SICATFUNCTION

SICAT FUNCTION & OPTIMOTION

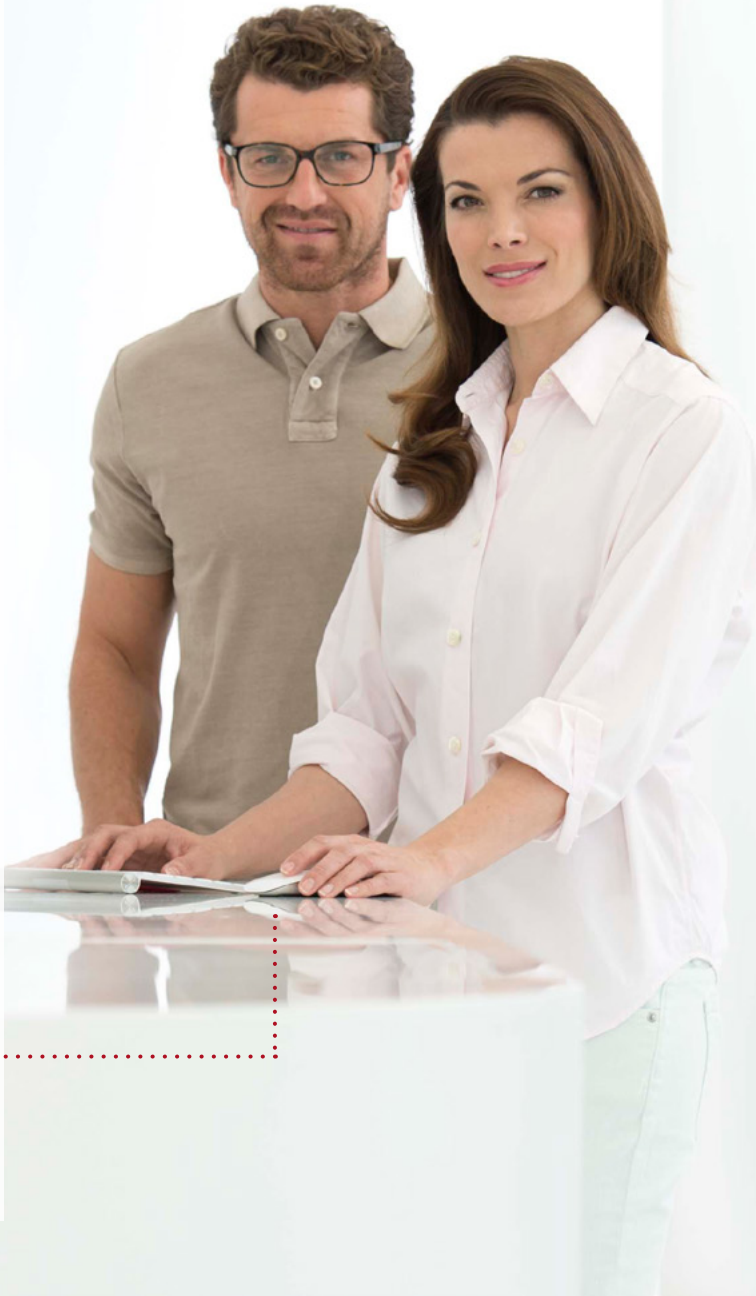
Individual functional treatment

REAL MOTION – TIME FOR FACTS

WITH SICAT FUNCTION, SICAT JMT + AND OPTIMOTION, SICAT offers a revolutionary solution for diagnostics and treatment of temporomandibular disorders (TMD).

SICAT FUNCTION combines all treatment steps in one software, completely digital and thus comprehensible and reproducible at any time.

HOW YOU BENEFIT: Considerable time-saving for planning and implementation of the appliance-based treatment due to significant reduction of treatment steps.



