With Zolid, Amann Girrbach 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 Girrbach’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 Girrbach Zolid blanks – with an almost negligible complaint rate of < 0.1 %). The excellent material properties of Zolid products are also reflected in several studies that underline the clinical evidence for the products.
ZOLID DNA - THE GUARANTOR FOR YOUR TREATMENT SUCCESS

HIGHEST QUALITY
By using the best raw materials and many years of experience in the production of zirconia blanks.

MAXIMUM ESTHETICS
Owing to natural translucency and shades perfectly matched to the Vita Shade Guide.

CLINICALLY TESTED
With more than 10 million restorations produced, which convince dentists and patients alike.

PROCESS SAFETY
Through a coordinated workflow with comprehensive, self-explanatory guidelines.
ZOLID DNA – THE SYSTEM FOR TROUBLE-FREE AND FUNCTIONAL RESTORATIONS

PREPARATION > REGISTRATION > PREPARATION OF MODELS > DIGITAL TRANSFER > MATERIAL SELECTION > CAD/CAM PRODUCTION > FINALIZING > CEMENTATION

- 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
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 die 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.

<table>
<thead>
<tr>
<th>Material</th>
<th>Die shade</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Veneer</td>
<td>Inlay</td>
</tr>
<tr>
<td>SHT</td>
<td>Bright</td>
<td>o</td>
</tr>
<tr>
<td>SUPER HIGH TRANSLUCENCY Zolid FX</td>
<td>Bright - slightly discolored</td>
<td>o</td>
</tr>
<tr>
<td>HT</td>
<td>Bright - discolored</td>
<td>o</td>
</tr>
<tr>
<td>LOW TRANSLUCENCY ZI</td>
<td>Bright- discolored/metal</td>
<td>o</td>
</tr>
</tbody>
</table>
THE BEST OF THREE GENERATIONS OF ZIRCONIA

**zolid fx** BEST CHOICE FOR MONOLITHIC CROWNS

- More safety compared to conventional glass ceramics due to strength values of up to 700 MPa
- 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

**zolid ht+** IDEAL FOR ALL-ON-X CASES

- 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

**zi** PERFECT BASIS FOR FRAMES

- Ideal for wide-span frames with strength values of 1,200 MPa
- Perfect basis for individually veneered restorations
- Suited for covering discolored/metalllic structures due to high opacity

Monolithic crowns made of Zolid FX ML / 15-26
DT Mauro Ahmić, Sandi Trkulja
Dental Inpuls

Crowns made of Zolid HT+ with little Cutback / 13-23
MDT Benjamin Votteler, Dentaltechnik Votteler GmbH & Co

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 Girrbach R&D

* Minimum requirement for the fabrication of 4- to multi-pontic bridges;
** Minimum requirement for the fabrication of 3-pontic bridges

TRANSLUCENCY

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

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). Amann Girrbach zirconia exhibits no signs of ageing.

Prior to mechanical aging

After mechanical aging

Results/references:
* LMU Munich; ** Amann Girrbach R&D
THE EFFECTIVE ALTERNATIVE TO LITHIUM DISILICATE

-More safety versus conventional glass ceramics due to greater strength - entirely without ageing effect
-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 mm-0.7 mm allow substance-conserving preparation and working in confined spaces irrespective of luting

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

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.

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

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.

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."

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.

That's teamwork: DMT Benjamin Votteler, the patient and the clinician, Dr. Feraydoon Sharghi (from the left)
Dentaltechnik Votteler GmbH & Co
Initial situation. To meet the patient’s requirements, the tooth dimensions and tooth shade need to be corrected.

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

The teeth are prepared and readied for the final restoration.

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

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.
“Modern dentistry is unthinkable without a material like this.”

“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.”

Dental technicians
Mauro Ahmić / Sandi Trkulja
Dental Inpuls, Croatia

Dentorium
Daniel Žgombić dr. dent. med.

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.
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
The product offer can vary from country to country depending on the approval status.