SWAROVSKI

APPLICATION A	MANUAL 2016	

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Swarovski is the premium brand for the finest crystal embellishments since 1895. It is recognized for its innovative excellence and its collaborations with top-class designers and brands in the fashion, jewelry, accessories, interior design, and lighting industries across the globe.

Available in myriad colors, effects, shapes, and sizes, crystals from Swarovski offer designers a fabulous palette of inspiration, and are produced according to the innovative, lead-free* Advanced Crystal standard. Born out of a passion for detail and high-precision cutting, these precious ingredients impart refined glamour to everything they embellish. They can be recognized by the 'Crystals from Swarovski' seal, which serves as a certificate of authenticity that identifies products made with genuine Swarovski crystals.

A family-owned company for more than 100 years, with values rooted in integrity, respect, and excellence, Swarovski is noted as much for its ethics in business as for its contemporary artistry and innovative flair.

SWAROVSKI.COM/PROFESSIONAL

^{*} Crystal glass and all other materials containing 0.009% lead or less.









Wherever you are, whatever you're looking for, search over 15,000 loose elements and 200,000 forward-integrated elements with Swarovski's inspirational new Crystal Collection App. Online or offline, stay app-to-date with the latest innovations and find popular classics - it's easy to install, easy to browse, easy to use.

EXCELLENCE, THROUGH INNOVATION AND ORIGIN



X-CUT

Advanced optical measurement and high-precision manufacturing deliver premium cuts characterized by unmatched brilliance.



HOTFIX GLUE

The variable temperatures at which Hotfix glue can be activated enable the application of crystals on a broad range of textiles.



PLATINUM PRO

With its new advanced foiling technique, Swarovski has set a new standard in the lifespan of crystals.



CRYSTALS - MADE IN AUSTRIA

The combination of innovation with sustainability and respect for individual wellbeing means that quality is always assured.

PREMIUM, BY SERVICE AND DESIGN



DESIGN SERVICE

Throughout its global network of Design Centers, Swarovski offers exceptional service provided by the industry's best creative talent.



GLOBAL SERVICE

Swarovski's Global Service Network provides customers with dedicated personal assistance on a local level.



APPLICATION SERVICE

A comprehensive range of application services means customers benefit from the extensive experience of leading international experts, as well as internal specialists.



DESIGNER EDITIONS

Creative collaborations with top designers result in exclusive cuts and unique designs for Swarovski crystal.

COMPLIANCE, WITH INTEGRITY



ADVANCED CRYSTAL

Swarovski's patented lead-free* formula has changed the DNA of crystal while still offering the same sparkle, dependability, and variety for which Swarovski is famous.

*Crystal glass and all other materials containing 0.009 % lead or less.



CLEAR

Regular legal monitoring of chemical requirements and reasonable testing provide customers with the comfort of trust in Swarovski's products.



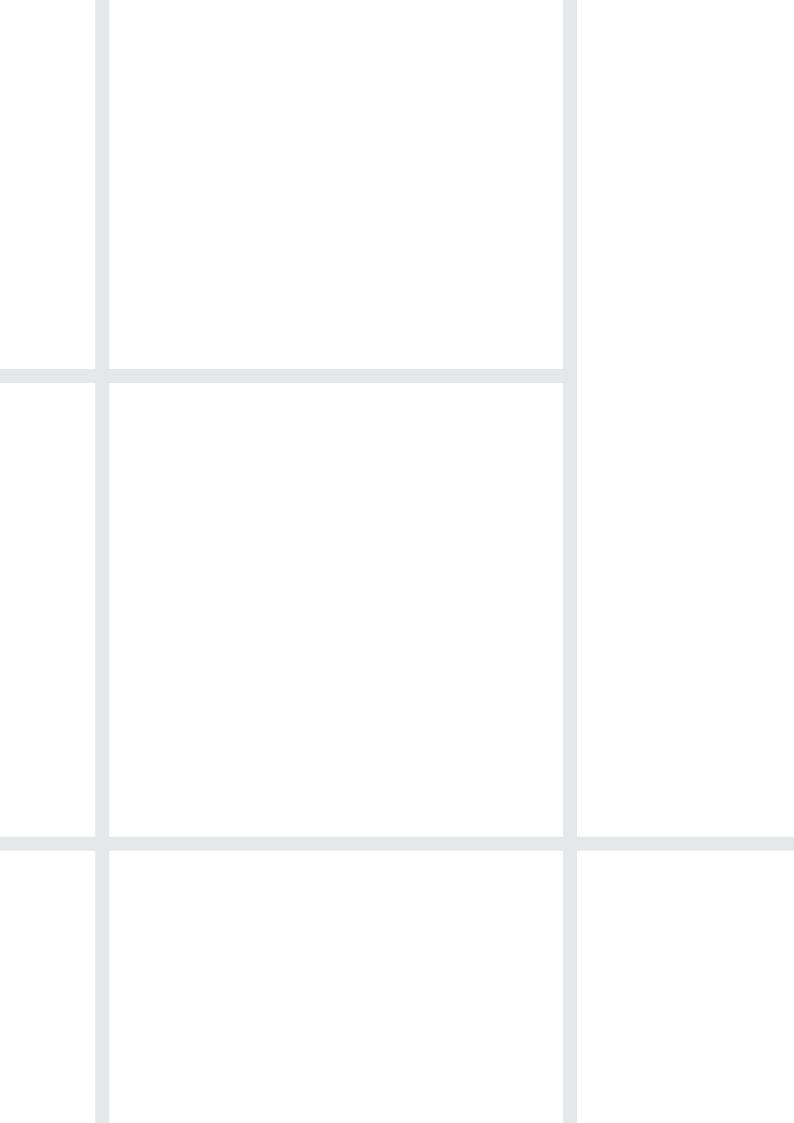
OEKO-TEX

Oeko-Tex[®] Standard 100 Class II (direct contact with skin) certification creates confidence in chemical safety of textile applications.



COMPLIANCE SERVICE

Assessments regarding substance limitations as well as compliance information and advice to support customers in complying with relevant laws, regulations, and voluntary standards.



SWAROVSKI.COM/PROFESSIONAL

GENERAL INFORMATION

Swarovski offers a comprehensive range of services, tailored to customers' requirements, for the application of Swarovski products.

APPLICATION MANUAL

This Application Manual offers extensive information on the various Application Services provided by Swarovski. Thanks to their outstanding quality, and with the help of specially developed application techniques, Swarovski products can be processed easily and quickly to produce a high-quality finished product. The processes involved are described in this manual on a step-by-step basis, with photos and illustrations.

Each application method contains detailed information on the following areas:

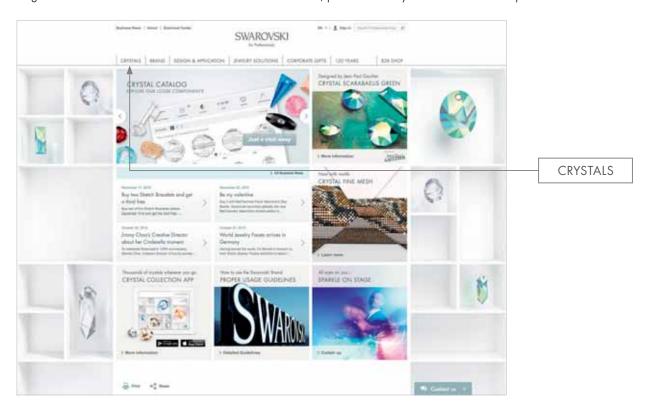
	<u>-</u>
Product Overview	Swarovski products that are suitable for the application technique in question
Machines, Tools, and Aids	List of machines, tools, and aids necessary for application
Suppliers	Selection of suppliers that sell these machines, tools, and aids
Application	Detailed description of the entire application process and the product-specific procedure. Furthermore, the Hotfix Selector outlines extensive application parameters for suitable product and carrier material combinations
Useful Information	Advice and tips on working with Swarovski products
Quick Assistance	A checklist of typical application problems, along with possible causes and recommendations on avoiding them (in each chapter these are marked with a ?!)

Extensive care instructions and further information on laws, regulations, norms, and standards are featured at the end of the manual.

APPLICATION ONLINE: SWAROVSKI.COM/PROFESSIONAL

All the information contained in this manual is regularly updated on the Swarovski products business website (SWAROVSKI.COM/PROFESSIONAL). In addition, application techniques are demonstrated through animations and videos. The site is an excellent way to find out about Swarovski's application services and application techniques.

To gain access to the restricted section of the business website, please contact your local Swarovski representative.



APPLICATION SERVICES

Swarovski offers a comprehensive range of services, tailored to your requirements, for applying Swarovski products. In doing so, the company aims to meet the needs of each industry, and to jointly offer flexible and integrated solutions.

- Technical enquiry service
- Compliance service
- Technical customer support field services
- Application partner network

Technical enquiry service

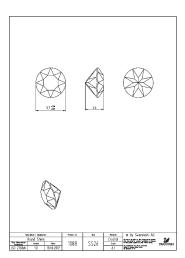
Available worldwide, the technical enquiry service can help you in the following areas:

- Product information
- Technical drawing
- Care instructions
- Information on industry standards
- Individual application tests based on customer samples
- Information on machines, tools, and aids

Compliance service

The worldwide available compliance service can support you in the following areas:

- Certificates
- Information on laws and regulations
- Compliance information of Swarovski crystals
- Compliance statement to customer-specific requirements







For further information, please contact your local Swarovski office.

