2022 Product Catalog
SDS1.2 and SDS2.2

designed by
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MAKING THE WORLD A HEALTHIER PLACE
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MAKING THE WORLD A HEALTHIER PLACE

Not all products shown in this product catalog are manufactured in Switzerland.
We have learned to think in terms of ceramics

**DYNAMIC THREAD® AND SDS IMPLANT ENGINEERING**

For the development and production of ceramic-implant series SDS1.2 and SDS2.2, the SDS team has drawn on more than 20 years’ experience in the area of ceramic implants. Over the years and with tens of thousands of implants monitored by our development team, we have gained an increasing understanding of the properties, possibilities and limitations of zirconia. The implants are used on a daily basis at the SDS company owner’s SWISS BIOHEALTH CLINIC, and have been designed, developed and continuously improved based on practical application.

**CERVICAL PORTION OF THE IMPLANT THREAD**

The micro thread of the upper part of the implant—in combination with the shape-congruent countersink drill for this portion of the implant—is ideally suited for cortical bone, which does not tolerate compression. At the same time, the use of the micro thread results in an increased core diameter in the area of highest implant loading, significantly improving implant stability. With tissue-level insertion, the bone level is approximately at the height of the green arrow. The red arrow shows the implant portion that is exposed to the highest load according to ISO 14801 during simulated bone recession. The wide tulip already forms the lower half of the abutment and supports the soft tissue thanks to the zirconia-epithelial (i.e. desmodontal) connection. The attachment of the gingiva to the tulip of the implant results in a closing of the immunological door.

**APICAL PORTION OF THE IMPLANT THREAD**

The lower area of the implant thread features a so-called Dynamic Thread®. This self-tapping thread increases primary stability and has up to 2.5 times the thread depth in the bone-compacting area. It also has a low thread pitch of 7 degrees compared to other implant systems. This thread design generates a very large surface area for safe osseointegration, even in difficult bone types. SDS implants featuring Dynamic Thread® ensure excellent primary stability at an insertion torque of up to 35 Ncm thanks to the combination of bone-type-dependent drilling protocols and form drill’s adjusted correspondingly.

**CLEAN IMPLANT “TRUSTED QUALITY”**

For many years, the independent CleanImplant Foundation has been conducting one of the largest, independent quality surveys of dental implants. Following an independent peer-review process, SDS SWISS DENTAL SOLUTIONS was awarded a quality seal for the SDS1.2 and SDS2.2 implants. SDS is the first company to receive this seal twice, both for production and manufacturing.

**“NO-TOUCH” PACKAGING**

The “no-touch” blister packaging comes with a pre-assembled disposable insertion tool, which is used up to the final insertion depth. No-touch removal is thus also possible with the handpiece itself.

**SDS1.2 “one-piece”**

**SDS2.2 “two-piece”**
ZIRCONIA IS NOT DUCTILE

Unlike titanium, zirconia ceramic is less flexible and therefore cannot warp inside the bone as titanium implants do when chewing forces act on them. As a result, zirconia implants can be positioned in areas where the bone thins out. We have developed new treatment protocols with A-PRF™ so that in many cases bone augmentation is no longer required. Also, apical alveolar ridge should never be leveled prior to implant placement, because the gingiva or papilla, respectively, will be lowered by exactly that amount.

ZIRCONIA-EPITHELIAL CONNECTION

Soft tissue attaches to zirconia—Dr. Rudelt from Hamburg proved this by means of histological examinations of human material 30 years ago. Current histological examinations by Professor Kniha and the Oliva family further confirm this. Concepts such as “One Abutment – One Time” are also based on this property. For the first time, we have at our disposal an implant material that both grows into/osseointegrates with bone and enables soft tissue to attach. As a result, a defined implant-abutment transition is no longer necessary. The quadruple micro thread with the same pitch as the coarse thread (7°) is only 0.04 mm deep and can come into contact with bone as well as be exposed, because the gingiva will also attach to this surface.

