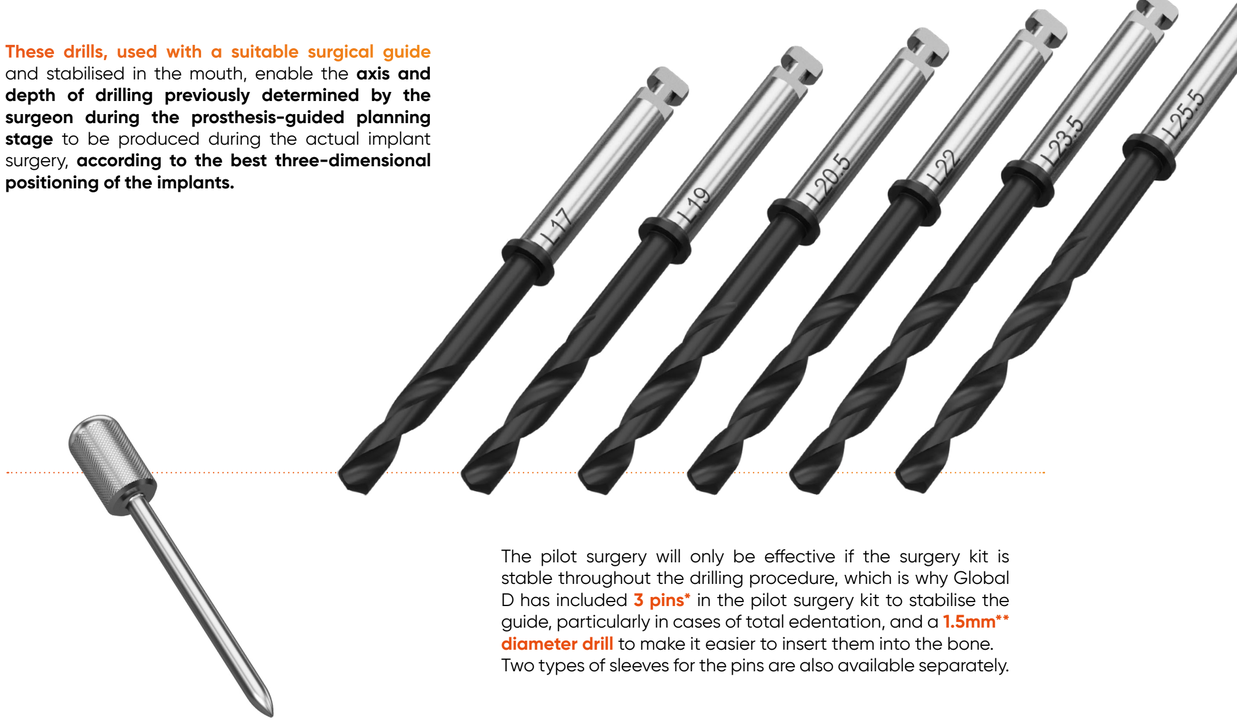
Global D proposes a full **pilot surgery kit** to guide the depth and axis of your implant drilling, for all **NR (3.0), ST & WD** platform **In-Kone® twinKon®** and **EVL®** implants.

The Global D pilot surgery kit is **complete and ergonomic.** It is used beforehand and in combination with the surgery kit of the implant system installed.

To meet the needs of the majority of clinical cases, Global D proposes **6 pilot drill lengths*, diameter 2mm, for the following working lengths: 17.3; 19; 20.5; 22; 23.5 and 25.5mm** corresponding to each implant length. It is however possible to offset the drill to be used for the surgery during the planning stage if required by the clinical situation.

See our technical sheet on pilot surgery

These drills, used with a suitable surgical guide and stabilised in the mouth, enable the **axis and depth of drilling previously determined by the surgeon during the prosthesis-guided planning stage** to be produced during the actual implant surgery, **according to the best three-dimensional positioning of the implants.**



The pilot surgery will only be effective if the surgery kit is stable throughout the drilling procedure, which is why Global D has included **3 pins*** in the pilot surgery kit to stabilise the guide, particularly in cases of total edentation, and a **1.5mm** diameter drill** to make it easier to insert them into the bone. Two types of sleeves for the pins are also available separately.

**The pins are medical devices manufactured and CE-marked by Biomec (CE 0051). Please read the manufacturers' instructions before use.*
***The pilot drills and drills for pins are medical devices manufactured and CE-marked by SAEG (CE 0476).*

03.

Guided surgery

A new take on ***Full Guided*** surgery

Our guided surgery protocol has been developed in collaboration with experienced dentists and our Research and Development teams to be perfectly compatible with our **ULTIMATE surgery protocol** and to meet its requirements.
We have developed a gradual, homothetic drilling sequence of the implant contour to obtain primary stability distributed uniformly in the bone.
Find out more about **transitioning smoothly to digital technology** without upsetting your work habits with the **ULTIMATE G42 guided surgery protocol.**

Available for you: a **simple, user-friendly** protocol

The philosophy of the **ULTIMATE G42** protocol is based on **direct guide** drills. No drill key type intermediary diameter reducing systems are therefore required. The protocol is designed to ensure systematic **continuity of guiding** for the various drills before contact with the bone.

