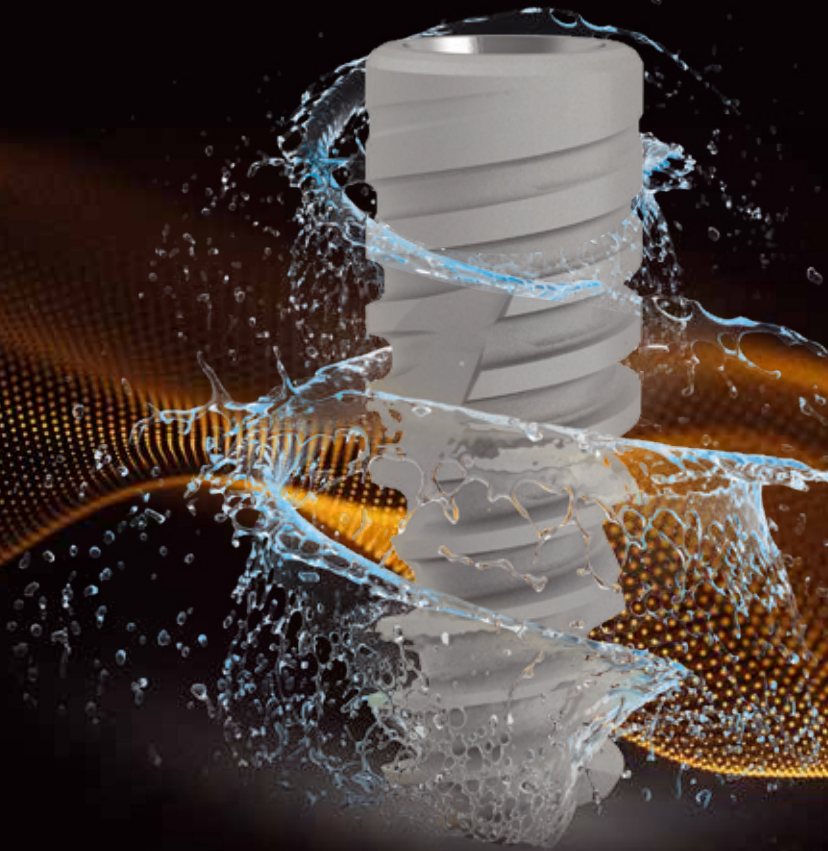


medentis  
medical

PRESENTS

# ICX-DIAMOND<sup>®</sup>

LIQUID



THE NEW ICX GOLD STANDARD  
FROM MEDENTIS MEDICAL.

# DISCOVER THE ICX DIFFERENCE IN A NEW WAY.

Dear Ladies and Gentlemen,

**What does our new ICX-DIAMOND® implant line offer you?**

You will now receive all our previous proven and successful ICX implants - ICX-PREMIUM and ICX-ACTIVE MASTER in an even higher quality of strength for you and your practice - as well as for your patients.

**We are now raising our best once again!**

**ICX-DIAMOND® implants combine the advantages of technically pure titanium with the strength of Ti 6Al-4V ELI.** We use the combination of strength and excellent body compatibility for our ICX-DIAMOND® implants without having to accept a loss of any of these properties.



**ICX-DIAMOND® implants also have a hydrophilic, microstructured surface.**

Properties such as a hydrophilic and microstructured implant surface, the high primary stability even in unfavourable bone conditions, optimal soft tissue and bone preservation and the adaptable implant alignment will convince you as a user.



**ALEXANDER SCHOLZ**  
CEO, shareholder  
and founder  
medentis medical

**Tensile strength refers to the maximum mechanical tensile stress with which a specimen can be loaded in a tensile test.**

Mechanical properties of different classes of titanium

| Titanium Grade <sup>2)</sup>                                     | Tensile strength <sup>2)</sup> |
|--|--------------------------------|
| Pure Titanium Grade 4 <sup>1)</sup>                              | ≥ 550 MPa                      |
| Pure Titanium Grade 4B <sup>1)</sup>                             | ≥ 680 MPa                      |
| Pure titanium grade 4B<br>all ICX premium implants <sup>3)</sup> | 843 MPa                        |
| Titanium alloy Ti6Al4V ELI <sup>5)</sup>                         | ≥ 860 MPa                      |
| <sup>A)</sup> Straumann® Roxolid® <sup>4)</sup>                  | ~ 1.000 MPa                    |
| <sup>B)</sup> ICX-DIAMOND® Giga-Titanium <sup>5)</sup>           | ≥ 1.100 MPa                    |



1) Source data for mechanical and chemical properties: ISO 5832-2, ISO 5832-3

2) Data on file - values in table are maximum values unless otherwise stated.