CONCLUSIONS

Ceramic implants should not be narrower at the implant-abutment transition, as is the case with titanium implants, but rather wider, which is what we have done at SDS, since the wide tulip stabilizes the gingiva, allowing it to attach. Ceramic implants must/should always be placed tissue-level, otherwise the valuable bond will be disturbed and destroyed. This way, soft tissue and pink esthetics are preserved to a maximum. In addition, the white color and soft tissue properties of ceramics make deep (bone-level) placement of implants unnecessary. During the prosthetic restoration, it is essential not to destroy the zirconia-epithelial connection with electrosurgical devices or retraction cords.

OPTIMAL ESTHETICS

With SDS zirconia implants, you will achieve perfect esthetics even in the maxillary anterior region. Because gingiva attaches to zirconia, placing the implant in a slightly oral position will support vertical gingival growth—especially in the esthetic zone. Always make sure that the long-term temporary (LTT) is placed in the “target position.” Especially in the anterior region, and even more so if the buccal lamella has been lost, immediate implants should not be placed in the alveolus, but further in the lingual direction, at the center of the bone.

The following basic rule applies. The further away you move your implant position from a wall defect, the sooner the implant will be covered by bone, without the need for augmentation.

Re-entry after 3 years: the bone tapers thinly – no circular soft tissue margin

Zirconia-epithelial connection after an implant service life of 20 years: a solid bond


Three months post-surgery after immediate implant placement, 12-22

The gingiva has become firmly attached all around the implant Tulip

Final prosthetic restoration

Video: Positioning in the UJ front teeth

Video: Positioning in the event of loss of the buccal lamella
CERAMIC DOES NOT DISSIPATE IATROGENIC HEAT

The only challenge that zirconia poses as an implant material is its poor ability to dissipate the heat generated at the surface, increasing the risk of overheating and destruction of the bone, particularly in type I bone. For this reason, when it comes to implant shapes and drilling protocols, we do not use cylindrical shapes or thread taps for shape-congruent implant preparation at SDS at all. Rather, we utilize the advantages of stepped implants for all SDS implants, as they will immediately “drop” into type I bone cavities to well over 70 percent of their length, and can be fixed in their final position with just a few turns, with only the thread tips penetrating the bone to a depth of 0.15 mm.

CREATING OPTIMALY VASCULARIZED BONE

In type III and IV bone, the Dynamic Thread® compresses the bone in the same manner as a bone condenser, thus enabling high primary stability. The Dynamic Thread®—in conjunction with our bone-type-based drilling protocol—enables you to create lacunae for stem cells in hard bone. The overextended preparation in hard bone types, in combination with the extreme thread depths of the SDS Dynamic Thread®, creates a cavity for bone debris, blood from the wound and stem cells, so that callus formation can be accelerated by up to 50 times. The resulting lamellar bone is far better supplied with blood than the appositional bone, which is formed when there is direct contact between the implant and the bone. Positive side effect: In this void space, there is no bone-implant contact, and thus no friction with heat generation during insertion.

PRESERVING PAPILLA HEIGHT

In the past, titanium implants placed in narrow alveolar ridges required extensive augmentation or removal of the alveolar ridge (red arrow at bottom right on previous page). This resulted in massive papilla height loss. Since with ceramic implants, the bone is allowed to taper thinly and the transition between implant and abutment is smooth, the entire papilla height can be maintained without the need for augmentation.

CASE PRESENTATION

Situation at the outset: Eight titanium implants with proven titanium intolerance. Immediate implant placement with immediate restoration. The pre-prosthetic images show a perfectly healed gingiva—the precondition not only for excellent esthetics, but also for a healthy result from a biological and immunological point of view.

SDS ceramic implant properties

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Video: SDS stepped implant vs. cylindrical implant

Video: Healing chambers in type I bone

Steped implant: After type I bone preparation, the implant will “drop” more than halfway into the cavity.

Lacunae for stem cells: The red areas are void spaces formed as a result of overextended preparation.

Papilla height loss compared: Titanium implant (left) vs. ceramic implant (right).