The range of drill lengths enables a **unique standard offset** (i.e. the distance between the drill stop on the sleeve and the neck of the implant), regardless of the implant length, thus facilitating access inside the mouth and improving the accuracy of drilling.

Modularity of the ***final drilling diameter***

The very gradual incrementation of different drill diameters allows the final drilling diameter to be adjusted to **different bone densities.**

Each reamer preserves the homothetic shape of the preparation, regardless of the final drilling diameter.

Consult our surgery manual

04.

Optical Impression & printed models

2 in 1 digital coping

Global D digital impression copings can be used with intra-oral cameras for taking optical impressions in the mouth and with desktop scanners for the digitisation of plaster models in the laboratory.
They are made of anodized titanium and can generally be used without powdering. They can be clipped as direct implants for **In-Kone®** and **twinKon®** implants.

Our implant libraries for the main impression and design software packages are available on request.

The **ST** & **WD** platform **In-Kone®** , **twinKon®** and **EVL®** range copings are proposed in direct implant indexed version, with or without fixing screws, for the design and production of customised abutments or screw-retained teeth, and in conical or MULTI abutment versions for the design and production of implant bridges and bars.

See our technical sheet on digital copings

Digital analogs

The latest versions of implant analogs and abutments can be used in the printed models.
They are easily identified by the groove at the top.

See our technical sheet on digital analogs

05.

Digital prosthesis

Once the optimal implantation conditions are satisfied, **the prosthetic restoration** should be able to ensure optimal preservation of **the health and stability of the peri-implant tissue capital**. The quality of assembly seal and stability, the passivity of frameworks, the choice of prosthetic materials, the occlusal adjustment and the maintenance of restorations are all key factors for the success of prosthetic integration in the long term.[4]

Our **customised** prosthesis solutions

Single & **multiple** titanium bases

Global D titanium bases are designed to enable the production of customised abutments, screw-retained teeth, implant bridges and bars with the best possible mechanical resistance: Global D recommends combining the titanium base with the superstructure.
Single bases can be adjusted by 1 to 2 mm in height, particularly in CAD software design (computer-aided design; coronal height of 3 mm can be obtained on the screen).
Titanium bases on conical abutments are available for the manufacture of personalised bars and bridges in numerous materials.

See our technical sheet on titanium bases

TiBase compatible with the **CEREC SYSTEM***

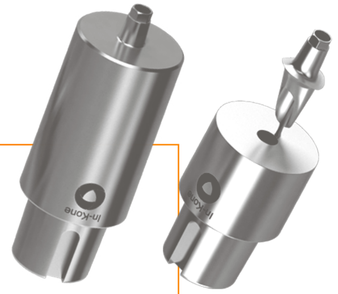
Designed and manufactured by our company for CAD/CAM restorations performed in the dental surgery, our TiBases are suitable for use with our original connections and the coronal part is compatible with **CEREC*-compatible** scanbodies and material blocks.

Via this system, these bases can be used to produce screw-retained teeth or customised abutments.