3) Mean values of the batches used in 2012 for ICX premium implants. Data on file.

4) Values deposited in brochure straumann\_en500367\_roxolid

5) Values ICX-DIAMOND® Giga-Titanium deposited in: medentis specification

6) Sources for mechanical and chemical properties: ISO 5832-3

A: Straumann/Roxolid® is a registered trademark and/or trademark of Institut Straumann AG, Basel, CH.

B: medentis medical/ICX-DIAMOND® is a registered trademark and/or trademark of medentis medical GmbH, Walporzheim, GER.



# ICX-DIAMOND®

SIGNIFICANTLY HIGHER TENSILE STRENGTH THAN TITANIUM GRADE 4B.

## THE PROPERTIES OF ICX-DIAMOND®:

- The use of Giga-Titanium results in significantly more tensile strength than implants made of titanium grade 4B.
- Chemically pure titanium
- Positive influence on material fatigue
- Desired ICX microroughness
- hydrophilic and microstructured implant surface.



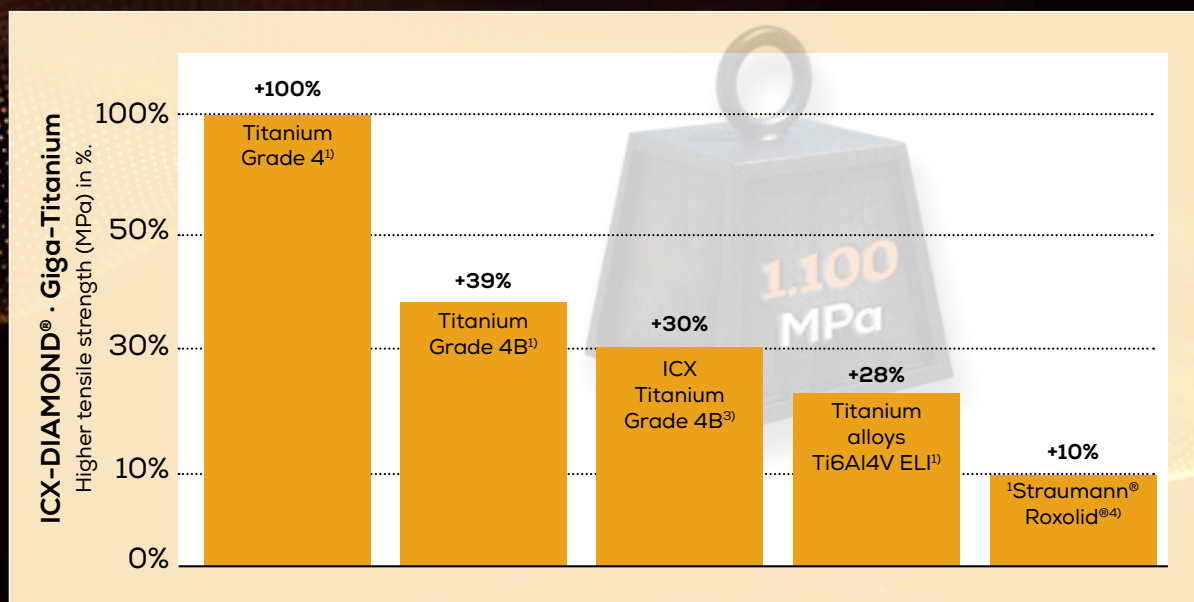
The special micro-roughness of the ICX implant surface is created by high-temperature acid etching. The resulting topography provides an ideal structure for the attachment of cells. Immediate implant placement and immediate loading are only possible under certain surgical conditions.

ICX-DIAMOND® offers dentists a very high degree of flexibility with regard to insertion and prosthetic options.

*All ICX-DIAMOND® implants are available for all lengths and diameters.*

ICX-DIAMOND® - MADE OF GIGA-TITANIUM  
IS SIGNIFICANTLY MORE STABLE THAN TITANIUM GRADE 4B.