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Papilla height loss compared: Titanium implant (left) vs. ceramic implant (right).
MATERIAL
SDS1.2 implants made of TZP-A (tetragonal zirconia polycrystal)—a material which is being continuously improved—achieve hitherto unknown strength values thanks to optimized and continuously honed production processes. SDS1.2 implants have an optimized surface.

DESIGN FEATURES
SDS1.2 implants feature the Dynamic Thread®, which is proven for all bone types. The dynamic thread performs convincingly in all situations, even with implants placed immediately using the SDSACC immediate implant concept.

As an option, the abutment can be ground deep into the tulip area with a red ring diamond bur at maximum rotation, water cooling and gentle application of pressure to match it to the line of the gingiva, and can then be used as a standard abutment for cementing crown/bridge restorations without any further steps required immediately after impression-taking*.

In addition, the SDS1.2 abutment has an internal screw thread allowing you to fix the insertion tool and transferring the abutment into the oral cavity in a safe manner.

*Further details can be found in the SDS prosthetics manual, or online in our media library at www.swissdentalstolutions.com.

SDS1.2 “one-piece”
One-piece implants are used when a risk-free restoration with a long-term temporary (LTT) is possible, limited forces act on the implant, and good primary stability is achieved. Please refer to the list of indications for more details.
Implant diameter

Micro thread with 0.04 mm thread depth

Dynamic Thread® with 2.5-fold thread depth

Biological width

Tulip width

SDS1.2 Product overview, areas of use and indications

- **Ø thread 3.3 mm**
  - SDS1.2_3308 Length in mm 8
  - SDS1.2_3311 Length in mm 11
  - SDS1.2_3314 Length in mm 14
  - Ø tulip 4.2 mm
  - **Indication**
    - exclusively for narrow teeth
    - 12/22, 21/41, 32/42

- **Ø thread 3.8 mm**
  - SDS1.2_3808 Length in mm 8
  - SDS1.2_3811 Length in mm 11
  - SDS1.2_3814 Length in mm 14
  - Ø tulip 5.0 mm
  - **Indication**
    - medium-width teeth

- **Ø thread 4.6 mm**
  - SDS1.2_4608 Length in mm 8
  - SDS1.2_4611 Length in mm 11
  - SDS1.2_4614 Length in mm 14
  - Ø tulip 6.0 mm
  - **Indication**
    - wide teeth

- **Ø thread 5.4 mm**
  - SDS1.2_5408 Length in mm 8
  - SDS1.2_5411 Length in mm 11
  - SDS1.2_5414 Length in mm 14
  - Ø tulip 6.0 mm
  - **Indication**
    - wide teeth

**SDS1.2_3.3**

**SDS1.2_3.8**

**SDS1.2_4.6**

**SDS1.2_5.4**
SDS1.2-ov “oval”
This implant series enables targeted restoration of upper and lower premolars. Please refer to the list of indications for more details.
SDS1.2-ov “Double balcony”
This implant series enables targeted centralized restoration of UJ/LJ molars. Please refer to the list of indications for more details.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Thread Size</th>
<th>Length</th>
<th>Indication</th>
</tr>
</thead>
</table>
| SDS1.2_5.4-ov | Ø 5.4 mm | 11 mm | Ø tulip 6.0 mm x 8.0 mm
| SDS1.2_5.4-ov | Ø 5.4 mm | 14 mm | Ø tulip 6.0 mm x 8.0 mm

- Summarized indication: central UJ/LJ molars
- Detailed indication: UJ/LJ molars, central position, mostly late implant placement, but also immediate implant placement with good interradicular septum

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Thread Size</th>
<th>Length</th>
<th>Indication</th>
</tr>
</thead>
</table>
| SDS1.2_4.6-ov | Ø 4.6 mm | 11 mm | Ø tulip 6.0 mm x 8.0 mm
| SDS1.2_4.6-ov | Ø 4.6 mm | 14 mm | Ø tulip 6.0 mm x 8.0 mm

- Summarized indication: central UJ/LJ molars
- Detailed indication: UJ/LJ molars, central position, mostly late implant placement, but also immediate implant placement with good interradicular septum
The two-piece implant series is used when leverage forces must be avoided (low primary stability, little bone contact, terminal position) in both immediate and late implant placements. Please refer to the list of indications for more details.