SICATFUNCTION

SICAT FUNCTION *introduces an integrated 3D workflow for diagnostics and therapy of temporomandibular dysfunctions (TMD).*

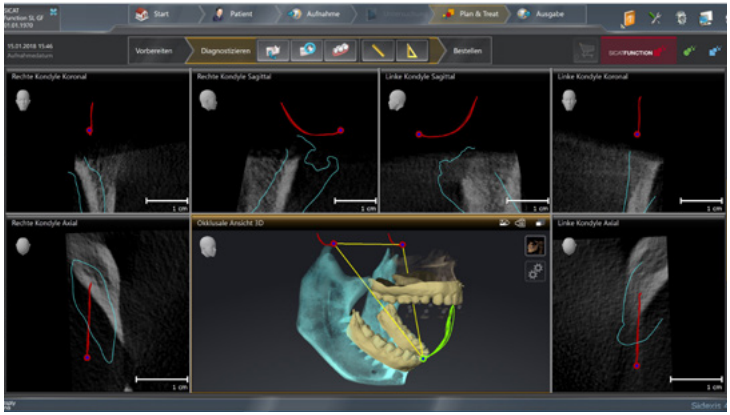
DIGITAL AND SEAMLESS INTEGRATION of three types of data in SICAT Function makes the complex interrelation visible: data of the CBCT, the Jaw Motion Tracker (SICAT JMT $^{+}$) and optical surface scan data are combined within SICAT Function.

FOR THE FIRST TIME, the real patient-individual movement of the mandible can be visualized in 3D, true to anatomy.

IN ADDITION, the recorded jaw movement traces can be displayed and reproduced for any point on the mandible and thus provide important therapeutical input.

BASED on the optical surface scan data (SSI, SIXD or STL) the dynamic occlusion can be simulated and incorporated into treatment planning.

TRACK REAL MOTION IN MOTION



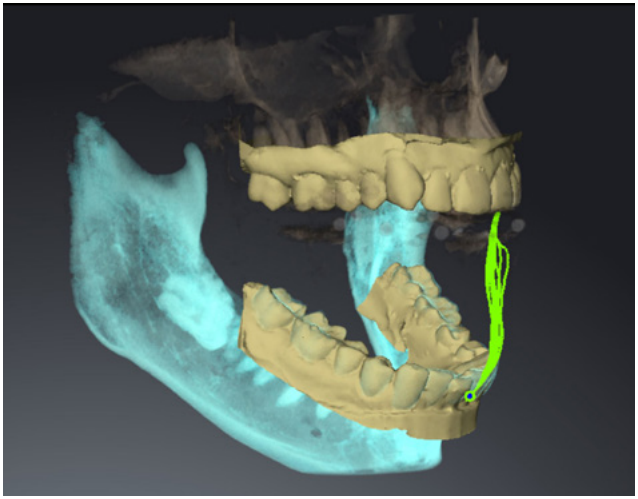
THE DATA MERGED IN SICAT FUNCTION allows for the first time a patient-individual 3D display of the mandible and teeth in motion for the first time.

BASED ON A SINGLE CBCT image, any number of lower jaw positions and movement sequences can be visualized.

REAL PATIENT ANATOMY combined with true dynamics of the lower jaw offer additional options for patient-individual diagnostics and treatment.

THE 3D VISUALIZATION true to anatomy helps the patient to better understand the diagnosis and increases the case acceptance.

THE VISUALIZATION OF JOINT PATHWAYS allows for the recording of all movement patterns and the programming of virtual articulators.

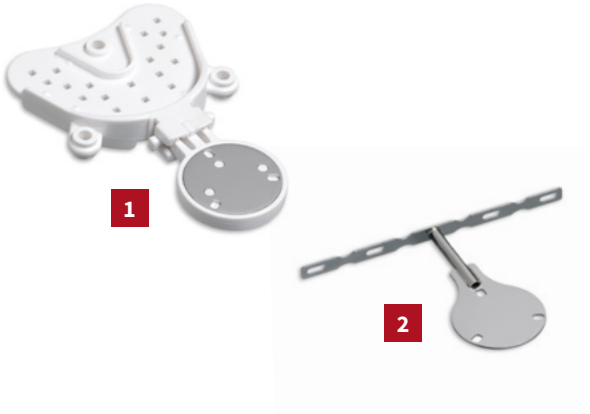


SICAT**JMT**+

SUPPORTED BY THE HIGHLY PRECISE *and contact-free recording of all degrees of freedom and movements of the mandible with the SICAT JMT+, the path is clear for the transfer, display and analysis of the patient's anatomically correct jaw movement in 3D.*

THE SICAT JMT+ includes a facebow with integrated receiver modules as well as a perfectly balanced mandibular sensor. This sensor is attached to the paraocclusal T-Attachment by means of a magnetic fasten.

