



CLINICAL GUIDE I
PRACTICE BROCHURE





ZOLID DNA - ZIRCONIA REDEFINED

With Zolid, Amann Girsch provides a comprehensive all-ceramic system for high-quality and esthetic zirconia restorations. Complete integration into the CAD/CAM workflow ensures maximum process reliability and continuously high quality. This process creates restorations that are individually adapted to each patient situation and can hardly be surpassed in terms of durability and esthetics.

Zolid zirconia is the result of a decade of Amann Girsch's experience in the development and in-house production of zirconia for dental restorations. Worldwide, more than 10 million units have already been produced from Amann Girsch Zolid blanks - with an almost negligible complaint rate of < 0.1 %¹. The excellent material properties of Zolid products are also reflected in several studies that underline the clinical evidence for the products.



The heart of Amann Girsch lies in Koblach in Austria



„Dentistry One“ with one of the most state-of-the-art production facilities for dental products on over 4,500 sqm

¹ Risk Management Report Amann Girsch 2021

ZOLID DNA - THE GUARANTOR FOR YOUR TREATMENT SUCCESS



* Periodic Safety Update Report 2021 Amann Girrbach

ZOLID DNA - THE SYSTEM FOR TROUBLE-FREE AND FUNCTIONAL RESTORATIONS






MAXIMUM PROCESS SAFETY DUE TO FULLY INTEGRATED WORKFLOW

- _ Illustrated step by step guidelines for selecting the correct preparation parameters**
- _ Registration of the jaw relation and production of precision models for patient-related restorations**
- _ Digitization of all data for the innovative fabrication of zirconia restorations using CAD software**
- _ Maximum material and indication diversity with Zolid DNA zirconia**
- _ Efficient and reproducible fabrication with state-of-the-art CNC milling machines**
- _ Material-conserving sintering for optimum material properties and long-term stability**
- _ Illustrated step-by-step guidelines for the correct cementation of the restorations**

ESTHETIC MANAGEMENT AND PROCESSING

The optimum zirconia for an indication is determined by a host of different factors. Esthetic requirements, the size of the restoration or the shade of the stump have a decisive influence on the choice of material. The more precisely the shade of the stump, the material and the indication are matched, the more predictable and esthetically accurate the final result will be realized.

Die Shade	Translucency	Product	Processing				Indication							
			Pinse/-/Tauchttechnik	Maltechnik	Cutback-Technik	Schichttechnik	Veneer	Inlay	Onlay	Anterior and posterior crown	3-pontic bridge (incl. molar region)	Multi-unit bridge	Hybrid abutment	Hybrid abutment crown
Bright 	SHT	Zolid FX Multilayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>
		Zolid FX White	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>
Bright - slightly discolored 	HT+	Zolid Gen-X Multilayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Zolid HT+ Preshades	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Zolid HT+ White	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Zolid DRS Multilayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Bright- discolored/ metal 	LT	ZI White	<input type="radio"/>			<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

THE BEST OF THREE GENERATIONS OF ZIRCONIA

zolid fx BEST CHOICE FOR MONOLITHIC CROWNS

SHT

- _Higher strength compared to lithium disilicate ceramics
- _Broad indication spectrum with up to 3-pontic bridges extending into the molar region
- _Minimum restoration thicknesses of 0.5 mm-0.7 mm allow substance-conserving preparation and working in confined spaces



Monolithic crowns made of Zolid FX ML / 15-26

DT Mauro Ahmić,
Sandi Trkulja
Dental Impuls

zolid ht+ IDEAL FOR ALL-ON-X CASES

HT

- _Combines natural esthetics with high strength of up to 1,000 MPa
- _Ideal for wide span implant-supported constructions with gingival component
- _Particularly massive restorations gain natural esthetics due to the increased translucency of the material



Crowns made of Zolid HT+ with little Cutback / 13-23

MDT Benjamin Votteler,
Dentaltechnik Votteler
GmbH & Co

zi PERFECT BASIS FOR FRAMES

LT

- _Ideal for wide-span frames with strength values of 1,200 MPa
- _Perfect basis for individually veneered restorations
- _Suited for covering discolored/metallic structures due to high opacity



Fully veneered frame work made of ZI / 11-23

MDT Benjamin Votteler,
Dentaltechnik Votteler
GmbH & Co

OUTSTANDING STRENGTH, ESTHETICS AND DURABILITY COMBINED IN A SINGLE MATERIAL

FLEXURAL STRENGTH

3-point flexural strength [MPa] DIN EN ISO 6872.
The higher the flexural strength of zirconia (ZrO₂)
the better the stability under masticatory loading.