Technical customer support - field services

Swarovski imparts its crystal application expertise through customized Crystal Application Workshops, Crystal Application Consultancy, Troubleshooting, and Technical Assessments. These can take place either on customers' premises or at Swarovski locations. The focus is always on customers' individual needs, the efficient use of Swarovski products, and on the quality of the crystal application.

Our services have been created to take advantage of our comprehensive crystal application expertise in the following areas: mastery of the relevant techniques, technical knowledge of Swarovski products, process-engineering competencies, and our experience of crystal application equipment, together with our product manufacturing knowledge of various industries.







Service results (dependent on the particular individual service package):

PREVENTION OF INCREASED DEVELOPMENT COSTS THROUGH TECHNICAL INPUT IN:

- The correct choice of Swarovski products
- The correct technical design
- The correct application technique
- The correct integration of an application process into the entire process landscape
- Application process set-up

PREVENTION OF COST COMPLAINTS THROUGH TECHNICAL INPUT IN:

- The correct positioning and arrangement of Swarovski products
- Learning how to check the quality of crystal applications
- Suitability of the customer's equipment, tools, and aids

PREVENTION OF INCREASED STAFF DEVELOPMENT COSTS THROUGH:

- Staff training in appropriate application techniques
- Building your technical knowledge base, thereby enabling you to be self-sufficient

Application partner network

As a company with a global sales network and deep understanding of the market, Swarovski has comprehensive knowledge of various application companies and their services from around the world.

Based on this knowledge, Swarovski has developed a global application partner network. These partners offer a wide range of technical and product-related services, as well as tailored production solutions. In order to qualify and to get access to the application partner network, certain criteria with regard to application techniques, know-how as well as product assortment need to be fulfilled by the application partners.

Application partners can assist you with a variety of application techniques, such as gluing, Hotfix application, sewing, embroidery, and mechanical application. In addition, many partners can carry out technically complex solutions, such as Flat Back Leather and the automated, mechanical application of Rivets. The services offered by our partners range from product and design consultancy, to prototyping and carrying out production, and make up a key component of our customer focus.

Should you require a professional partner to assist you in applying items such as Flat Backs onto interior, Transfer Motifs onto T-shirts, Rivets onto belts, or Plastic Trimmings onto jeans, the "Application Partner Platform" or your local Swarovski office can offer guidance.

Application Partner Platform (APP)

The Application Partner Platform enables you to find the right application partner swiftly and easily, wherever in the world production may be taking place. Through a tailored "search function", you can send out a specific, detailed request (e.g. searching for a specific country, an application technique, or products) to select partners around the world.

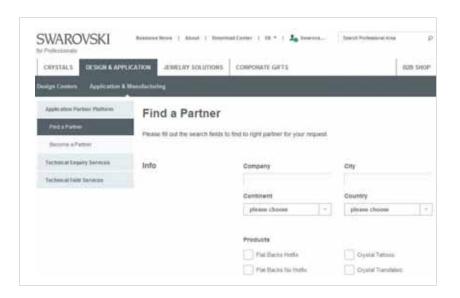
The platform is made up of two core areas - "Find a Partner" and "Become a Partner":

Find a Partner

Using the search function, this area enables you to locate the best application partner for your application work. You are immediately provided with a list of application partners, which you can download and save. If you use the search function for a specific enquiry regarding an application service, you receive detailed information from the application partners contacted.

■ Become a Partner

If you are interested in becoming an application partner yourself, the "Become a Partner" section contains key information on the requirements and an application form to complete. Your local Swarovski office will then contact you as soon as possible.



Access to the Application Partner Platform:

Part of the "Application Partner Platform" is located in the restricted area of the business website SWAROVSKI.COM/PROFESSIONAL. Under "Design & Application" → "Application & Manufacturing" you will find access to the Application Partner Platform.

For access to the restricted area of the business website and for further information, please contact your local Swarovski office or register online on the business website.

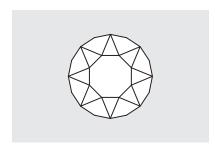
GENERAL PRODUCT INFORMATION

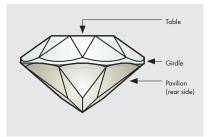
This list offers an overview of Swarovski products that are suitable for the application methods described. Product categories/descriptions are based on the 2014 Collection.

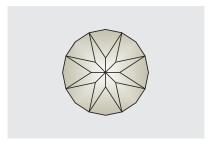
Round Stones	Round Stones are loose crystal elements. Most of them are pointed on the reverse side, making them easy to apply in either metal claw settings or pre-set cavities in die-cast metal alloys. The assortment features a wide variety of different cuts, the most innovative one is the XIRIUS Chaton.
Fancy Stones & Settings	Fancy Stones are offered in numerous shapes ranging from classical gemstone-inspired cuts to progressive trend cuts. They come in a huge assortment of different sizes and colors. Showing either a faceted or flat reverse side, Fancy Stones can be glued into pre-cast cavities or used in metal settings. Their precision-cut facets ensure the highest brilliance and endow design ideas with a unique sparkle.
Beads	Beads offer the highest standard available on the market. The high-quality precision cutting and the clear through-hole achieve high brilliance and clarity. Rounded hole edges reduce the wear on thread and increase the durability of designs. The assortment is divided into classic, romantic, and progressive shape characteristics. They are available in the latest fashion colors, effects, and cuts.
BeCharmed & Pavé	The BeCharmed assortment, from Beads, Crystal Pearls, Pavé, and Rondelles, to Stoppers and Pavé Balls in a brilliant array of colors and effects, offers unlimited combination possibilities. All products of this unique line feature a high-quality stainless steel part with Swarovski branding and a 4.5 mm-diameter hole, which is the standard size for existing charm concepts, making BeCharmed pieces ideal collectibles.
Crystal Pearls	Crystal Pearls are perfect replicas of genuine pearls. They are made of a unique crystal core covered with an innovative pearl coating, which features a flawless, silky smooth, rounded surface. They are available in a variety of shapes, sizes, and colors and are delivered loosely threaded or, if desired, also knotted.
Pendants	Pendants have timeless elegance and are available in a large range of classical and avant-garde cuts and shapes, as well as in many colors and effects. Pendants offer a whole range of design possibilities for different segments thanks to their easy application, with the hole on top requiring only a jump ring/pinch bail with a chain or cord.
Flat Backs No Hotfix	Flat Backs No Hotfix are loose crystal elements backed with platinum foiling for extra brilliance and protection. These Flat Backs are easy to apply to a variety of carrier materials using standard one- or two-component glues. They are available in a multitude of sizes, colors, shapes, and cuts.
Flat Backs Hotfix	Flat Backs Hotfix are loose crystal elements with a flat reverse side that has been pre-coated with a heat-sensitive glue. These Flat Backs can be easily applied to a large range of textile carrier materials using heat to produce a durable and long-lasting crystal effect. Flat Backs Hotfix are available in a multitude of colors, shapes, and cuts.
Sew-on Articles	Sew-on Articles are loose crystals that can be easily sewn (either by hand, or with a standard domestic or industrial embroidery sewing machine) onto any type of textile or accessory. Sew-on Articles come in two- or three-hole varieties, including round, oval, and triangle holes for use in a wide range of decorative applications for fine embroidery or even jewelry. Lochrosen are crystals with just one hole. Sew-on Articles have rounded edges on the hole entry and exit areas to guarantee thread protection.
Self-adhesive Elements	Self-adhesive Elements such as Crystal-it, Crystal Fabric-it, Crystaltex-it Chaton or Crystal Rocks-it are eye-catching and innovative products that come ready-to-apply. They are pressure-sensitive and self-adhesive. When applied to paper and solid surfaces, they can create elegant, romantic, or sporty designs.
Transfers	Transfers are ideal for Hotfix application on all kinds of textiles. They are available in a large range of motifs and numbers of rows, which are made up of different articles from the Flat Back Hotfix assortment. Featuring designs from the in-house design team, they can comprise XIRIUS and XILION Roses, or Creation Stones, as well as Metallics and Cabochons.
Synthetics Hotfix	These versatile products open up a multitude of creative design possibilities through their numerous application techniques. They combine elegant crystals from Swarovski that can be applied using Hotfix technology with synthetic carrier materials. They are ideal for use in the textile, interior design, jewelry, and accessories segments.
Plastic Trimmings	Plastic Trimmings are plastic carrier materials with integrated crystals. These multi-functional products can either be hand- or machine-sewn or glued onto various surfaces. The range of bandings not only offers a color selection of chatons, but also a variety of casing colors.
Buttons, Fasteners & Zippers	Crystal Buttons can be used in exactly the same way as standard buttons. The assortment of available buttons ranges from those for shirts, blouses, jackets, and coats, to buttons for denim and accessories. They are suitable for hand and mechanical application. Zippers from our assortment are unique because the crystals are integrated into the zipper teeth, allowing them to be used in the same way as standard zippers.