WITHIN THE SICAT JMT+ SOFTWARE you can generate a patient-individual recording protocol. Depending on the indication, specific jaw movements and positions can be recorded. Short videos in the software guide the practitioner systematically through this protocol.



1 **IN ORDER TO PRECISELY** merge the data from the CBCT and SICAT JMT+, the patient wears the SICAT Fusion Bite at the start of movement recording.

2 **THE INDIVIDUAL MANDIBLE MOVEMENTS** and jaw positions are subsequently recorded by the mandibular sensor fixed to the paraocclusal T-Attachment which is simply and easily attached to the vestibular surface of the patient's lower jaw teeth

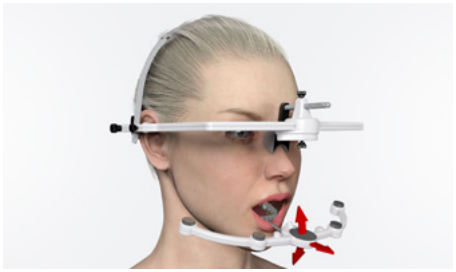
IN 5 SIMPLE STEPS

*Digital workflow **with patient scan***

1

Scan with a CBCT system. The patient wears the SICAT Fusion Bite during the scan for the subsequent fusion of CBCT data and JMT data.

2



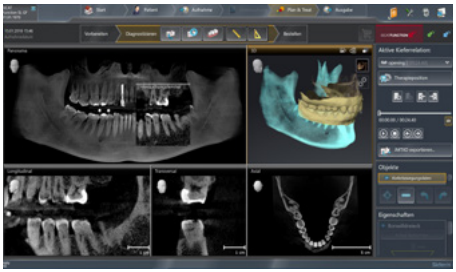
Lower jaw movement data such as opening movements, protrusion, and laterotrusion as well as jaw positions are recorded with the SICAT JMT $^{+}$. Facebow and mandibular sensor communicate via ultrasound.

3

Capturing of optical surface scan data (SSI, SIXD or STL) of the patient with an intra-oral camera.

TO THE **OPTI**MOTION THERAPEUTIC APPLIANCE

4

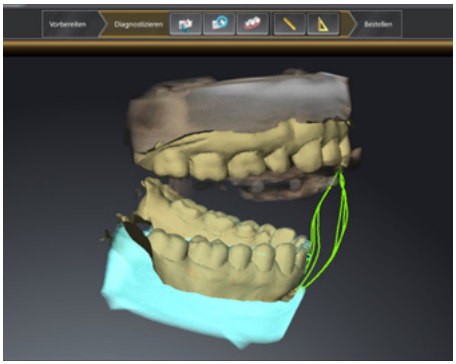


Fusion of optical surface scan data and mandible movement data with CBCT data directly within SICAT Function to visualize true patient-specific dynamics.

5

Diagnostics, treatment planning and completely digital order of a SICAT **OPTI**MOTION therapeutic appliance due to a significant reduction of treatment steps.

*Alternative workflow **with stone model scan***



As an alternative to a CBCT scan of the patient, the SICAT Fusion Bite is placed between the stone models of the upper and lower jaw. Next, the stone models are placed on a base and subsequently scanned with a CBCT system.

The following capture of the lower jaw movement data with the SICAT JMT $^{+}$, as well as the optical surface scan data, are performed directly on the patient, according to the regular SICAT Function workflow.

*SICAT **OPTI**MOTION*

The therapeutic appliance in a fully digital workflow

EACH PATIENT IS INDIVIDUAL – so is each SICAT **OPTI**MOTION.