**MATERIAL**

SDS2.2 implants made of TZP-A (tetragonal zirconia polycrystal)—a material which is being continuously improved—achieve hitherto unknown strength values thanks to optimized and continuously honed production processes. SDS2.2 implants have an optimized surface.

**DESIGN FEATURES**

SDS2.2 – The two-piece implant system is the result of more than 20 years’ experience in the development of ceramic implants. The load-bearing upper part of the implant and the implant-abutment connection have been designed to be very solid. The connection is not inside the implant, but rather in the lower part of the abutment, which is known as the “tulip.” Once cemented and screw-retained, the two pieces form a highly stable one-piece implant, with the crown being placed at tissue level. Thus, the implant has no moving parts and only one bacteria-proof connection, guaranteeing perfect results from a periodontal hygiene point of view. The stepped implant design and the proven self-cutting Dynamic Thread® perform convincingly in all bone types and indications. The two-piece design enables submerged healing with high success rates, especially in the posterior region and in free-end situations.

**TWO DIFFERENT ABUTMENTS**

Available options: angled at 15° and straight + 1.5 mm. One screw type is available: metal-free PEEK. Identical drilling protocols allow the surgeon to switch intraoperatively between the one-piece SDS1.2 and the two-piece SDS2.2 implants depending on the situation.

![SDS2.2 standard abutment cemented (blue line) and screw-retained, crown cemented at tissue level.](image)

The standard abutments are made of zirconia, standard screws are available in PEEK.
Implant diameter

Micro thread with 0.04 mm thread depth

Dynamic Thread® with 2.5-fold thread depth

Biological width

Tulip width

SDS2.2 Product overview, areas of use and indications

**SDS2.2_4.6**

- Ø thread 4.6 mm
- Length in mm: 8, 11, 14
- Ø tulip 6.0 mm
- Indication:
  - wide teeth

**SDS2.2_5.4**

- Ø thread 5.4 mm
- Length in mm: 8, 11, 14
- Ø tulip 6.0 mm
- Indication:
  - wide teeth, if 4.6 insufficient
This implant series enables targeted restoration of upper and lower premolars. Please refer to the list of indications for more details.

Summary indication:
UJ/LJ premolars

Detailed indication:
Premolar region and small gaps in canine region.
SDS2.2-ov “Double balcony”
This implant series enables targeted centralized restoration of UJ/LJ molars. Please refer to the list of indications for more details.

<table>
<thead>
<tr>
<th>SDS2.2_5.4-ov</th>
<th>Ø thread 5.4 mm</th>
<th>Length in mm</th>
<th>Ø tulip 6.0 mm x 8.0 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS2.2_5411-ov</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDS2.2_5414-ov</td>
<td>14</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SDS2.2_4.6-ov</th>
<th>Ø thread 4.6 mm</th>
<th>Length in mm</th>
<th>Ø tulip 6.0 mm x 8.0 mm</th>
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<tbody>
<tr>
<td>SDS2.2_4611-ov</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDS2.2_4614-ov</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summarized indication: central UJ/LJ molars
Detailed indication: UJ/LJ molars, central position, mostly late implant placement, but also immediate implant placement with good interradicular septum.
More precisely, the two different abutments (see top left) are only “abutment posts”, since the lower part of the abutment is already integrated into the implant shoulder.

SDS abutments are always cemented with a glass ionomer cement (GIC), e.g. Ketac™ Cem. The standard PEEK screw is used exclusively for fixation during cementation. For your prosthetic planning, please note that the crown must rest on the shoulder of the implant.

The exact treatment protocol is available in the SDS prosthetic manual and online in our media library at www.swissdentalsolutions.com.

**Parts and components SDS2.2**

**SDS2.2_AB-S+1.5**
- Post height: 4.9 mm
- Indication: Cemented single crown and bridge restorations with implant axis divergences.

