





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.

- 128** Product Overview
- 129** Machines and Tools
- 132** Suppliers
- 133** Application
- 142** Useful Information
- 143** Quick Assistance

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: Crystaltex	✓ ³		
Plastic Trimmings	✓	✓ ⁴	✓ ⁵
Buttons & Fasteners: Crystal Buttons & Buttons with Plastic / Metal Shank	✓		✓
Metal Trimmings: Chaton & Flat Back Bandings	✓		
Metal Trimmings: Spike Bandings	✓ ¹		
Metal Trimmings: Rose & 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 Mini Rondelles

6 Crystal Fine Mesh has a very tight structure and should therefore be sewn by hand.

MACHINES AND TOOLS

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



A **household sewing machine** offers a 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 Schifflli 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.



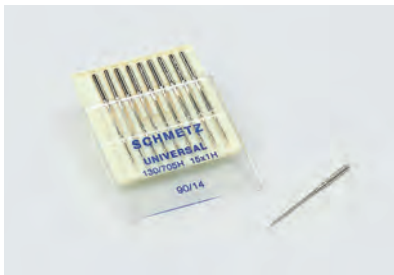
Adapted presser feet/beading feet (e.g. for single-row Plastic Trimmings): standard presser feet, adapted by adding two metal plates.



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.

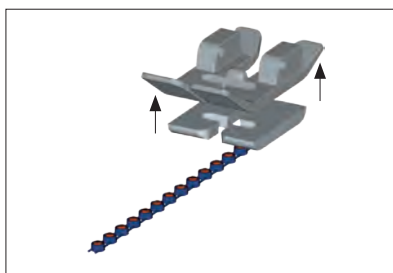


It is recommended that **protective eyewear** is worn when using a sewing machine, so as to prevent injury.

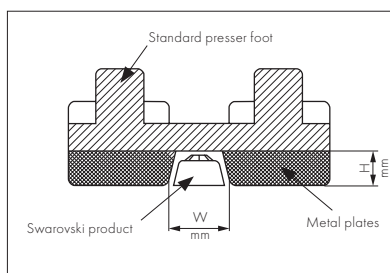
ADAPTED PRESSER FOOT

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 side of the standard presser foot.



Adapted 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	SUPPLIER	CONTACT
Sewing machines	Elna International Corp. AG Pfaff	www.elna.com www.pfaff.com
Button sewer	Pfaff	www.pfaff.com
Industrial embroidery machines (for Plastic Trimmings)	Barudan America, Inc. Meca Srl Tajima Industries Ltd. ZSK GmbH	www.barudan.com www.meca.it www.tajima.com 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 Plastic Trimmings	Elna International Corp. AG Pearl / Bead Foot	www.elna.com
	Pfaff Beading Foot	www.pfaff.com
Metal plates for adapting a presser foot	Swarovski: For Plastic Trimming art. 50 002: art. 9040/055 For Plastic Trimming art. 50 003: art. 9040/056 For Plastic Trimming art. 50 004: art. 9040/057	www.swarovski-professional.com
Machine needles	Ferd. Schmetz GmbH Groz-Beckert KG Prym	www.schmetz.com www.groz-beckert.de www.prym-consumer.com
Sewing threads	Amann & Soehne GmbH & Co. KG Coats PLC Madeira Garnfabrik KG Rayher Hobby GmbH	www.amann.com www.coats.com www.madeira.de www.rayher-hobby.de

SELECTING THE OPTIMUM
THREAD

SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD
TENSION

APPLICATION

APPLICATION

SELECTING THE OPTIMUM THREAD

When sewing Swarovski 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.

SELECTING THE OPTIMUM
THREAD

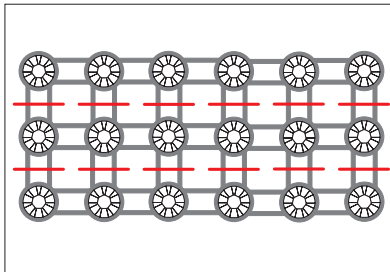
SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD
TENSION

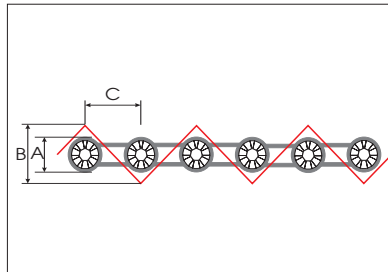
APPLICATION

SELECTING THE STITCH TYPE

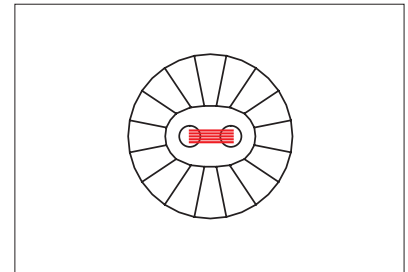
In general, Swarovski products can be sewn on using a variety of stitch types.



Multi-row products
Straight stitch



Single-row products
Zigzag stitch



Crystal Buttons and Sew-on Articles
Button 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.

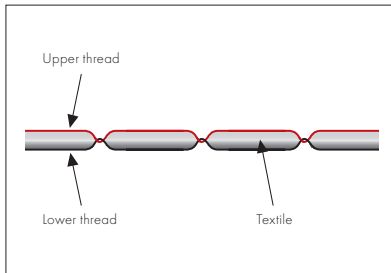
When applying products using a zigzag stitch, the use of an adapted presser foot is recommended.

BUTTON SEWING PROGRAM

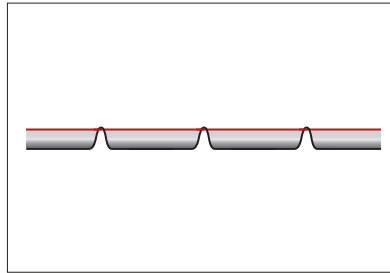
Crystal Buttons and Sew-on Articles can be applied using a button sewing program. The hole spacing must be selected in order to use the program.

