T-SCAN® NOVUS DIGITAL OCCLUSAL ANALYSIS



T-Scan® Novus

Digital dynamic scans of the occlusion and articulation of your patient



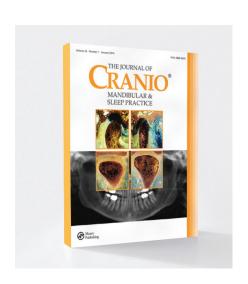


ARTICULATING PAPER VS DIGITAL OCCLUSION:

RECENT PUBLICATIONS

A recently published study highlighted that articulating paper markings produce very unreliable information for diagnosing the contacts where the most and least force is applied. Over 95% of all participants in this study (295 dentists) gave incorrect answers when they viewed 12 different images of highlighted articulation paper, and were asked to indicate which contacts were the most/least exerted.

These poor results based on a relatively large sample size of participating dentists clearly illustrate that it is difficult, if not impossible for dentists to reliably distinguish between low and high occlusal forces on elements.



CONCLUSION

The current method of using articulating paper-markers for determining occlusal contacts should be replaced by a reliable, objective and accurate measurement method, such as the T-Scan Novus.

Clinician accuracy when subjectively interpreting articulation paper marks by Robert B. Kerstein and John Radke; Journal of Craniomandibular & Practice, 2014, vol.32, no. 1.

SOME OTHER PUBLICATIONS

Kerstein, RB Lowe, M Harty, M Radke, J.

A Force reproduction analysis of two recorders sensors or a computerized occlusal analysis system. Journal of Craniomandibular Practice, January 2006: 24 (1); 15-24

This study shows that the T-Scan® HD Sensors are capable of being used 20-40 times per bite without losing quality of data.

Koos, Bernard.

Precision of an instrumentation-based Method of Analyzing Occlusion And its Resulting Distribution of Forces in the Dental Arch.

Journal of Orofacial Orthopedics, 2010. No. 6, pp 1-8.

This study shows that when a used T-Scan® HD Sensor is replaced with a new sensor (and used on the same patient) the difference between the two scans is minimal. The author found a reproducibility of 95%, regardless of whether the sensor was new or used (six trials per patient).

Ask us for a copy of these articles and the complete bibliography of all publications (100+).



T-SCAN® NOVUS

VERY ACCURATE, DYNAMIC SCANS OF YOUR PATIENT'S OCCLUSION AND ARTICULATION.

Successful dentistry requires good occlusion. This cannot be achieved by relying solely on articulating paper. Information provided by articulating paper does not measure the forces between the various elements. Articulating paper also provides no information about premature contacts. Information about the timing of the occlusion and the relative strength of the bite force is essential for any dentist pursuing an optimal occlusion. Measuring is knowing!

T-Scan® Novus is a revolutionary new tool for digital occlusion and articulation analysis, providing powerful data. Wafer-thin HD sensors (100μ) and clever software provide all the information required, in clear 2D and 3D images. At a glance, you will see a complete picture of the occlusal forces and timing of your patient's bite.

You will be able to achieve optimal occlusion, preventing possible damage to expensive dental restorations, treating pain and much more.

The T-Scan can be used very widely, not only in restorative dentistry, but also in gnathological diseases, orthodontics, implantology and prosthetic dentistry.



THE T-SCAN:

- Objective
- Provides predictable results
- Prevents damage to your restorations!
- Accurate
- Reliable
- Reproducible
- Evidence-based



HOW DOES THE T-SCAN® WORK?

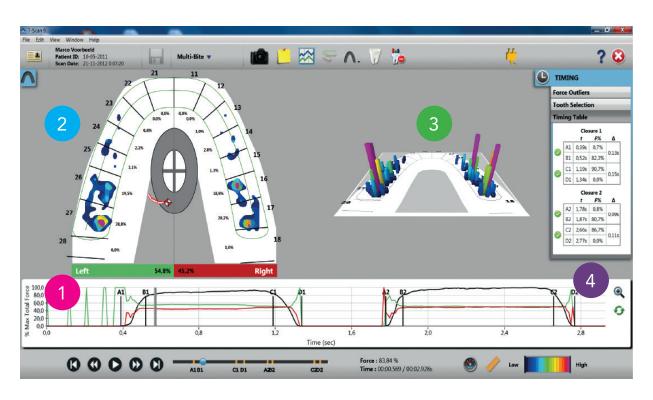
DIGITAL OCCLUSION ANALYSIS IN PRACTICE

The T-Scan® Novus consists of a Novus handle, disposable HD sensors and sensor supports. The handle connects to your computer or laptop via a USB cable (PC or Mac) and pairs seamlessly with the accompanying T-Scan® 9.1 software.

Once you have selected the relevant patient in the T-Scan software, you can immediately begin the bite registration. To begin, place the sensor in the patient's mouth and ask them to either bite closed or make a lateral move.