**SDS2.2_AB-S+150**
- Post height: 7.0 mm
- Indication: Cemented single crown and bridge restorations with a larger distance to the antagonist.
CONSISTENTLY METAL-FREE
Metal-free implant placement with all-ceramic drills made of ATZ high-performance ceramics. All instruments that come into contact with the patient are ceramic. The rotating instruments made from ATZ ceramic are characterized by very long service lives with consistently sharp cutting surfaces. The clearly arranged surgical tray is structured according to bone types (IV-III-II-I), making it easier to comply with the different drilling protocols. The drills are laser-marked (type and diameter) and also color-coded, meaning that the drilling sequences are very easy to follow.
### SDS surgical tray

<table>
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<tr>
<th>Item Code</th>
<th>Description</th>
<th>Shaft labeling</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Rose head bur</td>
<td>SDSrb230 SDS 2.30</td>
</tr>
<tr>
<td>2</td>
<td>Pilot bur</td>
<td>SDSpd250 SDS PD 2.50</td>
</tr>
<tr>
<td>3</td>
<td>Countersink 5.00</td>
<td>SDScs500 SDS CS 5.00</td>
</tr>
<tr>
<td>4</td>
<td>Countersink 6.00</td>
<td>SDScs600 SDS CS 6.00</td>
</tr>
<tr>
<td>5</td>
<td>Form drill for DT 3.80</td>
<td>SDSsd300dt SDS 3.00</td>
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<td>6</td>
<td>Form drill for DT 4.60</td>
<td>SDSsd380dt SDS 3.80</td>
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<td>7</td>
<td>Countersink drill for type III 3.8</td>
<td>SDS2.2_CS-500 SDS CS6.00</td>
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<td>Countersink drill for type III 4.6</td>
<td>SDS2.2_CS-600 SDS CS6.00</td>
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<td>9</td>
<td>Countersink drill for type III 5.4</td>
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<td>10</td>
<td>Form drill for RD 3.70 and DT 3.80</td>
<td>SDSsd370rd SDS RD3.7</td>
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<td>11</td>
<td>Form drill for RD 4.40 and DT 4.60</td>
<td>SDSsd430rd SDS RD4.7</td>
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<td>Cortical bone drill for type I 3.8</td>
<td>SDSsd470c SDS C3.5</td>
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<td>Cortical bone drill for type I 4.6</td>
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<td>15</td>
<td>Cortical bone drill for type I 7.0</td>
<td>SDSsd670c SDS C6.7</td>
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<td>16</td>
<td>Depth gauge</td>
<td>SDSdg240 SDS dg 240</td>
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<td>17</td>
<td>Drill extension</td>
<td>SDSse001 SDSse001</td>
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<tr>
<td>18</td>
<td>Insertion tool SDS1.2 (screw included)</td>
<td>SDS1.2_ITscrew-ST</td>
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<td>19</td>
<td>Insertion tool SDS2.2 (screw included)</td>
<td>SDS2.2_ITscrew-ST</td>
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<td>20</td>
<td>Insertion tool SDS1.2 short (screw included)</td>
<td>SDS1.2_ITshort-screw-ST</td>
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<tr>
<td>21</td>
<td>Insertion tool SDS2.2 short (screw included)</td>
<td>SDS2.2_ITshort-screw-ST</td>
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<tr>
<td>22</td>
<td>ISO adapter</td>
<td>SDS_ITISO-ST</td>
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<tr>
<td>23</td>
<td>Torque ratchet 5-50 Nm</td>
<td>SDS_tr50nm50</td>
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<td>24</td>
<td>Insertion tool SDS32 (screw included)</td>
<td>SDS32_ITscrew-ST</td>
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<td>25</td>
<td>Insertion tool SDS32 short (screw included)</td>
<td>SDS32_ITshort-screw-ST</td>
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<td>26</td>
<td>ISO adapter</td>
<td>SDS_ITISO-ST</td>
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<tr>
<td>27</td>
<td>Screwdriver SDS1.2/2.2 SDS-ST</td>
<td>SDS_ITISO-ST</td>
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<tr>
<td>28</td>
<td>Screwdriver SDS1.2/2.2 short</td>
<td>SDS_ITISO-ST</td>
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<td>Drill extension</td>
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<tr>
<td>30</td>
<td>Surgical box</td>
<td>SDS00401</td>
</tr>
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</table>
Biological drilling protocol