Higher tensile strength of ICX-DIAMOND® Giga-Titanium in % compared to other titanium classes.



ICX-DIAMOND® - MADE OF GIGA-TITANIUM  
SIGNIFICANTLY HIGHER TENSILE STRENGTH THAN TITANIUM GRADE 4B.

# ICX-DIAMOND® IS ON AVERAGE 20.1 % MORE RESILIENT THAN ROXOLID®

Overview of static load results „Straumann® Roxolid®<sup>A</sup> Implantat 3.3“ and  
ICX-DIAMOND®<sup>B</sup> Implant 3.3 according to standard DIN EN ISO 14801

| Test-Number | <sup>A</sup> Straumann® Roxolid®<br>NC Implant 3.3<br>Art.No: 021.2512<br>Roxolid® (Lot: KX802)<br><br>Straumann® Abutment<br>Art.No: 022.2326<br>Titanium Grade 5<br>(Lot: KY443) | <sup>B</sup> ICX-DIAMOND®<br>Implant 3.3<br>Giga-Titanium (Lot: 102129)<br>Art.Nr: ACM-001-330125<br><br>ICX® Abutment<br>Art.Nr: N-007-020402<br>Titanium Grade 5<br>(Lot: 2022000486) | INCREASE<br>IN PERCENT (%) |
|-------------|--|---|----------------------------|
| Test 01     | 550,13 N   | 630 N   | + 14,54 %                  |
| Test 02     | 522,01 N   | 647 N   | + 23,94 %                  |
| Test 03     | 518,20 N   | 635 N   | + 24,51 %                  |
| Average     | 530,11 N   | 637 N   | 20.1 %<br>more on average  |

The 14801 standard describes the static (breaking load) loading of implants. For this purpose, the implant/abutment specimens are loaded to fracture in a universal testing machine (DynaMess).

Machine type: 2-column testing machine/servopneumatic – Manufacturer: Dyna-Mess Prüfsysteme GmbH, 52222 Stolberg  
Test date Roxolid®: 01. 04.15-18.06.15 – Name of tester: Jörn Ockenfels – Job title: state-certified machine technician  
Test location: 53501 Gelsdorf – Test date ICX-Diamond®: 24./27.02.23 – Name of tester: Evgin Bugdaci – Job title: Dipl. Ing. –  
Testing location: 53474 Bad Neuenahr-Ahrweiler

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Data is stored in files.



## ICX-DIAMOND® LIQUID

DON'T SETTLE FOR ANYTHING LESS!

www.medentis.de – Service Tel.: +49 (0)2641 9110-0 – Mon.-Fri.: 7.30 a.m. to 7 p.m.



# ICX-DIAMOND® – MADE OF GIGA-TITANIUM

HIGHER TENSILE STRENGTH  
FOR HIGHER & MAXIMUM TENSILE STRESS.



MIN

ICX-DIAMOND®

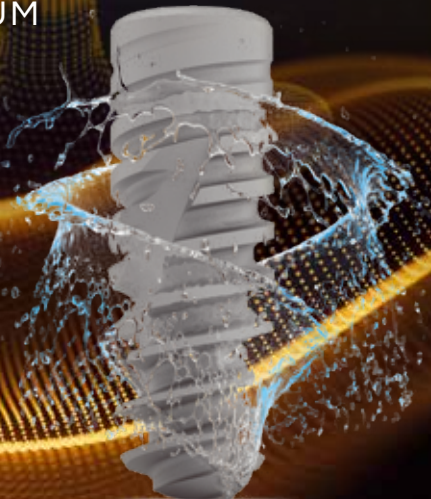
MAX

## QUALITY LEVEL

ICX-DIAMOND® – MADE OF GIGA-TITANIUM  
IS SIGNIFICANTLY MORE STABLE  
THAN TITANIUM GRADE 4B.

*Our new ICX-DIAMOND®  
implants are available in  
a pack of 6 – freely selectable  
for you!*

*Just ask us!*



# ICX-DIAMOND®

LIQUID



THE NEW ICX GOLD STANDARD  
FROM MEDENTIS MEDICAL.

# ICX-DIAMOND<sup>®</sup>

LIQUID



We will be happy to advise you on all  
questions regarding ICX-DIAMOND<sup>®</sup>.

ALEXANDER SCHOLZ

CEO, shareholder and founder  
medentis medical

**medentis**  
medical