Daniel Swarovski, an entrepreneur of extraordinary vision, was always ahead of his time with his ideas and ambitions, his machines, and his cutting technologies. He was also meticulous in his documentation. The 125th item in his workbook was a wide baguette cut for crystal of such classic elegance that we chose to reinterpret it in Swarovski Zirconia to serve as a motif for Swarovski’s 125th anniversary.

To celebrate this occasion we also elevated the Swarovski Zirconia classic cushion cut to a higher level of brilliance with 125 perfect facets. The cut embodies one facet for every year of the company’s history.

These two cuts allow us to take the spirit of the past to shape the future. Daniel Swarovski’s archive allows us to stay close to our core values, inspiring exciting new cuts and colors to enhance our ongoing designer cooperations. Our founder also believed in always improving what is already good and he instilled in us the belief that we are shaped by our memories, our special moments, and our choices to take the future into our own hands. The Anniversary Cuts are a direct link between our founder and today’s evolving family business, now in the hands of the fifth generation who are committed to passing it on to the next.

Daniel’s #125

Celebration Cut
What Is Zirconia?

Zirconia is an artificially produced crystalline imitation of a diamond made of Zirconiumoxide, which is very hard and is characterized by a light refraction that is close to that of a diamond. Zirconia can withstand very high temperatures (2750°C) and can therefore be set like a diamond.

Zirconia is also called Cubic Zirconia (CZ) and it is considered the best diamond imitation because it has a crystalline structure like diamonds.

Zirconia can be applied to jewelry without the need for adhesives, making it extremely durable and ideal for everyday wear.

<table>
<thead>
<tr>
<th>Material</th>
<th>Zirconia</th>
<th>Diamond</th>
<th>White Topaz</th>
<th>Crystal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refractive index</td>
<td>2.2</td>
<td>2.42</td>
<td>1.62</td>
<td>1.52 - 1.58</td>
</tr>
<tr>
<td>Dispersion (CF)</td>
<td>0.065</td>
<td>0.044</td>
<td>0.014</td>
<td>0.009 - 0.098</td>
</tr>
<tr>
<td>Hardness (Mohs)</td>
<td>8.5</td>
<td>10.0</td>
<td>8.0</td>
<td>5.0 - 6.0</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>5.6</td>
<td>3.53</td>
<td>3.54</td>
<td>2.7 - 3.3</td>
</tr>
</tbody>
</table>

Comparative Analysis

To demonstrate the supreme optical quality of zirconia, the following table compares our created stones with their natural counterparts.
Swarovski Zirconia
Is a Conscious Choice

Throughout its history, Swarovski has endeavored to remain true to its founder Daniel Swarovski’s vision of a responsible company that not only has its employees’ wellbeing at heart but also that of the environment and society as a whole. This vision drives the company’s dedication to conscious luxury: producing beautiful products using responsible methods that drive positive change.

Swarovski Zirconia is the most responsible zirconia on the market. It is crafted according to industry-leading environmental, safety and labor standards. Our own best-in-class production centers are certified by the Responsible Jewellery Council. They offer a safe, fair and comfortable working environment and innovative manufacturing processes ensure the efficient consumption of natural resources.

We have a transparent and tightly managed supply chain, which makes each stone traceable back to its very origin. The laser engraving on every single Swarovski Zirconia testifies its secure provenance.

Strict standards on product safety, which are based on the REACH regulation programme of the European Union, guarantee that Swarovski Zirconia is free from harmful substances.

Up- and downstream of the value chain we aim to inspire our suppliers and customers to find solutions for the most compelling sustainability issues together.

By choosing Swarovski Zirconia you trust in a product that respects people and the planet.
Swarovski Zirconia

Vibrance Family

We aspire to innovate in a way that seamlessly blends past, present, and future. The Vibrance color family is a first of its kind color development in Swarovski Zirconia, a unique combination of two colors in a single stone. Swarovski’s patented TCF™ coloring process results in pure, consistent shades from the smallest to the largest stone. Each stone of the Vibrance Family produces a fascinating color effect akin to looking through a kaleidoscope. Whichever way you look at it, every way you metaphorically ‘turn the kaleidoscope’ it creates fresh new perspectives. Above all, these constantly changing patterns and hues illustrate how each person and each life is unique, and every special moment deserves to be celebrated. It is both a jewel of a moment and a moment for memorable jewelry that will be admired and deeply treasured for years to come.

The Bizarre Square Cut is a fresh new take on the classic Square Step propelling it into the modern age. No longer just a classic engagement cut, this is a beautiful shape with a youthful spirit that will excite a younger target audience.