Metal Trimmings Metal Trimmings are forward-integrated metal products. They can be sewn by hand or machine at mechanically applied onto different fabrics or other materials. Metal Trimmings are bestsellers and the textile, shoe, and accessories segments because their wide range of application possibilities ethat they can be used in a multitude of different ways.				
Crystal Mesh is a flexible metal mesh carrier with integrated loose crystals. The product is available in a wide range of colors and casings, either as a Hotfix version, which can be applied using heat, or as a No Hotfix version that can be hand- or machine-sewn.				
Cupchains & Findings	These products are metal chains and findings that can integrate either Round or Fancy Stones and Beads into any creative design. They can be divided into seven sub-categories: Single Stone Settings, Cupchains and Brass Components, Multi Stone Settings, Channels, Metal Buttons, Rondelles, and Linked Findings. Each of these groupings is available in a wide variety of shapes, sizes, colors, and platings.			

Crystal specifications







Front view Side view Rear view (Pavilion)

Foiling

Foiling is the process of mirror coating the reverse side of the crystals.



Silver Foiling (A)

A silver mirror finish for XIRIUS and XILION Hotfix articles only.



Platinum Pro Foiling (F)

A silver mirror finish that is coated with a platinum colored protective layer of highest quality. The Platinum Pro Foiling is not only resistant to environmental damage from chlorine, salt water, and perfume – it can also withstand processes such as soldering and electroplating, giving it unprecedented durability (e.g. art. 4120).



Aluminum Foiling (M)

An aluminum mirror finish is applied using a vacuum coating process (e.g. art. 2855 Flat Back HF).



Protective Layer (P) for Beads and Pendants

Protective layer is a transparent lacquer system that is applied over the effects. This lacquer is designed to protect the effects from scratches, fingerprints, and other damage and also helps to prevent moisture that can lead to corrosion (e.g. from perspiration) penetrating into the effect layer when jewelry is designed to incorporate Crystal Stones that are not set in casings/settings.



Unfoiled (U)

Effects

Vacuum Coating Effects

Vacuum coating processes on the surface of the crystal produce either a special surface or a translucent effect, according to the application methods used.

Please find below a list of all Swarovski effects followed by an explanation of the special vacuum coating processes.

Surface Effects

(Vacuum coating on the surface of the crystal)



Effect Code	Name
AB	Aurore Boreale
ANTP	Antique Pink
API	Astral Pink
BLSH	Blue Shade
BRSH	Bronze Shade
CAL	Comet Argent Light
COP	Copper
DOR	Dorado
GSHA	Golden Shadow
HEM	Hematite (only on Jet)
IRIG	Iridescent Green
LISH	Lilac Shadow
LTCH	Light Chrome
LUMG	Luminous Green
METSH	Metallic Sunshine
METBL	Metallic Blue
MLGLD	Metallic Light Gold
MOL	Moonlight
NUT	Nut (only on Jet)
PARSH	Paradise Shine
REDM	Red Magma
ROGL	Rose Gold
SAT	Satin
SCGR	Scarabaeus Green designed by JPG
SSHA	Silver Shade

Translucent Effects

TRA

(Vacuum coating on the reverse side of the crystal, effect shines through the transparent crystal)

Transmission



Effect Code	Name
BBL	Bermuda Blue
HEL	Heliotrope
MBL	Meridian Blue
SINI	Silver Night
TAB	Tabac
VL	Vitrail Light
VM	Vitrail Medium
VOL	Volcano

Patina Effects

(Partial coating of the correspondingly modified effects)

Effect Code	Name
BLAPA	Black Patina
GOLPA	Gold Patina
ROSPA	Rose Patina
SILPA	Silver Patina
WHIPA	White Patina

Lacquer^{PRO} Effects

A premium opaque varnish which is applied to the reverse side of the crystal instead of foiling, resulting in an opalescent appearance.

Effect Code	Name
L104	Powder Blue
L102	Powder Green
L105	Powder Grey
L103	Powder Rose
L101	Powder Yellow

Variations on Surface Effects

2x



Both sides of the stone are treated with an effect (e.g. art. 5000AB 2).

В



Effects on three sides of a cube shape (e.g. art. 5601 AB B).

The effect is used in reverse. A surface effect is used like a translucent effect (e.g. art. 2420 NoHF SSHA V - Silver Shade on the reverse side).



Only a part of the stone is treated with an effect (e.g. art. 4869 HEL Z).

FC (Full Coated)

Improved technology allows for the perfectly homogeneous, all-round application of highintensity metallic effects in the Bead assortment (art. 5000).

CAL'V'SI & CAL'VZ'SI

The effect CAL (Comet Argent Light) is also used as a mirror coating on the reverse side of the crystal instead of standard foilings (A, F, ...) in special cases (e.g. art. 2035).

/G

Article with partly (PF) or fully frosted (FF) surface (e.g. art. 2611/G)

PA (Patina)

Innovative technology allows for the partly coated application of adapted effects. Its historical edge and "used" look give it a certain timelessness, without losing its crystalline appearance (e.g. art. 2034).

Special Surface Effects

Swarovski has been able to achieve various special surface effects by using special chemical and mechanical processes on the surface of the crystals.





Effect Code Name MAT Matt Finish COS Cosmojet

The Matt Finish effect is achieved by performing a chemical matting process on the entire surface of the crystal. Small variations in the size of the articles may occur as a result of this chemical process.

Using a special process, the outer facets of Flat Back Roses can be blackened. The Cosmojet effect is only possible for the color Crystal (001).

Colors



Crystal 001

234

Liaht Silk

White Opal



Violet 371

265

283

Light Amethyst 212

Smoky Mauve

Provence Lavender

Light Sapphire





Palace Green Opal



Olivine

228

Khaki

Greige



Effects

Crystal Silver Shade 001 SSHA



Crystal Moonlight 001 MOL

001 LUMG

001 GSHA



Crystal Aurore Boreale

Crystal Luminous Green*

Crystal Golden Shadow

<u>Crystal Metallic Sunshine*</u> 001 METSH

Crystal Rose Gold*



Crystal Comet Argent Light* 001 CAL

Crystal Light Chrome*



Crystal Silver Night** 001 SINI

Crystal Satin*

001 SAT



let Nut 280 NUT



Crystal Lacquer^{PRO} Effects

Crystal Powder Yellow* 001 L101

Crystal Powder Rose*

Crystal Powder Blue*

Crystal Powder Green*

001 L103

001 L104

001 L102



Rose Water Opal



Aquamarine 202

Liaht Azore



Light Grey Opal



Light Colorado Topaz













001 PARSH

001 VM

001 VOL

001 LISH

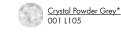


Crystal Paradise Shine

Crystal Vitrail Medium**

Crystal Volcano**

Crystal Lilac Shadow







Crystal White Patina 001 WHIPA



Crystal Rose Patina* 001 ROSPA



Crystal Silver Patina* 001 SILPA



Crystal Gold Patina* 001 GOLPA



Crystal Black Patina* 001 BLAPA



508

Light Peach



Air Blue Opal



Sapphire 206





231 Light Topaz



246

Jonquil

Yellow Opal









Marbled Light Grey

Marbled Terracotta

Marbled Yellow

Marbled Blue



Crystal Heliotrope** 001 HEL Crystal Bermuda Blue**

























Rose Peach

<u>Padparadscha</u>

Indian Pink

<u>Hyacinth</u>

Light Siam

Indian Siam***

223

262

542

289

236

209

502

Ruby

208

Burgundy 515

Garnet

Amethyst

Cyclamen Opal

Purple Velvet

Tanzanite

539

Classic Colors:

Exclusive Colors:

241

204

Fuchsia



Dark Indigo



288



<u>Turquoise</u>

263

229

Caribbean Blue Opal 394

Blue Zircon

<u>Indicolite</u>

Indian Sapphire

Denim Blue











280





Black Diamond



Ceramics

















Marbled Black

This color range offers a wide choice of traditional Swarovski crystal colors.

This color range is offered exclusively by Swarovski. The listed colors and effects are based on the Color Chart for Round Stones (2016).

The standard assortment of colors and effects may vary per product group. Slight changes in shades are unavoidable. Colors may vary according to cut and shape.

The plating resistance of effects is tested according to Swarovski's plating guidelines (SWAROVSKI.COM/PROFESSIONAL). Customers are advised to carry out their own tests if customers' plating parameters diverge from Swarovski plating guidelines. Details for parameter settings can be found on page 19.