TAILORED TO ALL BONE TYPES

Most conventional implant systems generate higher torques the harder the bone. This is absolutely contraindicated and counterproductive in biological terms as, according to Mammut’s Law, increased pressure on poorly perfused bone leads to resorption. The SDS drilling protocol takes biology and this important biological law into account by generating decreasing insertion torques as the bone gets harder and matching drills and drilling protocols to bone types. This conserves the bone and supports vascularization, which is crucial for the long-term preservation of any tissue.

DRILLING PROTOCOLS

We recommend having these drill sequences on hand during surgery to ensure that protocol is followed perfectly. The varied drilling protocols also make it possible to optimally adapt the implant bed preparation in atypical situations, depending on the bone density. The illustrations show the drilling sequences, starting with the rose bur and ending with the form drill projected onto the implant, so that you can see exactly which thread depth remains for stabilization purposes.

CORRECT USE

Drilling should be carried out intermittently and with constant external cooling with pre-cooled (5°C/41°F) sterile Ringer’s solution. External cooling prevents the bone tissue from overheating and facilitates bone chip removal and/or drainage. Preparation is performed under low pressure to the desired depth at a speed of 300–600 rpm.

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**Recommended rpm**

- **SDS 1.2**: 6000/min
- **SDS PD2.5**: 1000/min
- **SDS 3.0**: 300–600/min
- **SDS RD3.0**: 300–600/min

**Tiefenmarkierung**

- 6 mm
- 8 mm
- 11 mm
- 14 mm
- 17 mm
- 20 mm

---

**SDS1.2 Ø 3.3 mm – Type III bone**

**SDS1.2 Ø 3.3 mm – Type II bone**
**SDS1.2_3.8 Type IV and III bone**

- **SDS1.2_3.8-ba**
- **Recommended rpm**
  - SDS 2.30: 6000/min
  - SDS PD2.5: 1000/min
  - SDS 3.0: 300–600/min
  - SDS 5.00: 300–600/min
- **SDS1.2 Ø 3.8 mm – Type III bone**
- **SDS1.2 Ø 3.8 mm – Type IV bone**

**SDS1.2_3.8 Type II and I bone**

- **SDS1.2_3.8-ba**
- **Recommended rpm**
  - SDS 2.30: 6000/min
  - SDS PD2.5: 1000/min
  - SDS RD3.0: 300–600/min
  - SDS CS5.0: 300–600/min
- **SDS1.2 Ø 3.8 mm – Type I bone**
- **SDS1.2 Ø 3.8 mm – Type II bone**
SDS1.2_4.6 Type IV and III bone

Recommended rpm:
- SDS 2.30: 6000/min
- SDS PD2.5: 1000/min
- SDS 6.00: 300–600/min
- SDS 3.0: 300–600/min
- SDS 3.8: 300–600/min
- SDS CS6.0: 300–600/min

SDS1.2 Ø 4.6 mm – Type IV bone

SDS1.2_4.6 6 Type II and I bone

Recommended rpm:
- SDS 2.30: 10000/min
- SDS PD2.5: 300–600/min
- SDS RD3.0: 300–600/min
- SDS RD3.7: 300–600/min
- SDS CS6.0: 300–600/min
- SDS C3.5: 300–600/min
- SDS C4.3: 300–600/min

SDS1.2 Ø 4.6 mm – Type II bone
### SDS1.2_5.4 Type IV and III bone

<table>
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<th>Bone Type</th>
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<td>SDS PD2.5</td>
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<tr>
<td>SDS P5.0</td>
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<td>SDS P8.4</td>
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<td>SDS C3.5</td>
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<td>SDS C4.3</td>
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<td>SDS C5.1</td>
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### SDS1.2_5.4 Type II and I bone

