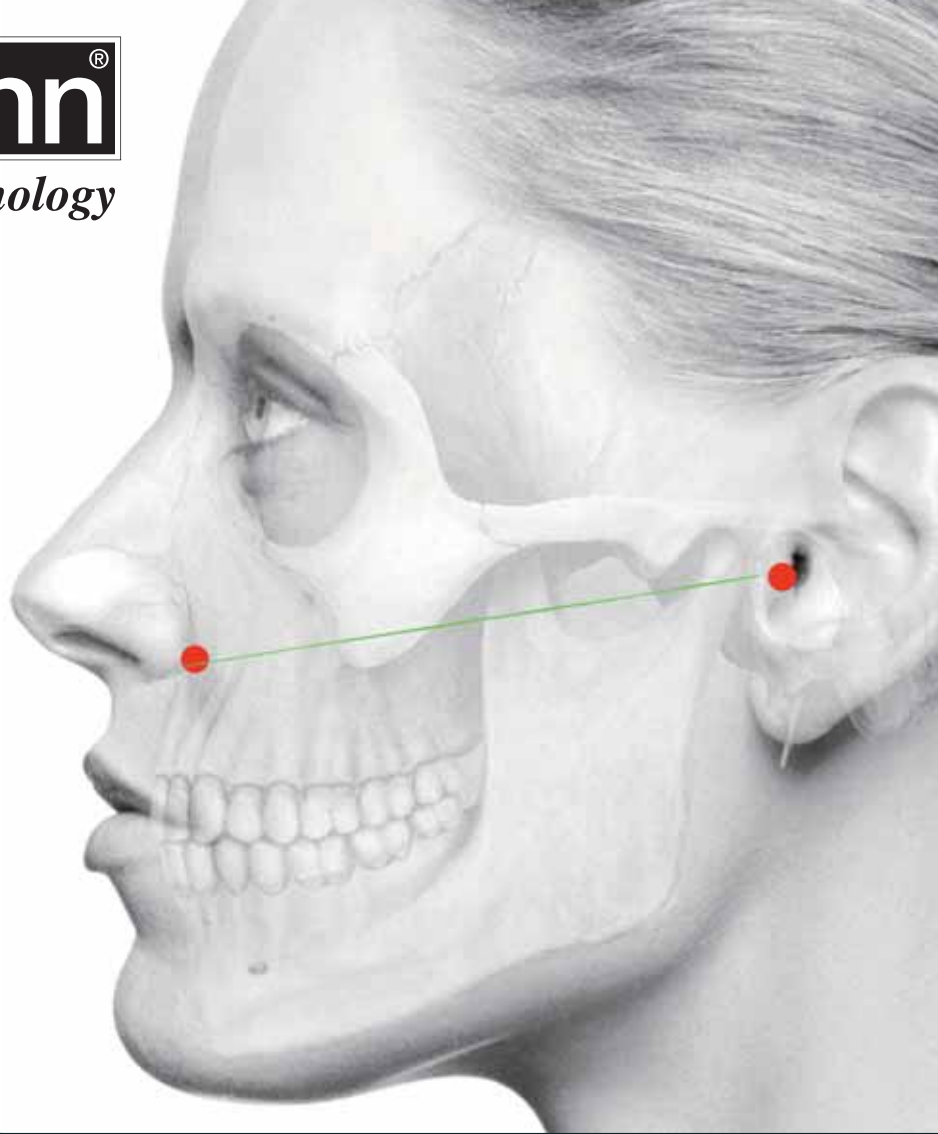# Zirkonzahn®

Human Zirconium Technology

PLANESYSTEM®

Functional synchronisation of the patient

ACCURATE AND EFFICIENT

During the planning and fabrication of prosthetic restorations, the PlaneSystem® allows to determine the precise position of the maxilla and to transfer it into the articulator. The technologies offer us fascinating possibilities in this field. The complete patient situation can be captured and validated on the basis of defined values. Communication between patient, dentist, orthodontist and dental technician is greatly simplified.

PlaneSystem® – developed by MDT Udo Plaster, in cooperation with Zirkonzahn

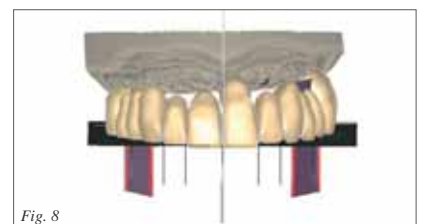## NATURAL HEAD POSITION (NHP), NATURAL POSITION OF THE MAXILLA AND ASYMMETRIES

The natural head position is a reproducible posture that a person assumes with the help of his or her eyes, neck muscles and vestibular system to align the visual axis so it is parallel with the horizon.

