



## IPS Implants®

Scan protocol

Preprosthetic



## IPS® – Individual Patient Solutions

### IPS Implants® scan protocol

#### Preprosthetic

##### **Basic information**

This scan protocol describes how patient data must be prepared for virtual planning of an instant dental rehabilitation so that a product of the "Individual Patient Solutions" product family can be made.

Deviations from these instructions may mean that the clinical results will not match the planned results.

KLS Martin can process data from all standard CT scanners and use almost all storage media.

Should you have any queries, please do not hesitate to contact our **hotline +49 7463 838-222**.

##### **Important:**

Planning results are only ever as up-to-date as the clinical data records!  
If the anatomical situation should change after scanning, the precision fit of the products can no longer be guaranteed.



### Scan of the patient skull

- Patient scans have to represent the current patient situation at the time of the planned treatment and have to be precise (< 4 months).
- The spatial resolution of the scans should be between **0.5 - 1.25 mm**.
- The **axial planes** are required.
- Movements of the patient during the actual scanning have to be avoided coercively.
- In the case of a medical CT **no gantry tilt is allowed (gantry tilt 0°)**.
- In case of a CBCT scan the patient has to be in upright position. The recording plane is perpendicular to the occlusion plane to minimise artefacts.
- The scan should include the orbital floors and condyles and should range below the mandible. The patient soft tissue contour should also be displayed. If applicable, please perform the scan without the detachable denture.
- Save the entire scan incl. all sub-files in the Dicom format without integrating a viewing software.

The conventional dental implantology is a well-established possibility for dental rehabilitation if the individual bone and soft tissue are sufficient. But conventional methods are limited in case of larger tissue loss or replacement.

Right here the new possibilities of IPS Implants® Preprosthetic are an excellent enlargement to achieve instant functionally stable dental rehabilitation independantly from the jaw region.

**Additional to the mandatory scan of the patient skull one out of the three procedures is necessary:**

■ **Recommendation:**

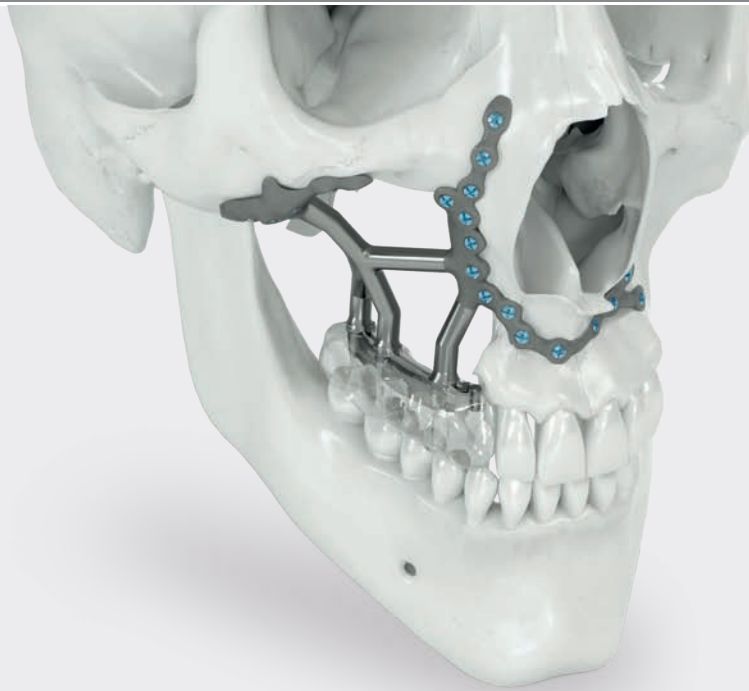
Scan the scan template (radiopaque “Standard teeth” in occlusion) orally in the patient as a Dicom file.

Besides an optional intraoral model of the soft tissue situation there is no plaster cast model needed.

- Scan the wax-up (in wax embedded plastic teeth on the plaster cast model) of the upper and lower jaw separately and also in the planned occlusion as STL-files.
- Scan the plaster cast models of upper and lower jaw with the available denture separately and also in the planned occlusion as STL-files.

**Recommendation**

Additionally mold the soft tissue situation by a squeeze bite and scan the plaster cast models of the upper and lower jaw as STL-files.