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<td>SDS PD2.5</td>
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<td>Type II bone</td>
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<td>SDS C5.6+</td>
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<td>SDS C5.1</td>
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SDS2.2_3.8 Type IV and III bone

**Recommended rpm**

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<td>SDS 5.00</td>
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<td>SDS 3.0</td>
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<td>SDS CS5.0</td>
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SDS2.2 Ø 3.8 mm – Type IV bone

SDS2.2 Ø 3.8 mm – Type III bone

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SDS2.2_3.8 Type II and I bone

**Recommended rpm**

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<th>Drill Code</th>
<th>RPM</th>
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<td>SDS 2.30</td>
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<td>SDS PD2.5</td>
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<td>SDS RD3.0</td>
<td>300–600/min</td>
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<tr>
<td>SDS CS5.0</td>
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<tr>
<td>SDS C3.5</td>
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SDS2.2 Ø 3.8 mm – Type II bone

SDS2.2 Ø 3.8 mm – Type I bone
**SDS2.2_4.6 Type IV and III bone**

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<td>SDS PD2.5 1000/min</td>
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<tr>
<td>IV</td>
<td>Bone</td>
<td>SDS 6.00 300–600/min</td>
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<tr>
<td>IV</td>
<td>Gingiva</td>
<td>SDS 3.0 300–600/min</td>
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<td>IV</td>
<td>Gingiva</td>
<td>SDS 3.8 300–600/min</td>
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<tr>
<td>II</td>
<td>Bone</td>
<td>SDS CS6.0 300–600/min</td>
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**SDS2.2_4.6 Type II and I bone**

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<th>Recommended rpm</th>
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<td>SDS 2.30 6000/min</td>
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<td>II</td>
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<td>Bone</td>
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<td>I</td>
<td>Gingiva</td>
<td>SDS C3.5 300–600/min</td>
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<td>I</td>
<td>Gingiva</td>
<td>SDS C4.3 300–600/min</td>
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<tr>
<td>I</td>
<td>Bone</td>
<td>SDS CS6.0 300–600/min</td>
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SDS2.2_5.4 Type IV and III bone

Recommended rpm
- SDS 2.30: 6000/min
- SDS PD2.5: 1000/min
- SDS 6.00: 300–600/min
- SDS 3.0: 300–600/min
- SDS 3.8: 300–600/min
- SDS 4.6: 300–600/min
- SDS CS6.0+: 300–600/min

SDS2.2 Ø 5.4 mm – Type IV bone

SDS2.2_5.4 Type II and I bone

Recommended rpm
- SDS 2.30: 6000/min
- SDS RD2.5: 300–600/min
- SDS RD3.0: 300–600/min
- SDS RD3.7: 300–600/min
- SDS RD4.7: 300–600/min
- SDS C3.5: 300–600/min
- SDS C4.3: 300–600/min
- SDS C5.1: 300–600/min

SDS2.2 Ø 5.4 mm – Type II bone

SDS2.2 Ø 5.4 mm – Type I bone
SDS1.2
• S suited for all bone types, immediate and late implant placement
• Indicated for implants connected by bridge or splinting, or for implant-supported partial or full dentures
• SDS1.2 implants are not suited for indications where there is a risk of excessive bending moments (bridges with more than one pontic, crown/bridge restoration with cantilever). In such cases, more implants have to be inserted to avoid such situations.
• SDS1.2 implants are not approved for bone-level positioning
• SDS1.2_3.3 mm Ø implants are not approved for upper central incisors, canines, premolars and molars and for bridge restorations
• SDS1.2_3.8 mm Ø implants are not approved for upper central incisors, canines, premolars and molars and for bridge restorations
• Connection of natural tooth with implant not approved
• Less than four implants with Locato†™ restoration not approved