- Crystals are not resistant to plating and similar processing.
- Crystals are resistant to plating only if they are foiled.
- The color Indian Siam is available only for a specific size range. Please refer to the current Collection.
- Designed by Jean Paul Gaultier

Testing the plating-resistance

For testing the plating-resistance of effects, the following parameter settings have to be considered:

Setting up the stand	
Sening up the stand	
	▼
Electrolytic degreasing	t<1 min, 3 A/dm², pH<12, T<45 °C (113 °F)
	▼
Rinsing	t = 30 sec, T < 25 °C (77 °F)
	▼
Pickling	t<20 sec, pH~1
	▼
Rinsing	t=30 sec, T<25 °C (77 °F)
	▼
Bright copper plating	t < 15 min, 3 A/dm², pH < 1, RT
	▼
Rinsing	t = 30 sec, T < 25 °C (77 °F)
	▼
Palladium interim coating	t<5 min, 1 A/dm², pH < 8, RT
	▼
Rinsing	t=30 sec, T<25 °C (77 °F)
	▼
Gold finishing	t<5 min, 1 A/dm²

Note: Swarovski cannot warrant the resistance of effects when the parameters as set out above are changed. Swarovski's declaration of resistance does not discharge customer from carrying out its own tests of the suitability for the intended finishing of products. The use and processing of these techniques and products are solely the user's responsibility.

Sizes

Various measurement abbreviations are used to classify the jewelry stones.



Pearl Plate (PP), Sieve Size or Stone Size (SS) for round crystals.



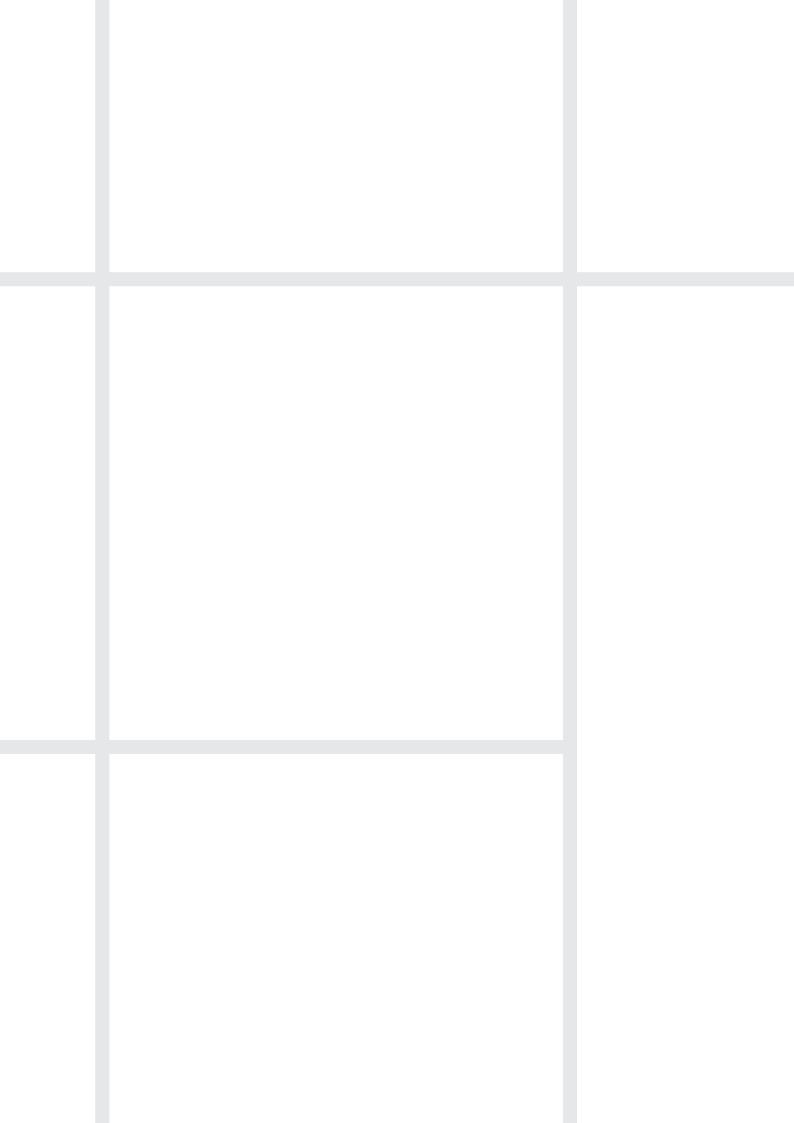
Metric figures in millimeters for crystal components and

P→		mm		
•	PP 0 0.70-0.80 mm	PP 21 (SS 10) 2.70-2.80 mm	SS 26 5.61-5.78 mm	SS 45 9.85-
•	PP 1 (SS 000) 0.80-0.90 mm	PP 22 (SS 10) 2.80-2.90 mm	SS 27 5.78-5.96 mm	10.19 mm
•	PP 2 (SS 00) 0.90-1.00 mm	PP 23 (SS 11) 2.90-3.00 mm	SS 28 5.96-6.14 mm	SS 46 10.19- 10.54 mm
•	PP 3 (SS 0) 1.00-1.10 mm	PP 24 (SS 12) 3.00-3.20 mm	SS 29 6.14-6.32 mm	
•	PP 4 (SS 1) 1.10-1.20 mm	PP 25 (SS 13) 3.20-3.30 mm	SS 30 6.32-6.50 mm	SS 47 10.54- 10.91 mm
•	PP 5 (SS 2) 1.20-1.30 mm	PP 26 (SS 13) 3.30-3.40 mm	SS 31 6.50-6.68 mm	
•	PP 6 (SS 2) 1.30-1.35 mm	PP 27 (SS 14) 3.40-3.50 mm	SS 32 6.68-6.87 mm	SS 48 10.91- 11.30 mm
•	PP 7 (SS 3) 1.35 – 1.40 mm	PP 28 (SS 14) 3.50-3.60 mm	SS 33 6.87-7.07 mm	SS 49
•	PP 8 (SS 3) 1.40-1.50 mm	PP 29 (SS 15) 3.60-3.70 mm	SS 34 7.07 - 7.27 mm	11.30- 11.72 mm
•	PP 9 (SS 4) 1.50-1.60 mm	PP 30 (SS 15) 3.70-3.80 mm	SS 35 7.27 - 7.48 mm	SS 50
•	PP 10 (SS 4) 1.60-1.70 mm	PP 31 (SS 16) 3.80-4.00 mm	SS 36 7.48-7.70 mm	11.72- 11.97 mm
•	PP 11 (SS 5) 1.70-1.80 mm	PP 32 (SS 17) 4.00-4.10 mm	SS 37 7.70-7.93 mm	SS 55
•	PP 12 (SS 5) 1.80 – 1.90 mm	PP 33 (SS 17) 4.10-4.20 mm	SS 38	12.97- 13.22 mm
•	PP 13 (SS 6) 1.90-2.00 mm	SS 18 4.20-4.40 mm	7.93 – 8.16 mm	SS 60
•	PP 14 (SS 6) 2.00-2.10 mm	SS 19 4.40-4.60 mm	SS 39 8.16-8.41 mm	14.22- 14.47 mm
•	PP 15 (SS 7) 2.10-2.20 mm	SS 20 4.60-4.80 mm	SS 40 8.41-8.67 mm	SS 65
•	PP 16 (SS 7) 2.20-2.30 mm	SS 21 4.80-4.90 mm	SS 41 8.67-8.95 mm	15.47- 15.72 mm
•	PP 17 (SS 8) 2.30-2.40 mm	SS 22 4.90-5.10 mm	SS 42	SS 70
•	PP 18 (SS 8) 2.40-2.50 mm	SS 23 5.10-5.27 mm	8.95-9.23 mm	16.72- 16.97 mm
•	PP 19 (SS 9) 2.50-2.60 mm	SS 24 5.27-5.44 mm	SS 43 9.23-9.53 mm	SS 75
•	PP 20 (SS 9) 2.60-2.70 mm	SS 25 5.44-5.61 mm	SS 44 9.53-9.85 mm	17.97 - 18.22 mm

SWAROVSKI PRODUCTS AND SUITABLE APPLICATION TECHNIQUES

		Soldering	Plating	Setting	Gluing	Hotfix Application	Sewing	Embroidery	Hand Application	Mechanical Application	Ceralun
Round Stones				✓	✓						✓
Fancy Stones	Fancy Stones			✓	✓						✓
& Settings	Settings	✓	✓	✓			√ 1		✓		
Beads							√ 1		✓		
BeCharmed &	Pavé						√ 1		✓		
Crystal Pearls							✓1		✓		
Pendants							√ 1		✓		
Flat Backs No	Hotfix			✓	✓						✓
	XILION Rose & XIRIUS Rose					✓					
	Framed Flat Backs					✓					
Flat Backs Hotfix	Creation Stones					√					
ношх	Creation Stones Plus					✓					
	Cabochon Round					√					
Sew-on Article							✓	√ 2	√		
Self-adhesive E					√						
	XILION Transfers & XIRIUS Transfers					√					
	Creation Transfers					√					
	Creation Transfers Plus					√ ·					
Transfers	Pearl Transfers					√					
Trunsiers	Diamond Transfers					√					
	Metallic Transfers					✓					
	Mezzo Transfers					✓					
	Crystal Fabric				√	√					
Synthetics	Crystal Rocks & Crystal Fine Rocks				√	√					
Hotfix					√	✓	√ 3				
	Crystaltex					v		7 4			
	Basic Bandings				✓		√	√ 4			
Plastic Trimmings	Fishnet Bandings										
gs	Decorative Bandings						√				
	Plastic Components						√ 1		✓		
	Crystal Buttons						√		√		
	Buttons with Plastic Shank						✓		✓		
Buttons, Fasteners	Snap Fasteners & Decorative Buttons Inset Snap Fasteners & XIRIUS Flat Back Snap Fasteners									✓ ✓	
& Zippers	Jeans Buttons									√	
	Buttons with Metal Shank						√		✓		
	Zippers						→		-		
	Chaton & Flat Back Bandings / Motifs				√		√				
	Spike Bandings				√		√ 1				
Metal	Rivets (Crystal Pearl, Square, Chessboard, Star, Spike)									√	
Trimmings	Roses & Chaton Montées						√ 1		✓		
	Rose Pins, Chessboard Pins & Rhombus Pins									✓	
	Crystal Studs									✓	
Crystal Mesh					✓	✓	√ 5				
Cupchains & F	indings	✓	✓				✓		✓		