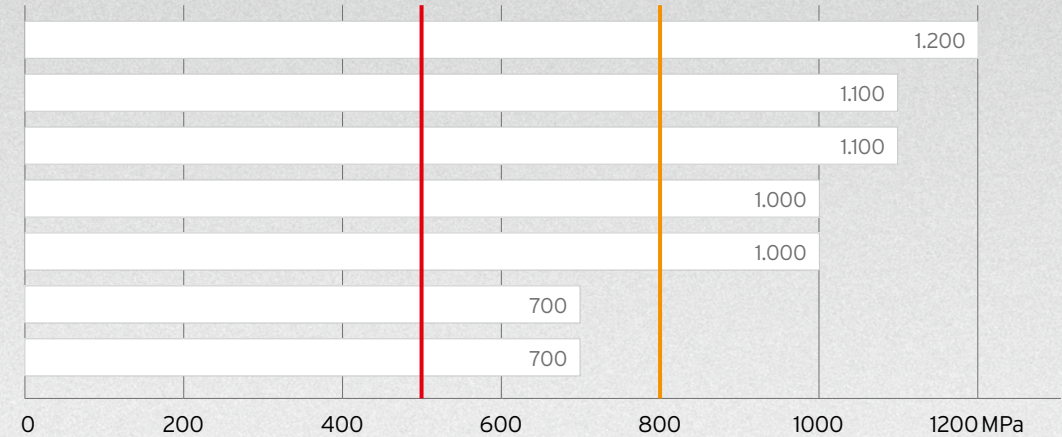
- Class 5 > 800 MPa according to DIN EN ISO 6872*
- Class 4 > 500 MPa according to DIN EN ISO 6872**

Source: Amann Gyrbach R&D

* Minimum requirement for the fabrication of 4- to multi-pontic bridges;

** Minimum requirement for the fabrication of 3-pontic bridges

- zi
- zolid ht+ white
- zolid DRS
- zolid gen-x
- zolid ht+ preshades
- zolid fx white
- zolid fx multilayer



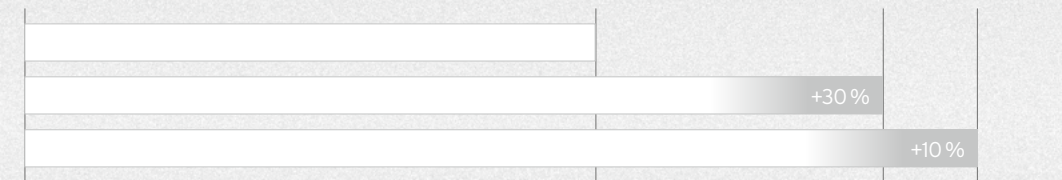
TRANSLUCENCY

The higher the translucency the more permeable the material is to light (translucent).

* Zolid HT+ White, Zolid HT+ Preshade, Zolid Gen-X, Zolid DRS

** Zolid FX White, Zolid FX Multilayer

- zi
- zolid ht+*
- zolid fx**



Translucency

RESISTANCE TO AGEING

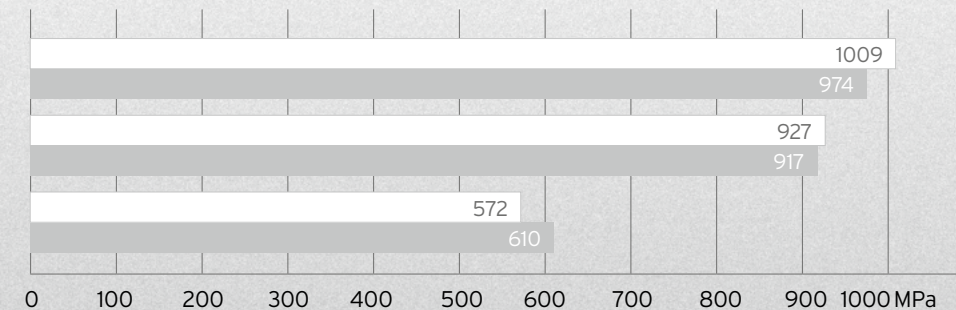
4-point flexural strength [MPa] DIN EN ISO 6872.
Consistent strength values (Weibull module) after
simulated mechanical ageing (1.2 million cycles, 100 N).

- prior to mechanical aging
- after mechanical aging

Results/references:

* LMU Munich; ** Amann Gyrbach R&D

- zi*
- zolid ht+**
- zolid fx**



THE EFFECTIVE ALTERNATIVE TO LITHIUM DISILICATE

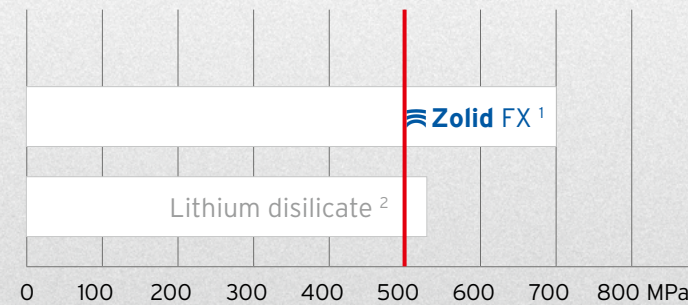


Crown made of Zolid FX



Crown made of lithium disilicate

- _Higher strength compared to lithium disilicate ceramics**
- _High long-term stability**
- _Highly esthetic restorations for anterior and posterior regions with extended indication spectrum for bridges of up to 3 pontics extending into the molar region**
- _Minimum restoration thicknesses of 0.5-0.7 mm allow substance-conserving preparation and working in confined spaces**