After recording, you will see a dynamic image on your computer, in which a 1/400th second (Figure 1) occlusion or articulation appears. You will see both in 2D (Figure 2) as well as in 3D (Figure 3), all the contacts and the magnitude of the forces at play. You will also see important information about the timing of the occlusion or articulation (Figure 4).







APPLICATIONS

FOR DAILY USE OF THE T-SCAN

RESTORATIVE DENTISTRY

Restorative dentistry is the most common application of the T-Scan. The T-Scan helps you to protect your patients' restorative dental work by indicating which contacts experience excessive force and which are loaded too early. Indispensable information for optimal results!



(MISUNDERSTOOD) PAIN AND TOOTH SENSITIVITY.

Unexplained pain, headaches, tooth sensitivity and other complaints can be resolved by restoring a disturbed occlusion or articulation. Reducing the overload using the T-Scan often results in a rapid improvement or resolves the complaints completely.



IMPLANTOLOGY

Overload is disastrous for implants. If the implant is insufficiently loaded, it may cause problems with osseointegration. The T-Scan helps you construct the implant in such a way that the implant will not be loaded beyond natural contact.



ORTHODONTICS

The real power of the T-Scan in orthodontics lies in the aftertreatment, particularly for adults. For this group of patients, caring for a perfect occlusion and articulation on an ongoing basis is key to successful treatment.



OTHER APPLICATIONS INCLUDE:

- Fitting splints
- Special Dentistry
- Endodontics
- TMJ Complaints
- Prosthetics

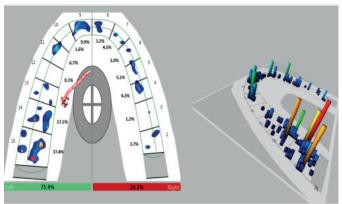


CASE STUDIES

GINGIVAL RECESSION DUE TO OVERLOAD



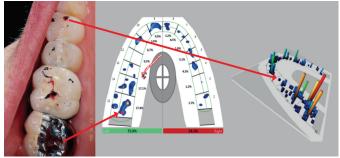
This patient began showing strong gingival recessions a few months after restorations were placed. After excluding a bacterial cause, it was noted that overload could be a possible cause.



After making an initial scan there appears to be a major overload at the location of the restorations.



Using articulation paper, it is impossible to say which contacts are over-taxed and which are premature.

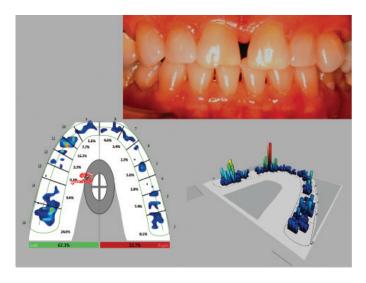


A comparison between the scan and the imprints on the articulation paper clearly shows at which locations the restorations are overloaded. This will indicate whether the restoration requires grinding or building up to remedy the overload.

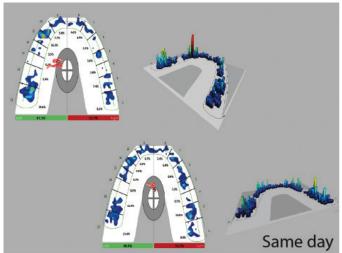


CASE STUDIES

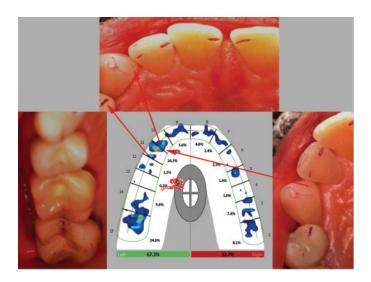
SORE TOOTH AFTER PLACEMENT



After placing a crown at 23, the patient kept returning complaining of pain. Articulating paper indicated that there was no heavy overload. A T-Scan, however, indicated a major overload at 23 and 27.



After grinding a minimum (0.03mm), the overload totally disappeared in the same treatment. The pain complaints were resolved within 10 minutes.



Using articulating paper does not indicate the level of force overloading 23. The T-Scan shows that the large imprint represents only a small force, and the smaller imprint appears to represent the greater force.



TESTIMONIALS

FROM ENTHUSIASTIC USERS AND PATIENTS

"For anyone even thinking about doing full mouth rehabilitation working with occlusion and major restorative treatments, the T-Scan is a must. This is the mirror and probe in achieving the ideal balanced occlusion. I revisited two full mouth rehabilitations, one a full mouth restorative, the other an implant case and equilibrated using the T-Scan. Both patients contacted me the next day and confirmed that their bites were now 100% more comfortable than they had been."



Dr. Fadi Yassmin - Dentist



"The T-Scan is a digital occlusal analysis system, which should be used routinely to evaluate occlusion in implantology. It is even more useful in dento-maxillo- facial reconstruction following tumor surgery and will assist greatly with successful rehabilitation. The use of T-Scan in regards to TMD increases diagnostic evaluation capability and aids in the development of customized treatment concepts to optimize the `therapeutic outcome.""