¹ These products are not suitable for sewing with a sewing machine 2 Art. 3129 3 Not suitable for Crystaltex Chaton Bandings 4 Art. 50 002, 50 003, and 50 004 (single-row) 5 Crystal Fine Mesh is not suitable for sewing with a sewing machine



SEWING, EMBROIDERY,

AND HAND APPLICATION

There are many Swarovski products that are suitable for sewing and embroidering. These products can be easily applied either by hand, or with standard domestic or industrial sewing and embroidery machines. Swarovski also offers an ideal selection of products for a variety of creative techniques by hand.

PRODUCT OVERVIEW

The following products are suitable for sewing (by hand or machine), embroidery or hand application (e.g. beading):

	SEWING	EMBROIDERY	HAND APPLICATION TECHNIQUES
Settings	√ 1		✓
Beads	√ 1		✓
BeCharmed & Pavé	√ 1		✓
Crystal Pearls	√ 1		✓
Pendants	√ 1		✓
Sew-on Articles	✓	√2	✓
Synthetics Hotfix: Crystaltex	√ 3		
Plastic Trimmings	✓	√ 4	√ 5
Crystal Buttons & Buttons with Plastic / Metal Shank	✓		✓
Zippers	✓		
Metal Trimmings: Chaton & Flat Back Bandings	✓		
Metal Trimmings: Spike Bandings	√ 1		
Metal Trimmings: Roses & Chaton Montées	√ 1		✓
Crystal Mesh	√6		
Cupchains & Findings	✓		✓

- 1 These products should be sewn by hand.
- 2 Lochrose art. 3129
- 3 Not suitable for Crystaltex Chaton Bandings 4 Art. 50 002, 50 003 and 50 004 (single-row)
- 5 Plastic Components like Mini Rondelles
- 6 Crystal Fine Mesh has a very tight structure and should therefore be sewn by hand.

MACHINES, TOOLS, AND AIDS

The following machines, tools, and aids can be used for sewing and embroidering Swarovski products:



A household sewing machine offers $\boldsymbol{\alpha}$ range of stitch types such as straight stitch, zigzag stitch and a program for sewing on buttons, and is therefore well suited to applying Swarovski products.



An **industrial sewing machine** is suitable for most sewing applications. However, a machine with a zigzag stitching program is necessary for some Swarovski products.



A **button sewer** can also be used for the application of some Swarovski Buttons.



Various fully automatic embroidery machines can be used for application, depending on the product.



The **lock stitch head** is ideal for applying single-row Plastic Trimmings.



Use a device like the Laesser Crystal Stone Head for Schiffli embroidery machines (or the Lochrose Embroidery Device from Tajima) to fully automatically apply Lochrose art. 3129.



Embroidery interfacing stabilizes the fabric.



Spray glue is used to fix the fabric on the interfacing.



A **frame** serves to stabilize thin and elastic fabrics during industrial embroidery processes.



Adapted presser feet/beading feet (e.g. for single-row Plastic Trimmings): standard presser feet, adapted by adding two metal plates.



By gluing on **small metal plates** (offered by Swarovski), an adapted presser foot can be made.



For zippers and products with net-edge, a **zipper foot** is helpful. A **button foot** can be used for the application of Crystal Buttons and Sew-on Articles.



Sewing and embroidery machine needles sizes Nm 70-100.



Sewing thread (Nm 50 - 80); stronger synthetic thread is more suitable for sewing on items.

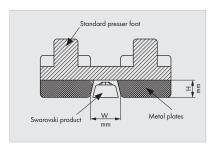


It is recommended that **protective eyewear** is worn when using a sewing machine, so as to prevent injury.

Adapted presser foot

To adapt a sewing machine's standard presser foot (e.g. for sewing Plastic Trimmings on garments), affix two small plates to the underside of the presser foot with help of epoxy adhesive. Make sure that the plates are tailored to the height of the Swarovski product. When gluing, also be aware of the recommended width.





The metal plates are glued to the left and right Adapted presser foot side of the standard presser foot.

Available metal plates from Swarovski

Plastic Trimmings	Width	Height	Metal plates
Art. 50 002	2.7 mm	2.3 mm	Art. 9040/055
Art. 50 003	3.4 mm	2.5 mm	Art. 9040/056
Art. 50 004	4.4 mm	3.5 mm	Art. 9040/057

SUPPLIERS

This list provides an overview of selected suppliers worldwide.

MACHINES / TOOLS / AIDS	SUPPLIER	CONTACT		
Sewing machines	Elna International Corp. AG	www.elna.com		
	Pfaff	www.pfaff.com		
Button sewer	Pfaff	www.pfaff.com		
Industrial embroidery machines	Barudan America, Inc.	www.barudan.com		
(for Plastic Trimmings)	MECA Srl	www.meca.it		
	Tajima Industries Ltd.	www.tajima.com		
	ZSK GmbH	www.zsk.de		
Embroidery device for Lochrose art. 3129	Laesser AG Crystal Stone Head for Laesser embroidery machines	www.laesser.ch		
	Tajima Industries Ltd. Lochrose Embroidery Device	www.tajima.com		
Adapted presser foot / beading foot for sewing	Elna International Corp. AG Pearl / Bead Foot	www.elna.com		
Plastic Trimmings	Pfaff Beading Foot	www.pfaff.com		
Metal plates for adapting a presser foot	Swarovski: www.swarovski.com/professional For Plastic Trimming art. 50 002: art. 9040/055			
	For Plastic Trimming art. 50 003: art. 9040/056	rimming art. 50 003: art. 9040/056		
	For Plastic Trimming art. 50 004: art. 9040/057			
Machine needles	Ferd. SCHMETZ GmbH	www.schmetz.com		
	Groz-Beckert KG	www.groz-beckert.de		
	Prym	www.prym-consumer.com		
Sewing threads	AMANN & Soehne GmbH & Co. KG	www.amann.com		
	Coats PLC	www.coats.com		
	MADEIRA Garnfabrik KG	www.madeira.de		
	RAYHER HOBBY GmbH	www.rayher-hobby.de		

SELECTING
THE OPTIMUM THREAD

SELECTING
THE STITCH TYPE

ADJUSTING THE UPPER
THREAD TENSION

APPLICATION

When sewing Swarovki products, particularly Sew-on Articles, Crystal Buttons and Beads, **synthetic multifilament threads with a thread count of Nm 50 – 80** are most suitable. Monofilament and pure cotton yarns are not recommended due to their limited abrasion resistance.

7

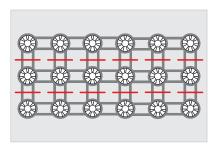
SELECTING
THE OPTIMUM THREAD

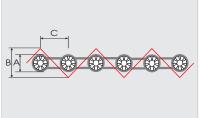
SELECTING
THE STITCH TYPE

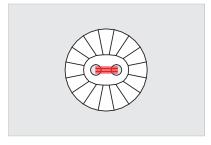
ADJUSTING THE UPPER THREAD TENSION

APPLICATION

In general, Swarovki products can be sewn on using a variety of stitch types.







Multi-row products
Straight stitch

Single-row products Zigzag stitch

Crystal Buttons and Sew-on ArticlesButton sewing program or zigzag stitch

Straight stitch

A stitch length should be selected that allows the stitches to fall in the spaces between the cups.

Zigzag stitch

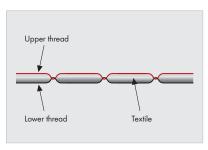
The length and width of the stitch must be adjusted to suit the element being applied. The width of the stitch (B) should be 0.5 mm - 1 mm broader on both sides than the crystal product (A) being applied. The length of the stitch (C) should be equal to about 2/3 of the width of the stitch. In some cases the tension of the upper thread must be reduced.

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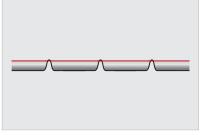
When applying products using a zigzag stitch, the use of an adapted presser foot is recommended.

Button sewing program

Crystal Buttons and Sew-on Articles can be applied using a button sewing program. The hole spacing must be selected in order to use the program.



If the **tension is correct**, the threads cross in the middle of the textile.



If the **tension is too tight**, the lower thread is visible on the upper surface of the fabric and the fabric can become gathered.



APPLICATION

If the **tension is too loose**, the crossing of the threads is visible on the upper surface of the fabric.

