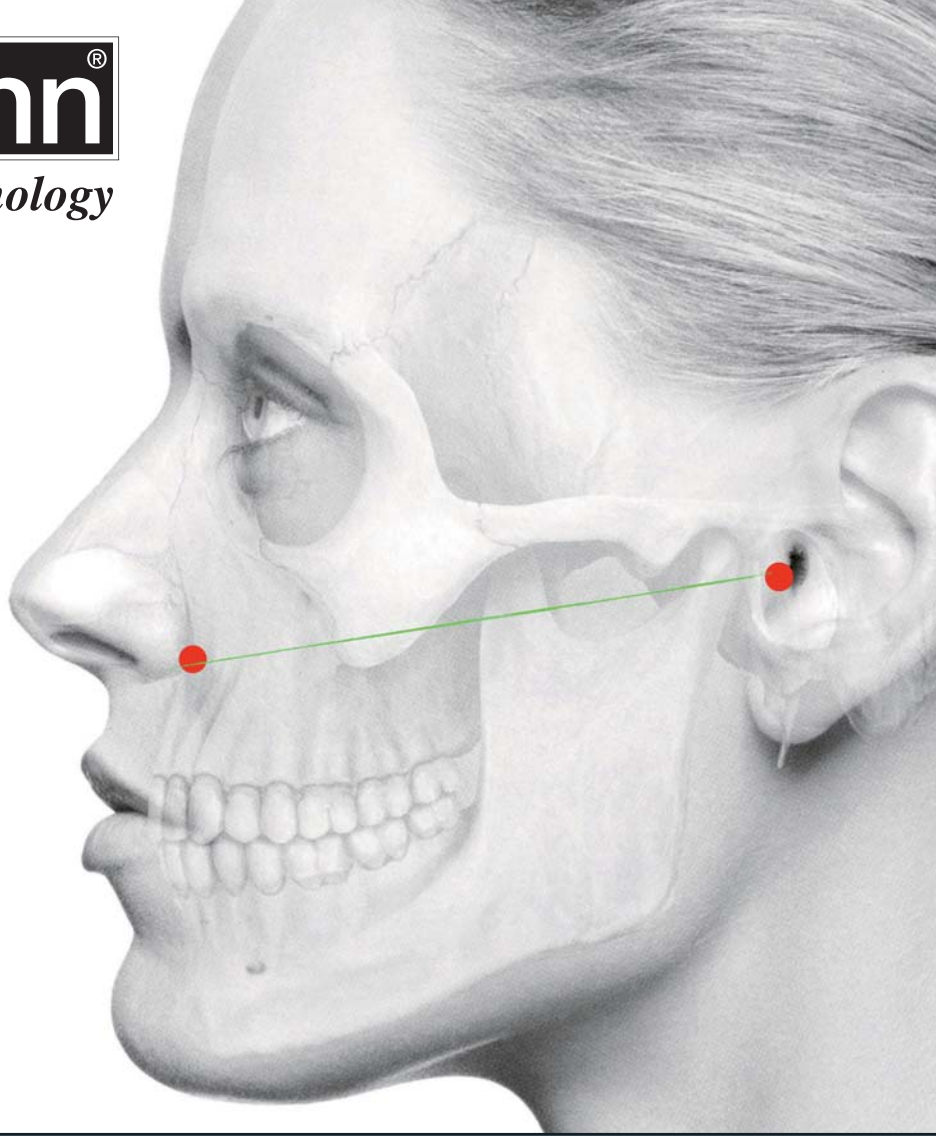# Zirkonzahn®

Human Zirconium Technology

PLANESYSTEM®

*The third dimension in patient analysis*

HIGHLY PRODUCTIVE

The PlaneSystem® detects bone asymmetries and resultant muscular compensation ahead of dental treatment planning and reduces the risk of transmission errors while also minimising potential problem sources in the planning and fabrication of prosthetic restorations. Communication between patient, dentist, orthodontist and dental technician is greatly simplified.