SDS2.2
• S suited for all bone types, immediate and late implant placement
• Indicated for implants connected by bridge or splinting
• SDS2.2_4.6, 5.4 mm Ø implants are approved as single-tooth implants for front teeth, canines, premolars and molars and for bridge restorations
• SDS2.2 implants must be placed at tissue level; the shoulder is always the prosthetic plateau; the abutment must be cemented (glass ionomer cement: Ketac™Cem) + additionally screw-retained additionally.
• Fixed crown/bridge restoration (glass ionomer cement: Ketac™Cem)
• Spirit multiple implants

SDS1.2
• S suited for all bone types, immediate and late implant placement
• Indicated for implants connected by bridge or splinting, or for implant-supported partial or full dentures
• SDS1.2 implants are not suited for indications where there is a risk of excessive bending moments (bridges with more than one pontic, crown/bridge restoration with cantilever). In such cases, more implants have to be inserted to avoid such situations.
• SDS1.2 implants are not approved for bone-level positioning
• SDS1.2_3.3 mm Ø implants are not approved for upper central incisors, canines, premolars and molars and for bridge restorations
• SDS1.2_3.8 mm Ø implants are not approved for upper central incisors, canines, premolars and molars and for bridge restorations
• Connection of natural tooth with implant not approved
• Less than four implants with Locato†™ restoration not approved

SDS2.2
• S suited for all bone types, immediate and late implant placement
• Indicated for implants connected by bridge or splinting
• SDS2.2_4.6, 5.4 mm Ø implants are approved as single-tooth implants for front teeth, canines, premolars and molars and for bridge restorations
• SDS2.2 implants must be placed at tissue level; the shoulder is always the prosthetic plateau; the abutment must be cemented (glass ionomer cement: Ketac™Cem) + additionally screw-retained additionally.
• Fixed crown/bridge restoration (glass ionomer cement: Ketac™Cem)
• Spirit multiple implants

CONTRAINDICATIONS
SDS1.2
• SDS1.2 implants are not suited for indications where there is a risk of excessive bending moments (bridges with more than one pontic, crown/bridge restoration with cantilever). In such cases, more implants have to be inserted to avoid such situations.
• SDS1.2 implants are not approved for bone-level positioning
• SDS1.2_3.3 mm Ø implants are not approved for upper central incisors, canines, premolars and molars
• SDS1.2 implants are not approved for bridge restorations
• SDS1.2_3.8 mm Ø implants are not approved for upper central incisors, canines, premolars and molars
• Implant diameter smaller than 4.6 mm Ø for central upper incisors, canines, molars and/or bridge restorations
• Connection of natural tooth with implant not approved
• Less than four implants with Locato†™ restoration not approved

SDS2.2
• SDS2.2 implants are not suited for indications where there is a risk of excessive bending moments (bridges with more than one pontic, crown/bridge restoration with cantilever). In such cases, more implants have to be inserted to avoid such situations.
• SDS2.2 implants are not approved for bone-level positioning
• SDS2.2_3.8 mm Ø implants are not approved as single implants in the molar or canine region
• SDS2.2_3.8 mm Ø implant not approved for bridge restoration
• Implant diameter smaller than 4.6 mm Ø for central upper incisors, canines, molars and/or bridge restorations
• Not approved for implant-supported partial or full dentures
• Connection of natural tooth with implant not approved

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* Not suitable for the esthetic zone. as SDS2.2 implants can only be ground/individualized to a limited extent (or brackets) * Approved but mostly second choice or diameter too large | red = recommended diameter
## SDS implant indications – special shapes

**OVAL**

SDS1.2 and SDS2.2 with a diameter of 4.6
- SDS2.2-ov: UJ/LJ molars, central position, mostly late implant placement
- SDS1.2-ov: Premolar region, mostly immediate implant placement

SDS1.2 and SDS2.2 with a diameter of 5.4
- UJ/LJ molars, central position, mostly late implant placement

*Not suitable for the esthetic zone, as SDS2.2 implants can only be ground/individualized to a limited extent (in brackets) = approved, but mostly second choice or diameter too large | red = recommended diameter

<table>
<thead>
<tr>
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*SDS2.2-ov: UJ/LJ molars, central position, mostly late implant placement*