Alongside sewing by hand, the following table provides a summary of possible machine application techniques.

Machine application **SWAROVSKI PRODUCTS** MACHINE TOOL/AID NOTE **PROGRAM** Sew-on Sew-on Stones Sewing Button foot Button sewing program Switch off the lower feed, adjust Articles machine or zigzag stitch without the stitch width to the product. feed function The use of the application aid in some types of sewing machines can require some readjustment of the tension release Lochrose Schiffli Laesser art. 3129 embroidery Crystal Stone Head or machine Tajima Lochrose Embroidery Device **Synthetics** Crystaltex Sewing Standard presser foot Straight stitch, zigzag stitch Hotfix machine (single-row) Plastic Basic Bandings Sewing Adapted standard Zigzag stitch Adjust the stitch width to **Trimmings** (single-row) machine presser foot the product When working with the net-edge Zipper foot Straight stitch option of the Banding Lock stitch head Basic Bandings **Embroidery** Zigzag stitch (single-row) machine Adjust the stitch width to Basic Bandings Sewing Standard presser foot Straight stitch, zigzag stitch (multi-row) machine the product When working with the net-edge Zipper foot Straight stitch option of the Banding **Fishnet** Sewing Adapted standard Straight stitch Bandings machine presser foot Sewing Decorative Zipper foot Straight stitch When working with the net-edge Bandings machine option of the Banding Special sewing Special presser foot Programmed stitch machine Buttons, Crystal Sewing Button foot Button sewing program Switch off the lower feed, adjust Fasteners & the stitch width to the product Buttons machine or zigzag stitch without **Zippers** feed function Button sewer Holding clamps must be adjusted Button sewing program to the shape of the button Buttons with Button sewer Button sewing program Holding clamps must be adjusted Plastic Shank / to the shape of the button Metal Shank **Zippers** Sewing Zipper foot Straight stitch machine Metal Chaton & Flat Sewing Standard presser foot Straight stitch **Trimmings** Back Bandings machine Zipper foot Straight stitch When working with the net-edge option of the Banding Crystal Sewing Standard presser foot Straight stitch Do not remove the transparent Mesh machine support film before sewing, but score the film along the course of the stitching beforehand Cupchains Cupchains Sewing Adapted standard Adjust the stitch width to the Zigzag stitch & Findings machine presser foot product

SEWING, EMBROIDERY AND HAND APPLICATION

Application using a sewing machine

The right choice of needle (strength Nm 70 - 100), sewing thread and thread tension (upper and lower thread) are particularly important for applications with a sewing machine. The fabric must not become gathered and the upper and lower thread should run easily and smoothly.

Tests should be conducted on the original material before beginning production.

Before sewing on Crystal Buttons with a machine it is essential to set the sewing machine to the correct hole and stitch length, as well as stitch width. This prevents the crystal from being damaged during application and reduces the risk of injury. When sewing high, multi-row products, there can be problems with the sewing machine feed, caused by a slanting presser foot. To avoid this, position a **height compensator** beneath the presser foot to ensure it sits parallel to the material, allowing the fabric to feed through properly.



The foot lies flat due to the **height** compensator.



A slanting presser foot can cause problems with the feed of the base material.



Sew-on StonesSwitch off the lower feed and adjust the stitch width to the product.



Crystaltex BandingsSew between the rows of crystals.



Basic Bandings (single-row)
Make sure that the Basic Banding runs parallel to the foot.



Basic Bandings (multi-row)
Stitch the banding between the first and second rows of crystals and if necessary strengthen the corners with a zigzag stitch.



Fishnet BandingsAdjust the needle bar so that the stitches are next to the crystals.



Crystal ButtonsSwitch off the lower feed and adjust the stitch width to the product.



Zippers
It is possible to sew very close to the teeth of the zipper when using a zipper foot. In some cases, it can also be very helpful to adjust the needle bar.



Chaton & Flat Back BandingsStitch the Banding between the rows of crystals.



Crystal Mesh Stitch the banding between the first and second rows of crystals. Alternatively, use a zigzag stitch.

Note: Consider the useful information about the support film on the pages 114 and 119.



CupchainsMake sure that the Cupchain runs parallel to the foot.

Application using a button sewer

Amongst other Swarovski products, Crystal Buttons, Buttons with Plastic Shank and Buttons with Metal Shank can also be applied using a button sewer.

CRYSTAL BUTTONS

Before application, it is essential to set the button sewer according to the used Crystal Button. This prevents the product from being damaged during application and reduces the risk of injury.

BUTTONS WITH PLASTIC SHANK AND BUTTONS WITH METAL SHANK

Just like Crystal Buttons, Buttons with Plastic or Metal Shank can be easily affixed using a button sewer. To do this, they must be positioned in the application slot of the button holder, and the machine must be adjusted beforehand.



Application using an embroidery machine

The industrial application of single-row Plastic Trimmings and Lochrose art. 3129 can be carried out on fully automatic embroidery machines.

PLASTIC TRIMMINGS



 First design the motif. Choose the desired type of Plastic Trimming and the embroidery thread.



2 A lock stitch head can be used for applying Plastic Trimmings. It allows the Plastic Trimmings to be fixed to the carrier material by using zigzag stitch.



3 Wind the Plastic Trimming onto a suitable spool.



4 When spool and thread are in place, fix the fabric into place with spray glue.



5 Start the stitching process.



6 The customized material is now ready for further processing.

A comprehensive video about working with Plastic Trimmings can be found on the Swarovski business website SWAROVSKI.COM/PROFESSIONAL.

LOCHROSE art. 3129

An innovative product application solution has been developed in conjunction with the companies Laesser and Tajima for the industrial application of Lochrose art. 3129 with fully automatic embroidery machines. If using a Laesser embroidery machine, the Laesser Crystal Stone Head must be used. The application is based on standard embroidery technology and allows the unique combination of first-class Schiffli embroidery yarns (e.g. SETAFIL®) and crystal applications in a single production stage.

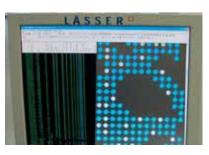
If sewing with a Tajima embroidery machine is preferred, the Tajima Lochrose Embroidery Device is used.



Orders for the **Lochrose art. 3129**, as well as sample and production orders, can be placed directly with your Swarovski sales partner.



1 Draw the desired motif.



2 Enter the design into the embroidery software.



3 Fill the embroidery machine with Lochrose art. 3129.



4 Embroidery is carried out automatically using a system like the Laesser Crystal Stone Head (in the photo) or the Tajima Lochrose Embroidery Device.



5 The embroidered material is now ready for further processing.

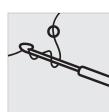
Picture source: S. Jurkowitsch

Hand application techniques

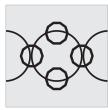
Some of the Swarovski products listed in the product overview at the beginning of this chapter can be applied by hand. This means a range of creative application techniques in addition to sewing and embroidery.



Knitting



Crocheting



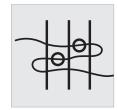
Beading



Threading



Wire working



Weaving



Knotting

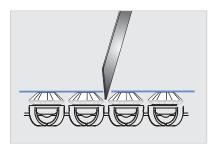
Please choose a sufficiently thick wire in accordance to the size and weight of the Swarovski crystals. For heavier products a nylon-coated wire is recommended. Crystal Pearls larger than 6 mm should be additionally knotted for a better hold. Detailed instructions for these techniques and information concerning the necessary tools and aids required for the work are given on WWW.CREATE-YOUR-STYLE.COM.

USEFUL INFORMATION

Cutting and sewing Crystal Mesh

Before cutting and sewing, the transparent film must not be removed. The film allows the individual crystals to be aligned perfectly, and provides Crystal Mesh with the stability necessary for flawless application.

In case the Crystal Mesh is fixed on the fabric with Hotfix prior to sewing, the foil can be removed before starting to sew.



Pre-scoring: Score the transparent film between the rows of crystals with a Stanley knife, though do not pull them apart – otherwise the stability of the crystals during cutting and sewing will be lost.

Cutting: Cut the metal with scissors along the scored line, and remove the excess link rings. The Crystal Mesh is now

ready for sewing.

Sewing: When sewing Crystal Mesh, it is recommended that the film is scored along the course of the stitching

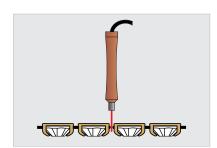
beforehand (see illustration).

Note: Crystal Fine Mesh cannot be sewed with a sewing machine due to its tight structure.

Cutting Metal Trimmings

It is recommended that the frayed ends are removed using heat. This avoids the support fabric entering the cutting point and consequently reducing the rigidity of the product.

Alternatively, the cutting and removal can be carried out in a single process using a hot knife fabric cutter. After cutting the net the ends should be finished with flame (e.g. lighter) that the crystal cannot scale off the net.