¹) 3-point flexural strength (MPa) DIN EN ISO 6872

²) Mean flexural strength (manufacturer's data Ivoclar Vivadent)

— Class 4 > 500 MPa according to DIN EN ISO 6872

ZOLID DNA GENERATION - COMPLEX PATIENT CASE WITH MAXIMUM ESTHETICS



1
Initial situation: multiple agenesia in the maxilla and mandible. Orthodontic pre-treatment was performed. Pronounced progency is clearly visible from the lateral view during orthodontic treatment.



2
The situation after the bimaxillary corrective osteotomy. The maxilla was moved forward by maxillofacial surgery and the position of the mandible was adjusted.



3
A total of eleven implants were then inserted. Gingiva formers were screw-retained to the exposed implants. In the maxilla, four implants as well as six teeth were to be restored all-ceramic. The seven implants in the mandible were also provided with gingiva formers. Now the implants had to be prosthetically restored together with the two anterior teeth.



4
Eleven hybrid abutments made of Zolid as well as single-tooth restorations and max. 3-pontic bridges made of Zolid FX were used. Only in the anterior region were the crowns partially veneered, in the posterior region work was completely monolithic.



This is happiness! This self-confident laugh of the patient makes all the stress of the protracted treatment a secondary issue.



"The Zolid DNA zirconia portfolio offers me the right material for every indication and every esthetic requirement."

That's teamwork: DMT Benjamin Votteler, the patient and the clinician, Dr. Feraydoon Sharghi (from the left)

Dentaltechnik Votteler GmbH & Co

The complete patient case was published by the trade journal "dental dialogue" and is available online at www.amann-girrbach.com in the download area.

ZOLID DNA GENERATION - HIGHEST ESTHETICS IN THE ANTERIOR REGION



1 Initial situation. To meet the patient's requirements, the tooth dimensions and tooth shade need to be corrected.



2 From this perspective, the necessary corrections of the tooth position and the dental arch can be seen very clearly.



3 The teeth are prepared and readied for the final restoration.



4 Crowns on the control model to see the relationship between teeth and gingiva.



5 The monolithic crowns made of Zolid FX ML fit harmoniously into the overall picture. Both the tooth position and the dental arch could be corrected. The harmonious gingiva defined the final tooth shape.



The portrait photos (before/after) show us a new overall impression. In this case we had to achieve harmony, as well as create symmetry. The patient is overjoyed with her new smile.



"The system helps me to create natural shapes, shades and structures, all of which together create a smile and enable a higher quality of life."

Dentorium
Daniel Žgombić dr. dent. med.



"Modern dentistry is unthinkable without a material like this."

Dental technicians
Mauro Ahmić / Sandi Trkulja
Dental Impuls, Croatia

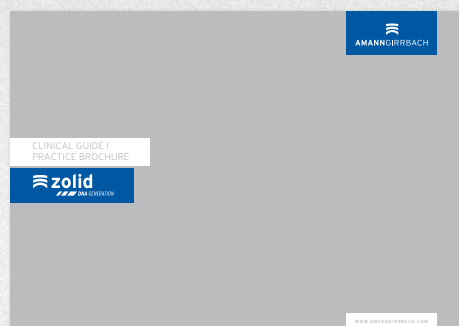


ZOLID ESTHETIC MANAGEMENT - AS ESTHETICS ARE NOT HAPPENSTANCE

Amann Girrbach is not only specialized in the production of highly esthetic materials, but also offers a comprehensive range of information and training courses. In combination with the blanks of the Zolid DNA generation, the didactically prepared print and online media as well as courses provide the desired outcomes right from the start.

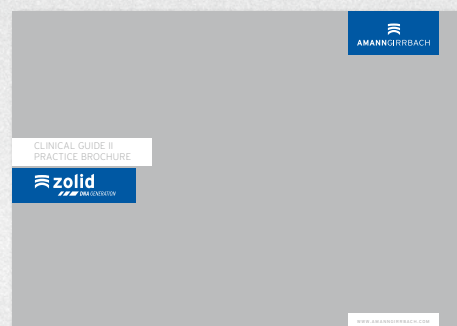
CLINICAL GUIDE I Practice brochure

All important information about the Zolid DNA System



CLINICAL GUIDE II Practice guideline

Preparation, luting, surface polishing



CLINICAL GUIDE III Scientific compendium

Compendium Zolid DNA studies



APPLICATION GUIDELINE

Processing guideline laboratory





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