Star light, star bright - the Pentagon cut allows that star to shine in a brilliant new light. A cut made for dreaming, which will inspire the creation of collections that focus on life’s special moments. Lose yourself in its star-shaped facets etched on its table, each designed to highlight the fascinating new Vibrance play of colors.

The Cushion Cut, an enduring favorite for centuries is a classic diamond cut that comes alive in our Swarovski Zirconia. Now revamped, it is bold and modern while still retaining the original cushion’s unique elegance. Its rounded shape and precise facets show the Vibrance color combinations in an ideal light.
Technical Details
Innovations 2020

DANIEL’S #125
The 125th item in Daniel Swarovski’s original workbook is a wide baguette cut of sparkling facets and extraordinary elegance. Daniel’s #125 in Swarovski Zirconia takes this classic shape and transforms it into a stone perfect for modern jewelry.

Available size ranges: 5x3 / 6x4 / 7x5 mm

CELEBRATION CUT
The Celebration Cut can be set like any regular cushion cut and is predestined to bring sparkle to anyone who wears it. A fabulous classic cut that is nothing short of an explosion of brilliance.

Available size ranges: 5x5 / 6x6 / 7x7 mm

VIBRANCE FAMILY
Like the Kaleidoscope of Life, the brand new Swarovski Zirconia Vibrance Family offers impressions and colors you never thought possible. Castable and brilliantly uniform TCF™ colors that look great in prong and bezel settings.

Available size ranges: 5 / 6 / 7 mm

VIBRANCE & TCF™
Vibrance elevates the classic TCF™ color range to an entirely new level. Every stone is a harmonious blend of two shades to awaken emotions and inspire countless possibilities for applications and designs.

Available size ranges: 5 / 6 / 7 mm

THERMAL COLOR FUSION™
Swarovski Zirconia comes in an exciting array of colors produced by using Swarovski’s own TCF™ (Thermal Color Fusion) process. Each shade is consistent and highly saturated, regardless of the size and shape of the stone.

TOLERANCES
The maximum tolerance level for round and fancy-shaped Swarovski Zirconia stones, in diameter, height, and girdle thickness is just +/- 0.1mm. This guarantees fast, simple setting, eliminates additional sorting and minimizes the risk of stone rejection during the process.
**Handling of TCF™ Treated Zirconia**

**ZIRCONIA TCF™ – Color**

- **Vibrant Red – Orange Yellow**
- **Vibrant Purple – Aqua**
- **Vibrant Spring Green – White**

- **Casting-in-place** **
  - 14 Kt Gold and 925 Silver**
- **Casting temperature 1030°C**
- **Wax burnout: 2 hours at 700°C**

- **Soldering up (AG) & Electroplating**
  - Soldering agent: Silver soft agent (925/000)
  - Soldering flux: Floron
  - Soldering temperature ~ 700°C

- **Blackened Silver 1/3 K2CO3, 1/3 Sulfuric acid pickle, 20 Vol % H2SO4, 30 minutes at 60°C rinsed with H2O**

- **Gold coloring**
  - Color bath mix of 17.3% NaCl, 23% KNO3, 22.6% H2O,
  - 25.6% HCl: Boiled in solution for 3 min, rinsed with H2O

- **Electroplating; for cleaning galvanic process, please see **Alkaline Cleaning** recommendations below**
  - pH value of electro cleaning bath max. pH 12, temp. of bath 45°C constant
  - Exposure time in bath max. 2 minutes

- **Sulfuric acid pickle, 20 Vol % H2SO4, 30 minutes at 60°C rinsed with H2O**

- **Vitrex pickle, 12.5 Vol % Natriumbisulfat, 10 minutes at 70°C rinsed with H2O**

- **Alkaline Cleaning**
  - Max. pH 12, at max. 50°C,
  - Max. exposure time 15 minutes
  - Total soaking time in all steps max. 15 minutes

- **Polishing or extreme scratching of the pavilion might cause a change in the color appearance.**
- **parameters MUST be adhered to**

If further information is needed please contact your local sales or technical support representative.

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**Product Overview**

**Round Rosebush**

<table>
<thead>
<tr>
<th>Size (mm)</th>
<th>Packaging (gram/100pcs)</th>
<th>Approx. Weight (grams/100 pcs)</th>
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<tr>
<td>5.00</td>
<td>60</td>
<td>25.977</td>
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<td>7.00</td>
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**Brassive Square**

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**Cushion Princess**

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**Daniel’s #125**

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**Celebration Cut**

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*Polishing or extreme scratching of the pavilion might cause a change in the color appearance.*

*parameters MUST be adhered to*