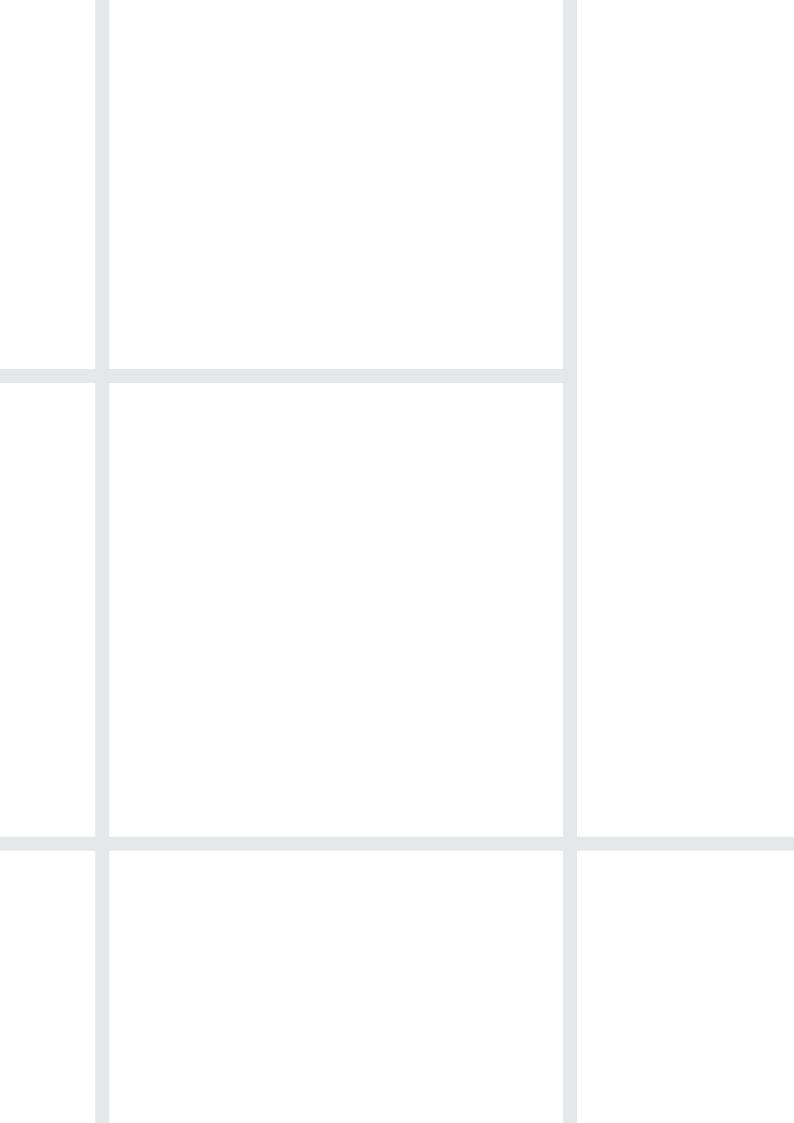
Cutting and removal of ends in a single process.

QUICK ASSISTANCE

The following table outlines common problems and their causes when sewing, and offers advice on how to avoid them. Further details and more extensive descriptions can be found in the section marked with a ?

PROBLEM	CAUSE
Product or fabric is not fed through correctly.	1, 2, 3
The machine misses out stitches.	4, 5, 6, 7
The thread breaks.	4, 6, 8, 9
The needle breaks.	10, 11, 12, 13
The crystals break out of the cups.	14

CAUSE		RECOMMENDATION
1	The foot pressure may be too low.	Increase the foot pressure according to the instructions.
2	There may be dust between the feeder teeth.	Clean the feeder teeth.
3	Upper feed is faulty.	Replace the upper feed.
4	The needle may be bent or damaged.	Replace the needle.
5	The needle is not fitted correctly.	The needle must be pushed right up to the top.
6	The machine may be threaded wrongly.	Rethread the machine.
7	The tension of the threads may be incorrect.	Check the thread tension.
8	There may be knots in the thread or it may be too thin.	Check the thread for faults and if necessary, change it.
9	The components that form the stitches may be damaged.	Have the sewing machine checked by a specialist.
10	The wrong needle may have been chosen.	Choose a needle that has the correct size for the carrier material.
11	The bobbin may not be fitted correctly.	Check the bobbin case.
12	The needle is too thick and gets stuck in the product.	Use a thinner needle.
13	The needle hits the crystal.	Sew more slowly and feed the product through the machine more carefully.
14	The needle damages the cup.	Check the length of the stitch and the thickness of the needle.



CARE INSTRUCTIONS

To ensure the highest quality and longest-lasting applications of Swarovski products, proper care is essential. The Swarovski Hotfix adhesive is characterized by its wash resistance and

easy-care properties.

TEXTILE CARE INSTRUCTIONS

Recommendations		60°	40°	30°	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
		Turn inside out, choose a gentle wash cycle and use mild laundry detergent. To protect the crystals as much as possible, the			Turn inside out and use mild laundry detergent.	Do not wash!	Chlorine bleach may be used.	Do not use chlo- rine bleach!
		use of a soft was	h bag is recommer	nded.				
Round Ston	es	✓						✓
Fancy Stone	es	✓						✓
Beads	Beads	✓						✓
Dedds	Crystal Mesh Balls				✓			✓
BeCharmed	d & Pavé		✓					✓
Crystal Pea	rls				✓			✓
Pendants						✓		✓
Flat Backs 1	No Hotfix ¹	✓						✓
	XILION Rose & XIRIUS Rose 1	✓						✓
El . 5	Framed Flat Backs	✓						✓
Flat Backs Hotfix	Creation Stones	✓						✓
	Creation Stones Plus ²				✓			✓
	Cabochons				✓			✓
Sew-on Arti	icles	✓						✓
Self-adhesiv	ve Elements					✓		✓
	XILION Transfers & XIRIUS Transfers	✓						✓
	Creation, Diamond	✓						✓
Transfers	Metallic & Mezzo Transfers		✓					✓
	Creation Transfers Plus ²				✓			✓
	Pearl Transfers				✓			✓
	Crystal Fabric		✓					✓
	Crystal Rocks & Crystal Fine Rocks		√					✓
Synthetics Hotfix	Graphic Fabric & Graphic (Fine) Rocks				✓			✓
Hoffix	Crystal Medley		√					✓
	Crystaltex ³		√					✓
	Basic Bandings	✓						✓
Plastic	Fishnet Bandings	✓						✓
Trimmings	Decorative Bandings		√					✓
	Plastic Components		<i>✓</i>					· ✓
	Crystal Buttons	✓						√
	Buttons with Plastic Shank		√					· ✓
Buttons,	Snap Fasteners & Decorative Buttons		· ✓					· ✓
Fasteners	Jeans Buttons		· ✓					· ·
& Zippers	Buttons with Metal Shank		· ·					· ·
	Zippers			√				· ·
Metal	Chaton & Flat Back Bandings & Spike Bandings				✓			✓
	Rivets, Square Rivets, Chessboard Rivets & Star Rivets		✓					✓
	Crystal Pearl Rivets				✓			✓
Trimmings	Spike Rivets				✓			✓
	Roses & Chaton Montées		√					✓
	Rose Pins, Chessboard Pins & Rhombus Pins		✓					✓
	Crystal Studs				✓			√
Crystal Me	<u> </u>				· ·			· ✓
	& Findings					✓		✓

XIRIUS size SS 40 and SS 48: only wash with a hand wash program.
 Creation Stones Plus have a stone size of 8 – 10 mm.
 It is recommended to wash Crystaltex Cabochon with a hand wash program.

	E CARE III STRUCTIONS			T		T
					<u></u>	\geq
		Turn inside out and dry at reduced	Do not tumble dry!	Iron inside out using a silk/polyester/ viscose setting.	Iron inside out using a wool setting.	Do not iron!
		temperature.		Ironing the textile inside out and using a pressing cloth is recommended.		Do not iron directly over the crystals.
Round Stor	nes		✓			✓
Fancy Ston	es		✓			✓
	Beads	✓				✓
Beads	Crystal Mesh Balls		✓			✓
BeCharmed	d & Pavé		✓			✓
Crystal Pea	ırls		✓			✓
Pendants			✓			✓
Flat Backs I	No Hotfix ¹		✓			✓
	XILION Rose & XIRIUS Rose 1	✓		✓		
	Framed Flat Backs			√		
Flat Backs Hotfix	Creation Stones	✓		✓		
Поттіх	Creation Stones Plus ²		✓			✓
	Cabochons	✓		✓		
Sew-on Art	icles		✓			✓
Self-adhesi	ve Elements		✓			✓
	XILION Transfers & XIRIUS Transfers	✓		✓		
	Creation, Diamond	✓		✓		
Transfers	Metallic & Mezzo Transfers		✓	✓		
	Creation Transfers Plus ²		✓			√
	Pearl Transfers	/		✓		
	Crystal Fabric		✓	✓		
	Crystal Rocks & Crystal Fine Rocks		√	✓		
Synthetics	Graphic Fabric & Graphic (Fine) Rocks		✓	√		
Hotfix	Crystal Medley		✓	✓		
	Crystaltex ³		✓	✓		
	Basic Bandings	✓				√
DI i	Fishnet Bandings		✓			· ✓
Plastic Trimmings	Decorative Bandings		✓			✓
	Plastic Components		✓			✓
	Crystal Buttons		√			· ✓
	Buttons with Plastic Shank		✓			✓
Buttons,	Snap Fasteners & Decorative Buttons		· ✓			· ·
Fasteners	Jeans Buttons		✓			√
& Zippers	Buttons with Metal Shank		✓			✓
	Zippers		· ✓			· ·
	Chaton & Flat Back Bandings & Spike Bandings		<i>√</i>			<i>√</i>
	Rivets, Square Rivets, Chessboard Rivets & Star Rivets		✓			✓
Metal	Crystal Pearl Rivets		✓			✓
Trimmings	Spike Rivets		✓			✓
	Roses & Chaton Montées		✓			✓
	Rose Pins, Chessboard Pins & Rhombus Pins		✓			✓
	Crystal Studs					√
Crystal Me	sh		✓			✓
Cupchains	& Findings		✓			✓
		1			1	1