If there is no STL-scanner available in your clinic, you can send the plaster cast models to KLS Martin for digitalization:

FAO Ms. Christina Glaser  
Karl Leibinger Medizintechnik  
Kolbinger Straße 10  
78570 Mühlheim a. d. Donau  
Germany

Please keep in mind the precise trim of the backrest and side surfaces of both models to each other for an accurate alignment of the planned occlusion by the surfaces. Occlusion markings at the incisor and premolar region provide additional orientation.

## The IPS® Product Range



### IPS Implants® Preprosthetic

IPS Implants® Preprosthetic convinces by summarising the planning of complex anatomical factors towards a functionally stable and patient individual functionalised solution within an efficient process for dental rehabilitation.

We supply IPS Gate®, a platform that guides surgeons and users reliably and efficiently through the process of inquiring about, planning, and completing patient-specific products. The intuitive concept offers the user maximum mobility, flexibility, and functionality. With the HTTPS standard IPS Gate® ensures encrypted data transmission, which is additionally certified by the TÜV Süd seal.



**Univ. Prof. Dr. Dr.  
Nils-Claudius Gellrich  
CMF Surgery  
Medical School Hanover**



**Dr. med. dent.  
Björn Rahlf  
CMF Surgery  
Medical School Hanover**



### IPS Gate®

The web-based platform and app guide surgeons and users reliably and efficiently through the process of inquiring about, planning, and completing patient-specific products. With the HTTPS standard IPS Gate® guarantees encrypted data transmission, which is additionally certified by the TÜV Süd seal.



### IPS Implants®

Patient-specific implants, planning aids, and anatomical models are made from various materials using state-of-the-art fabrication technologies. Thanks to computer-based planning and functionalized patient-specific implants, preoperative planning can be implemented in surgery with unprecedented precision.



## KLS Martin Group

### **KLS Martin Australia Pty Ltd.**

Sydney · Australia  
Tel. +61 2 9439 5316  
australia@klsmartin.com

### **KLS Martin do Brasil Ltda.**

São Paulo · Brazil  
Tel. +55 11 3554 2299  
brazil@klsmartin.com

### **KLS Martin Medical (Shanghai) International Trading Co., Ltd**

Shanghai · China  
Tel. +86 21 5820 6251  
info@klsmartin.com

### **KLS Martin India Pvt Ltd.**

Chennai · India  
Tel. +91 44 66 442 300  
india@klsmartin.com

### **KLS Martin Italia S.r.l.**

Milan · Italy  
Tel. +39 039 605 67 31  
info@klsmartin.com

### **KLS Martin Japan K.K.**

Tokyo · Japan  
Tel. +81 3 3814 1431  
info@klsmartin.com

### **KLS Martin SE Asia Sdn. Bhd.**

Penang · Malaysia  
Tel. +604 261 7060  
malaysia@klsmartin.com

### **KLS Martin de México, S.A. de C.V.**

Mexico City · Mexico  
Tel. +52 55 7572 0944  
mexico@klsmartin.com

### **KLS Martin Nederland B.V.**

Huizen · Netherlands  
Tel. +31 35 523 45 38  
infonl@klsmartin.com

### **KLS Martin SE & Co. KG**

Moscow · Russia  
Tel. +7 499 792 76 19  
russia@klsmartin.com

### **KLS Martin Taiwan Ltd.**

Taipei · Taiwan  
Tel. +886 2 2325 3169  
taiwan@klsmartin.com

### **KLS Martin SE & Co. KG**

Dubai · United Arab Emirates  
Tel. +971 4 454 16 55  
middleeast@klsmartin.com

### **KLS Martin UK Ltd.**

Reading · United Kingdom  
Tel. +44 118 467 1500  
info.uk@klsmartin.com

### **KLS Martin LP**

Jacksonville · Florida, USA  
Tel. +1 904 641 77 46  
usa@klsmartin.com

### **KLS Martin SE Asia Sdn. Bhd.**

Hanoi · Vietnam  
Tel. +49 7461 706-0  
info@klsmartin.com

### **KLS Martin SE & Co. KG**

#### **A company of the KLS Martin Group**

KLS Martin Platz 1 · 78532 Tuttlingen · Germany  
PO Box 60 · 78501 Tuttlingen · Germany  
Tel. +49 7461 706-0 · Fax +49 7461 706-193  
info@klsmartin.com · www.klsmartin.com