See our technical sheet on the CEREC system

**CEREC is a registered trademark belonging to DENTSPLY Implants Manufacturing GmbH, Germany.*

Blanks or **pre-milled blanks**

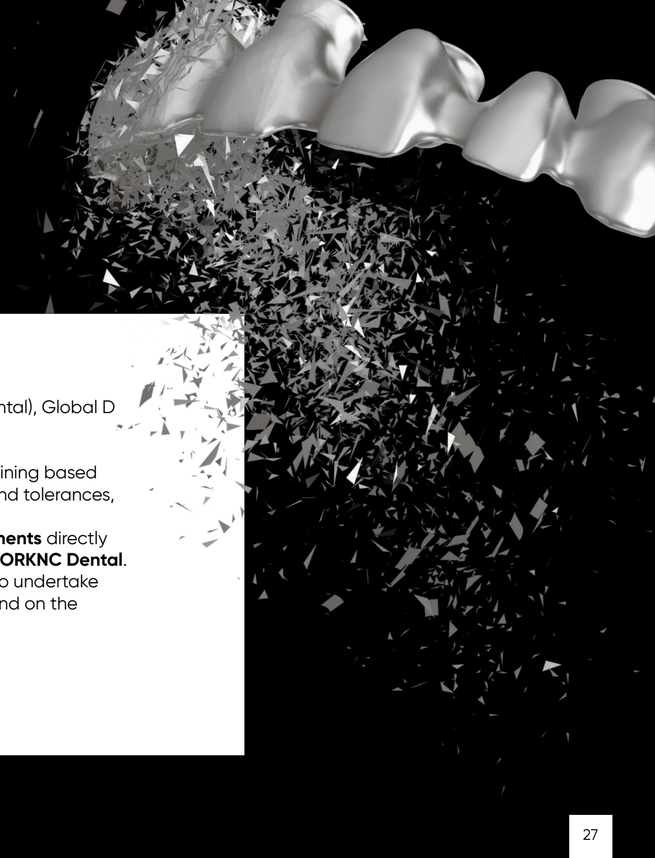


The blanks (or pre-milled blanks) designed and manufactured by Global D, indicated for the manufacture of customised abutments as single or multiple cement-retained prostheses, are guaranteed for our connections.
They are compatible with the patented S3DEL* set-up and enable customised titanium abutments to be made by the laboratory (subject to appropriate equipment) with connections guaranteed to comply with our industrial machining specifications.
Global D titanium blanks are available for **ST** & **WD** platform **In-Kone®**, **EVL®** and **twinKon®** implants.

See our technical sheet on blanks

**List of compatible machines available on request.*

Global D **Compliance** programme



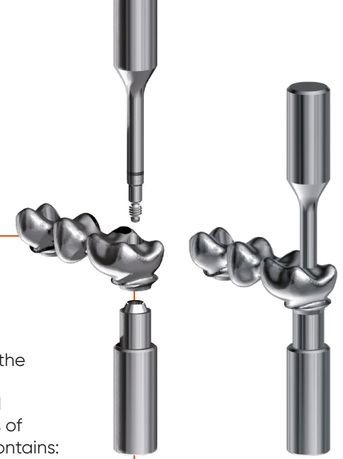
Since 2015 and in partnership with Hexagon (WORKNC Dental), Global D has been implementing the integrated programme:
"Global D Compliance".
This programme brings a new vision of in-laboratory machining based on geometries developed by Global D in terms of shape and tolerances, ensuring reproducible production.
The 3D design of connections for **MULTI** and **conical abutments** directly from Global D is included in the implantology module of **WORKNC Dental**.
A Compliance programme charter is provided to users, who undertake to apply the protocols on manufacturing and inspection and on the purchase of original Global D prosthesis parts.

worknc Dental

Global D Compliance

Photo credit: ZirTech 34 FRONTIGNAN

Specific
machining tools



INSPECTION CASE

Prosthesis laboratories check the **passivity of the framework** by verifying that the prosthesis is properly supported on all the abutments.
Global D Compliance proposes **simple and useful inspection instruments and an instrument re-calibration management solution** to confirm the dimensions of machine parts (contact Global D for more information). The inspection case contains:

- **Inspection templates:** these two-part templates can check shapes, passages, as well as geometrical interactions like co-axiality between the screw head passage and the connection part with the abutment.
- **"No entry" gauges:** these are designed to check the internal diameter of the screw passage, which must be small enough to prevent the gauges from passing (hence their name "no entry"). This enables validation of sufficient support for the screw head.
- **Digital sliding calliper:** to verify the position of the screw head.

At the dawn of this new era of work methods, as dental health professionals, you want to simplify your everyday activities for the well-being and satisfaction of your patients.

Far from imposing a restrictive workflow, **Global D** helps you to **choose your partners** and to **implement suitable solutions** for your digital equipment.

The products described are class I, IIa and IIb Medical Devices bearing the CE mark; they are intended for healthcare professionals in the field of dental implantology. They are used to replace missing teeth.
The CE compliance evaluation was carried out by GMED (CE0459) for class IIa and IIb medical devices. In France, these devices are not covered by the social security reimbursement list.
Please read the instruction manuals before using our products. The instruction manuals are available in the cloud. A QR code and URL link are included on the device label. Paper instructions are nevertheless available upon request to quality@globald.com, at no additional fee, within 7 days. The medical devices presented here may not be available for sale in every country.
In case of doubt or if you need any further information, please contact the Global D sales team.

Treatments in aesthetic, sub-sinus implantation, immediate loading, implant planning sectors... The Oskar training programmes are provided by experienced surgeons familiar with the use of Global D products.

From simple to complex cases, ***OSKAR helps you to understand our products in an optimal way in all clinical situations.***

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Soft tissues and marginal bone adaptation on platformed switched implant with a morse cone connexion: a histomorphometric study in dogs
C Bolle & coll., *The International Journal of Periodontics & Restorative Dentistry . Vol 36 Number 2, 2016*

One Piece Implants with Smooth Concave Neck to Enhance Soft Tissue Development and Preserve Marginal Bone Levels: A Retrospective Study with 1 to 6 Year Follow Up.
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Luca Fiorillo & coll, *Hindawi BioMed Research International Volume 2020, Article ID 2976067, 13 pages*

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- **Reconstructive surgery**
- **Facial trauma surgery**
- **Cancer surgery**
- **Craniomaxillofacial surgery**
- **Orthodontics**
- **Training**

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