Fig. 1

Fig. 2

Fig. 3

OCCLUSAL PLANE

Fig. 4

Fig. 5

PS1-3D CAD PLANETOOL AND ZIRKONZAHN.MODELLIER / ZIRKONZAHN.MODIFIER

Fig. 6

Fig. 7


Fig. 8

THE COMPONENTS

PLANEFINDER®

The PlaneFinder® is capable of identifying a reference level (zero-degree line), regardless of any asymmetries of the skull (Fig. 1). Based on this reference level, it is possible to register the natural position of the maxilla (Fig. 2) and to measure the angle of inclination of the occlusal plane with reference to the ala-tragus line (Fig. 5). The PlaneFinder® is also used for the photographic documentation and analysis of the initial clinical situation and its subsequent developments.


PLANEPOSITIONER® AND PS1 ARTICULATOR

In accordance with the position registered by the PlaneFinder® (Fig. 2), the maxillary model is positioned on the PlanePositioner® whereby the natural position of the maxillary is represented. Then the PlanePositioner® is transferred to the mechanical PS1 articulator (Fig. 3). The PlanePositioner® represents the individual position and inclination of the occlusal plane and can be used as set-up aid (Fig. 5).
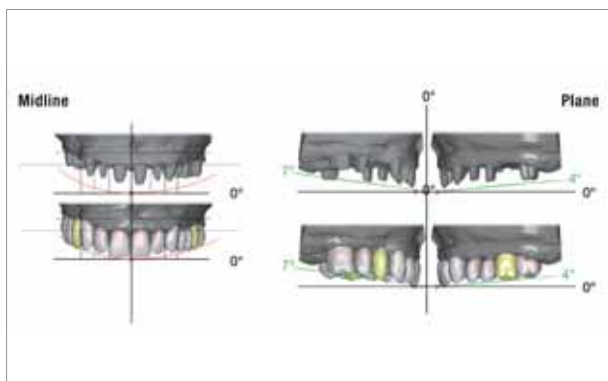
PS1-3D CAD PLANETOOL

Using the PS1-3D CAD PlaneTool, the data for patient and model analyses as well as for digital modelling are prepared. The tool allows the different inclination of the occlusal plane to be registered (Fig. 6), it offers to choose the suitable set-up aid (Plaster-planes) for the positioning and proportioning of the modellation (Fig.7) and pictures as well as STL data can be registered (Fig. overleaf).
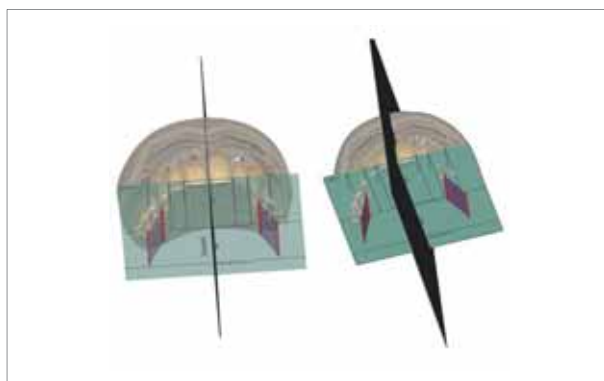
ZIRKONZAHN.MODELLIER / ZIRKONZAHN.MODIFIER

In both softwares, the maxilla is represented in its natural position. In the Zirkonzahn.Modifier software, the teeth are automatically aligned with the identified occlusal plane. They can then be made proportional and positioned in an appropriate relation and at a suitable distance to the axis of rotation (Fig. 8) using the set-up aid. Based on available images, the teeth can be adjusted to aesthetic requirements (Fig. overleaf).

Zirkonzahn®

S300 ARTI SCANNER – COMPACT WITH ARTICULATOR SCAN

- Especially compact fully automated optical structured-light scanner with two high-resolution high-speed cameras

- Even faster scanning thanks to further developed software technology (starting from Zirkonzahn.Scan 5051)

- High scanning precision: ≤ 10 µm

- Particularly large scanning area (115 x 78; format 16:9)

- Patient-specific information captured with the PlaneSystem® and with the Plane Analyser, can be 100 % digitised and implemented into the Zirkonzahn.Software

HUMAN ZIRCONIUM TECHNOLOGY

FACE HUNTER

- Scanner for photo-realistic 3D digital facial scanning as a working basis for the manufacture of individualised dental prostheses and as digital articulation tool

- Fast scans (less than 0.3 seconds per face)

- Intuitive operation: One-click scanning

- Adaptation of the dental restoration to aesthetic requirements

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