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

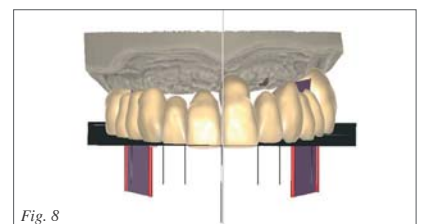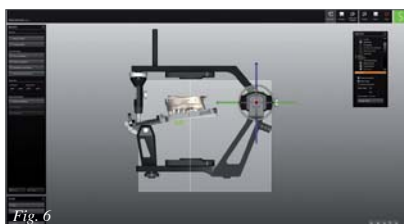## NATURAL HEAD POSITION (NHP), NATURAL POSITION OF THE MAXILLA AND ASYMMETRIES

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
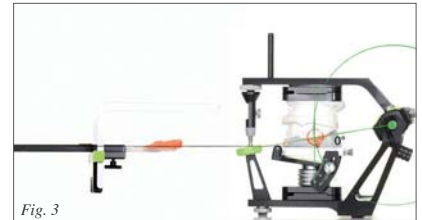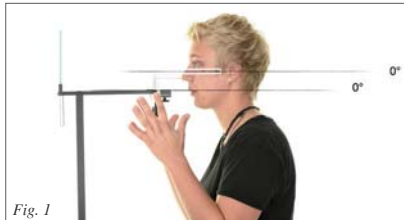
PS1-3D CAD PLANETOOL AND ZIRKONZAHN.MODELLIER
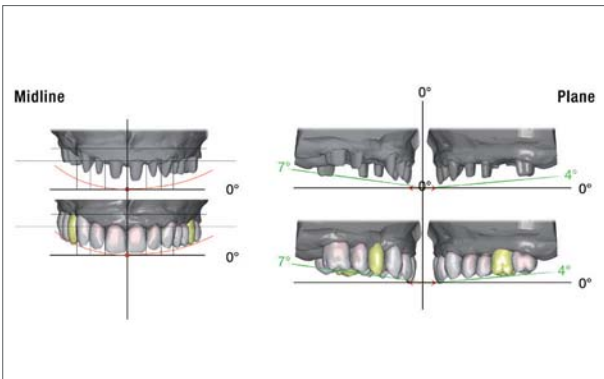

Fig. 6

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.
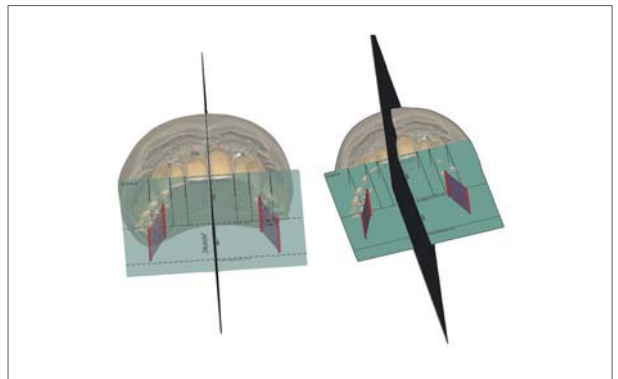

PLANEPOSITIONER® AND THE PS1 ARTICULATOR

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 (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 for positioning and proportioning of the modellation (Fig.7) and pictures as well as STL data can be registered (Fig. overleaf).

ZIRKONZAHN.MODELLIER

In the modelling software, the maxilla is represented in its natural position. The teeth can be aligned with the identified occlusal plane and can 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®

S600 ARTI SCANNER

- *Fully automated optical structured-light scanner*

- *Digital acquisition of almost any object location with an accuracy of about 7 μm*

- *Extra large measuring field allows scanning the model within the articulator*

- *Compatible with smart model acquisition concepts (Easy-Fix system)*

- *Perfectly integrated into the digital workflow*

HUMAN ZIRCONIUM TECHNOLOGY

ZIRKONZAHN Worldwide – Tel +39 0474 066 680 – info@zirkonzahn.com – www.zirkonzahn.com

FACE HUNTER

- *Scanner for photo-realistic 3D digital facial scanning*

- *Fast scans (less than 0.3 seconds)*

- *Intuitive operation: One-click scanning*

- *Adaptation of the dental restoration toaesthetic requirements*