Following diagnosis and planning in SICAT Function, a SICAT **OPTI**MOTION therapeutic appliance can be ordered according to the practitioner's preference.

HOW YOU BENEFIT: The completely digital workflow saves time and ensures the exact fit of the therapeutic appliance.

OPTIMOTION

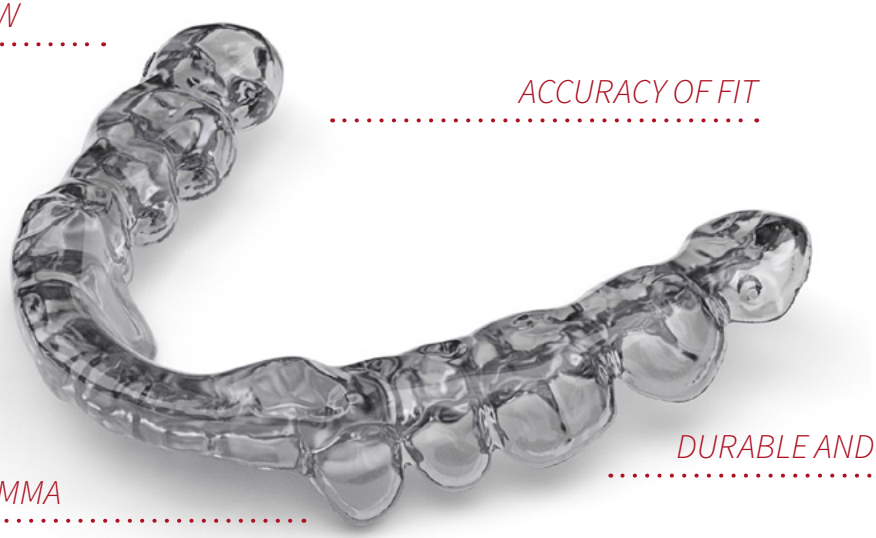
THE SICAT OPTIMOTION THERAPEUTIC APPLIANCE is manufactured on the basis of the CBCT data, the optical surface scan data and the jaw movement data obtained from the SICAT JMT^{+} according to the principles of a Michigan appliance.

SICAT FUNCTION is the first solution that considers both – occlusion and mandibular joints in diagnosis and treatment planning.

HOW YOU BENEFIT: patient-individual therapeutic appliances which significantly reduces the amount of manual adjustment.

FIRST EVER DIGITAL WORKFLOW

ACCURACY OF FIT



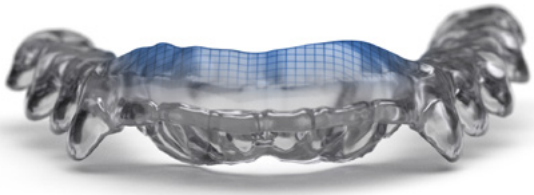
SLIM DESIGN

DURABLE AND HYGIENIC

MILLED FROM PMMA

THE VARIETY OF SICAT OPTIMOTION is also impressive: solely canine guidance or anterior and canine guidance, occlusal relief or flatplane, upper or lower jaw – SICAT produces an appliance per preference to meet the needs of the individual patient situation.

*SICAT **OPTI**MOTION – canine guidance*



*SICAT **OPTI**MOTION – anterior and canine guidance*

*SICAT **OPTI**MOTION – occlusal relief*

*SICAT **OPTI**MOTION – flat plane*

SICAT OPTIMOTION: the first therapeutic appliance produced in a completely digital workflow using real, patient-individual jaw movement data.

SICAT

MANUFACTURER

SICAT GMBH & CO. KG
FRIESDORFER STR. 131 – 135
53175 BONN, GERMANY

T +49 (0)228 / 286206-0
F +49 (0)228 / 286206-971

INFO@SICAT.COM
WWW.SICAT.COM

DISTRIBUTOR

HICAT USA INC.
6950 SAWMILL VILLAGE DRIVE
COLUMBUS OH 43235-4996, USA

INFO@SICAT.COM
WWW.SICAT.COM

203-01/03-20-USA