Dr. Joerg Mudrak- Oral Surgeon

"I had a T-Scan check and I can't believe the difference. I noticed it when I woke up in the morning and just felt totally comfortable, I didn't want to admit it but my bite felt so much better then when I first restored my teeth."







SPECIFICATIONS

OF YOUR T-SCAN NOVUS SYSTEM

- T-Scan® Novus Handle (USB)
- T-Scan® v9.1 Software (incl. updates)
- 20 Large T-Scan® HD sensors
- 20 Small T-Scan® HD sensors
- 2 Large T-Scan® Supports
- 2 Small T-Scan® Supports
- Graphic Output Software
- Electronic Operation Manual

THE T-SCAN INCLUDES:

- 12 months warranty
- Installation and user training
- Customer support

FINANCIAL LEASE

In collaboration with Team Leasing we can offer you an attractive financial leasing offer with a term of 1 to 4 years. Ask us about the possibilities.

SUPPORT AND USER DAYS

Dedicated to outstanding customer service, our Service and Technical Support team consists of some of the industry's most experienced Technicians, Engineers and Applications Specialists. We also offer regular user days for you to learn all the tips and tricks to get the most out of your T-Scan.



PROFITABLE INVESTMENT

Practices regularly surpass the break-even point on their T-Scan investment within a year.

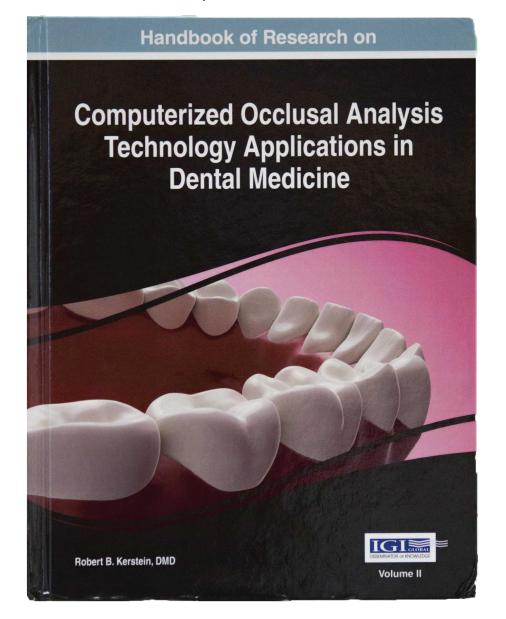
The T-Scan is a great addition to every dental practice!



REFERENCE

MANUAL DIGITAL OCCLUSION ANALYSIS BY ROBERT KERSTEIN

Together with 17 renowned researchers and practioners Dr. Robert Kerstein wrote the two-volume "Handbook Computerized Occlusal Analysis', where very extensive information of all treatments and applications of the T-Scan will be described in. This book can be ordered at Australian Imaging and provides all necessary information in order to work successfully with the T-Scan.





MORE INFORMATION?

COME TO ONE OF OUR LECTURES, MEETINGS OR DEMONSTRATIONS

STUDY CLUB MEETINGS

Have a Study Club meeting? We are happy for your group to have a lecture on digital occlusion analysis. An experienced T-Scan user will speak about the latest digital techniques to make the forces, timing and location of the teeth easily visible. We examine the existing concepts of occlusion and articulation and what this new technology can mean for modern treatment.

DEMONSTRATION IN YOUR OWN PRACTICE

Would you like to see the T-Scan in action? We are happy to visit you to demonstrate the T-Scan and discuss the benefits for your practice.

LECTURES

Australian Imaging regularly organises lectures by internationally renowned speakers on digital occlusion analysis. Refer to our website regularly for new lectures.

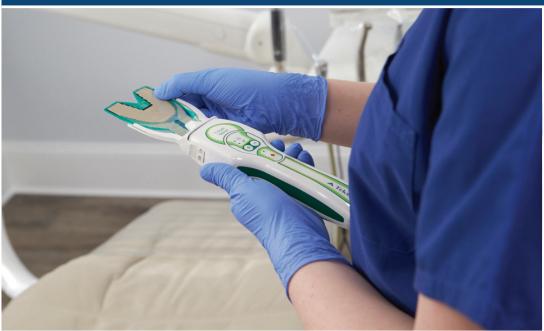
TEKSCAN WEBSITE

For further information on the T-Scan visit the Tekscan website (www.tekscan.com). Where you can view case studies on digital occlusion analysis as well as training videos to assist you in the operation of the T-Scan

CONTACT US

P 08 9479 3244

E wayne@westcoastdental.com.au





West Coast Dental Depot

17A Wheeler Street, Belmont WA 6104 Australia

Office 61 8 9479 3244 Mobile 61 4 1794 8121 Fax 61 8 9479 3255 E-mail wayne@westcoastdental.com.au

www.westcoastdental.com.au