ADJUSTING THE UPPER THREAD TENSION

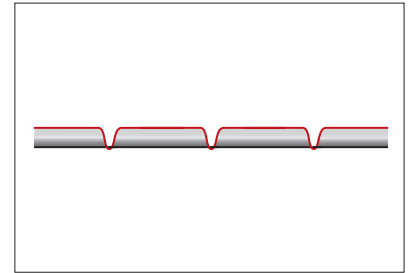
If the upper thread tension is too tight or too loose, the resulting seam is not strong. The tension of the thread must therefore be adjusted accordingly.



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.



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

APPLICATION

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

MACHINE APPLICATION

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

SELECTING THE OPTIMUM
THREAD

SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD
TENSION

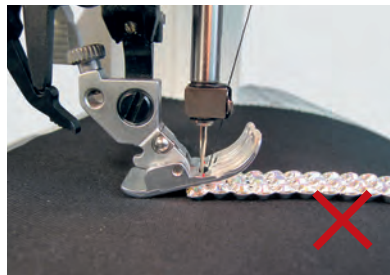
APPLICATION

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 Stones

Switch off the lower feed and adjust the stitch width to the product.

APPLICATION



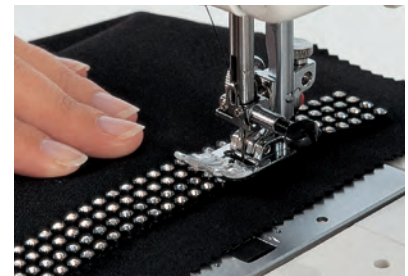
Crystaltex Bandings

Sew 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.

SELECTING THE OPTIMUM
THREAD

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APPLICATION



Crystal Buttons

Switch off the lower feed and adjust the stitch width to the product.



Chaton & Flat Back Bandings

Stitch 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 further details about the support film in the section Useful Information at the end of this chapter.



Cupchains

Make 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.



SELECTING THE OPTIMUM
THREAD

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APPLICATION

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



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



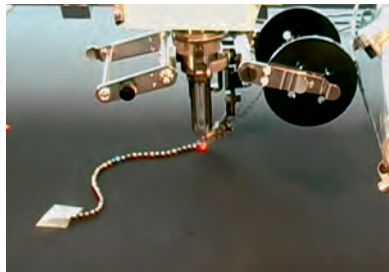
2 A lock stitch head can be used for applying Plastic Trimmings. It allows the Plastic Trimmings to be fixed to the carrier material by using zigzag stitch.



3 Wind the Plastic Trimming onto a suitable spool.



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



5 Start the stitching process.



6 The customized material is now ready for further processing.

SELECTING THE OPTIMUM THREAD

SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD TENSION

APPLICATION

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 Schifflli 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.

APPLICATION



1 Draw the desired motif.

2 Enter the design into the embroidery software.

3 Fill the embroidery machine with Lochrose art. 3129.



Picture source:
S. Jurkowitzsch

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.

SELECTING THE OPTIMUM
THREAD

SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD
TENSION

APPLICATION

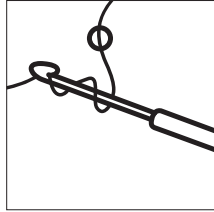
HAND APPLICATION TECHNIQUES

Some of the Swarovski products listed in the product overview at the beginning of this chapter can be applied by hand.

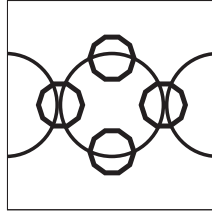
This means a range of creative application techniques in addition to sewing and embroidery.



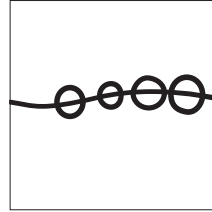
Knitting



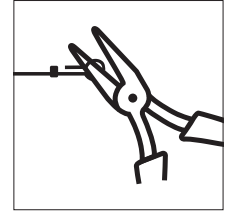
Crocheting



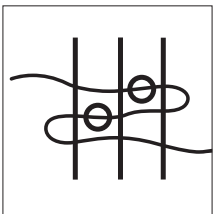
Beading



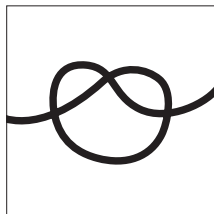
Threading



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.

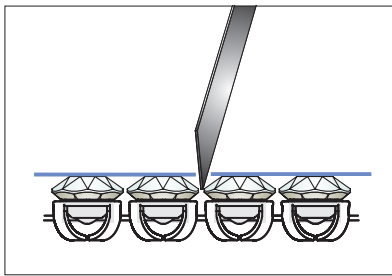
Detailed instructions for these techniques and information concerning the necessary tools required for the work are given on CREATE-YOUR-STYLE.COM.

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

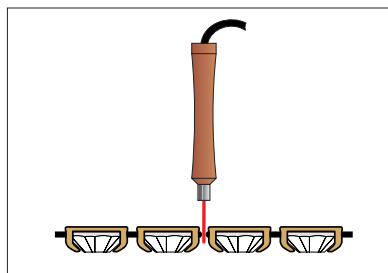
When sewing Crystal Mesh, it is recommended that the film is scored along the course of the stitching beforehand (see illustration).

Note: Crystal Fine Mesh cannot be sewn 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 typical sewing, embroidery, and hand application problems, along with possible causes and recommendations on avoiding them.

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 carefully.
14 The needle damages the cup.	Check the length of the stitch and the thickness of the needle.