TEXTILE CARE INSTRUCTIONS

		P	F _	w _	
		The textile can be gently dry-cleaned using perchlorethylene. Turn inside out.	The textile can be gently dry- cleaned using hydrocarbon. Turn inside out.	The textile will withstand gentle professional wet cleaning. Turn inside out.	The textile may not be dry-cleaned.
		To protect the crysto wash bag is recomm	als as much as possib mended.	le, the use of a soft	
Round Ston	es		✓	✓	
Fancy Stone	es		✓	✓	
D	Beads	✓	✓	✓	
Beads	Crystal Mesh Balls		✓	✓	
BeCharmed	l & Pavé		✓	✓	
Crystal Pea	rls		✓	✓	
Pendants					✓
Flat Backs N	No Hotfix ¹		√	✓	
	XILION Rose & XIRIUS Rose 1	√	✓	✓	
	Framed Flat Backs	✓	✓	✓	
Flat Backs	Creation Stones	✓	✓	✓	
Hotfix	Creation Stones Plus ²	✓	✓	√	
	Cabochons	√	· ·	· ✓	
Sew-on Arti		√	→	→	
	ve Elements	·	,	,	✓
bell-dariesiv	XILION Transfers & XIRIUS Transfers	✓	✓	✓	•
		√	✓	▼	
T (Creation, Diamond	•	V	✓	
Transfers	Metallic & Mezzo Transfers		∨		
	Creation Transfers Plus ²	√	1	√	
	Pearl Transfers	√	√	√	
	Crystal Fabric		√	√	
Synthetics	Crystal Rocks & Crystal Fine Rocks		√	√	
Hotfix	Graphic Fabric & Graphic (Fine) Rocks		√	✓	
	Crystal Medley		√	√	
	Crystaltex ³		√	✓	
	Basic Bandings	√	√	✓	
Plastic	Fishnet Bandings	✓	✓	✓	
Trimmings	Decorative Bandings	√	✓	✓	
	Plastic Components	✓	✓	✓	
	Crystal Buttons	✓	✓	✓	
	Buttons with Plastic Shank	✓	✓	✓	
Buttons, asteners	Snap Fasteners & Decorative Buttons	✓	✓	✓	
& Zippers	Jeans Buttons		✓	✓	
	Buttons with Metal Shank		✓	✓	
	Zippers		✓	✓	
	Chaton & Flat Back Bandings & Spike Bandings		✓	✓	
	Rivets, Square Rivets, Chessboard Rivets & Star Rivets	✓	✓	✓	
Metal	Crystal Pearl Rivets		✓	✓	
Trimmings	Spike Rivets	√	✓	✓	
	Roses & Chaton Montées	✓	✓	✓	
	Rose Pins, Chessboard Pins & Rhombus Pins	✓	✓	✓	
	Crystal Studs		✓	√	

GENERAL CARE INSTRUCTIONS

A light layer of dust is most easily removed with a clean, dry and antistatic cloth. To avoid unsightly fingerprints on the crystal, wear white cotton gloves during the cleaning process. For heavier dirt, lukewarm water with a little dishwashing detergent will suffice. Ideally you should use a damp and clean microfiber or thin, lint-free cotton cloth. Gently wipe each individual crystal and dry with a clean cloth. Again, wearing white cotton gloves is recommended.

When cleaning with moisture, make sure to use cleaning agents that do not damage the surrounding material. By correctly cleaning your Swarovski crystals, you will restore their full reflectivity.



Cloth

The composition of loose and forward-integrated crystals in the Advanced Crystal standard is compliant with regulatory industry norms and laws regarding the restriction or prohibition of certain substances for finished products in the most relevant segments of our customers' business.

WARNING NOTICES

General Warning



Loose crystals may present a small parts hazard to young children, particularly children under three years old. Depending on the size of the crystal and any attached material (such as glue, fabric, etc.), children may choke on, inhale, swallow, or insert the crystal into their noses. Magnetic products with crystal applications pose a particular risk of serious intestinal injury if ingested. The application techniques as stated in the Application Manual do not guarantee that crystals will not come loose. For each application, the manufacturer must determine whether the product meets the relevant requirements related to small parts hazards and assess any risk it may pose to small children. Failure to follow Swarovski's care instructions may result in damage to the crystal, which could pose a risk of laceration or other harm.

Warning for Crystal Tattoos

Crystal Tattoos may be applied on healthy skin only. Do not adhere to eyes or on mucous membranes. Crystal Tattoos are not recommended for young children. Loose crystals may present a small parts hazard to young children, particularly children under three years old. If a crystal comes loose, depending on the size of the crystal, children may choke on, inhale, swallow, or insert the crystal into their noses.

Warning for Magnetic Products

Loose crystals may present a small parts hazard to young children, particularly children under three years old. Magnetic products with crystal applications pose a particular risk of serious intestinal injuries if ingested. For each application of magnetic crystal products, the manufacturer must determine whether the product meets relevant requirements related to small parts hazards and assess any risk it may pose to small children.

Warning for Tableware

The application of loose crystals to tableware presents a potential risk of aspiration, choking, swallowing, or tooth damage should crystals become loose. To reduce this risk, crystals should never be applied to any surface of tableware likely to come in contact with food or the mouth, and crystals should never be placed on any tableware intended for use by children. Tableware with

crystals intended for decorative use only should be marked as such. To avoid dishwasher damage, tableware decorated with crystals should be washed by hand. The application techniques or suggestions in this manual do not guarantee that crystals will not come loose. For each application, the manufacturer must determine whether the product meets relevant requirements related to small parts hazards or use in food contact items and assess any risk it may pose to users.

The use of crystals (which may contain restricted substances deemed hazardous under local laws) and adhesives on tableware is subject to legal restrictions in specific countries. The customer is fully responsible for complying with these country-specific provisions and shall defend, indemnify, and hold Swarovski harmless from any and all third-party claims based on product liability or otherwise relating to uses of Swarovski products, and waives all its own claims against Swarovski.

Unsuitable Applications

Crystals from Swarovski are intended for use in the fields of fashion, jewelry, accessories, textile products, and for interior décor. Due to their physical properties, crystals from Swarovski are unsuitable for other uses (e.g. gluing onto teeth, using on or near mucous membranes, and other unsafe uses). The customer shall defend, indemnify, and hold Swarovski harmless from any and all third-party claims based on product liability or otherwise relating to uses of Swarovski products purchased by the customer, and waives all its own claims.

Responsibility of User

Any oral, written, or test-based advice that Swarovski provides regarding techniques for the application of its products are recommendations based on Swarovski's current knowledge and the information provided by its suppliers. Such advice does not discharge the customer from carrying out its own tests of techniques it proposes to use and their suitability for the intended application. The application, use, and processing of these techniques and products are solely the user's responsibility.

CARE INSTRUCTIONS

Not following Swarovski care instructions can damage the product and thus lead to damage of textiles or other damage.

Please note that with all standard washing processes (whether carried out by a household washing machine or via dry cleaning) the rotation of the drum places significant mechanical forces on the textiles. The most important factor in ensuring a secure wash is correctly applying the product, without compromising its adhesion. The larger the product employed, and the more products are applied next to each other, the greater the risk of damage. Swarovski products are made out of crystal or contain crystal and must thus be handled with suitable care.

In general, it is recommended that a soft wash bag is used and that the washer drum is filled to protect against damage. To maintain the quality of crystals from Swarovski, the following is also important: before washing, turn items of clothing inside out, select a gentle wash cycle, and use a mild detergent. According to DIN EN ISO 3758, our care instructions list all product groups, meaning each product used by customers must be assessed separately with regard to its washability and suitability for its purpose/the end product. The recommendations given by Swarovski reflect our current level of knowledge. Swarovski uses these recommendations to decide on the suitability of the product for textile applications. Customers are solely responsible for defining the recommended cleaning process for the end product, and must consider the care advice of Swarovski and any other manufacturers in doing so. The type of shape, cut, surface effect, and size, as well as the weight of the application and the quantity of crystals used has a significant impact on the cleaning process to be followed.

To avoid all risks, customers/textile cleaning companies should remove any large crystal stones, buttons, etc., that have been stitched on before cleaning, and stitch them back on again afterwards.

Content is subject to change without notice.

Errors and misprints excepted.

Please note, the actual products may deviate from the pictures in color and effect.

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