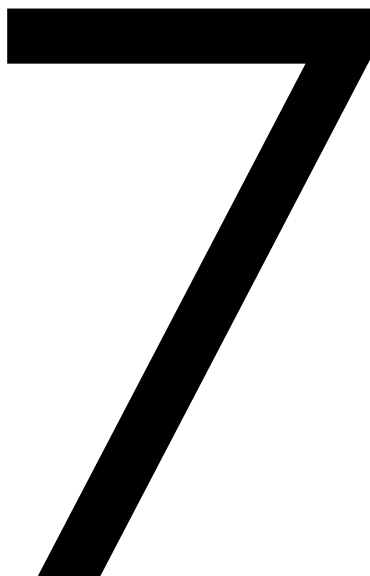






Sewing and Hand Application

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 machine. Swarovski also offers an ideal selection of products for a variety of creative techniques by hand.

146	Product Overview
147	Machines and Tools
148	Suppliers
149	Application
157	Useful Information
158	Quick Assistance

Product overview

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

Product overview & Machines and tools

		SEWN BY HAND	SEWN BY MACHINE	HAND APPLICATION TECHNIQUES
Beads		✓		✓
Crystal Pearls		✓		✓
Pendants		✓		✓
Sew-on Articles		✓	✓	✓
Crystal Buttons		✓	✓	✓
Crystal Textures with Foil Overlay		✓	✓	
Linked Crystal Components	Crystal Mesh Standard	✓	✓	
	Crystal Fine Mesh	✓		
	Crystal Light Mesh	✓	✓	
	Crystal Light Mesh Mini	✓	✓	
	Crystal Mesh Colorée	✓		
	Crystal Mesh Colorée Mini	✓		
	Crystal Cavier Mesh	✓	✓	
	Cupchains	✓	✓	✓
	Bezel Chains	✓	✓	✓
	Multirow Cupchains size PP11	✓		✓
	Multirow Cupchains size PP14 to PP24	✓	✓	✓
	Crystal Fishnet Banding	✓	✓	✓

Machines and tools

The following machines, tools and aids can be used for sewing 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.

07



Adapted presser feet/beading feet: standard presser feet, adapted by adding two metal plates.



By gluing on **small metal plates**, an adapted presser foot can be made.



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



Sewing 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.

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
Beading foot	Elna International Corp. AG Pearl / Bead Foot Pfaff Beading Foot	www.elna.com www.pfaff.com
Machine needles	Ferd. Schmetz GmbH Groz-Beckert KG Prym	www.schmetz.com www.groz-beckert.de www.prym.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.com
Sew-on settings	E.H. Ashley & Company, Inc. Franz Simm Metall- und Zinkdruckgusswaren GmbH Rio Grande Snow Findings Company Whiting & Davis	www.ehashley.com www.simm-metallwaren.de www.riogrande.com www.snowfindings.com www.whitinganddavis.com

Application

Selecting the optimum thread

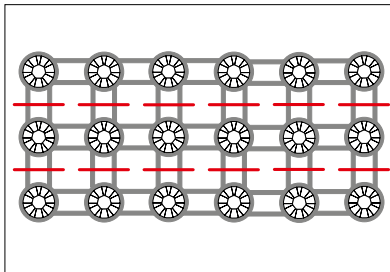
When sewing Swarovski products, particularly Sew-on Articles and Beads, **synthetic multifilament threads with a thread count of**

Nm 50 – 80 are most suitable. Monofilament and pure cotton yarns are not recommended due to their limited abrasion resistance.

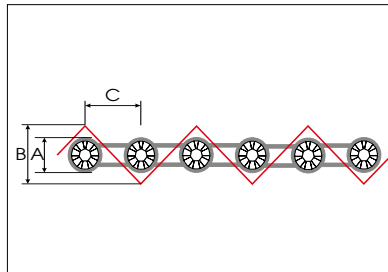
Selecting the stitch type and direction

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

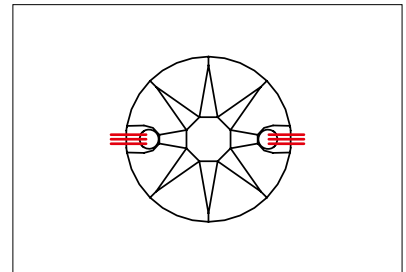
Types of stitch



Multi-row products
Straight stitch



Single-row products
Zigzag stitch



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 product (A) being applied.

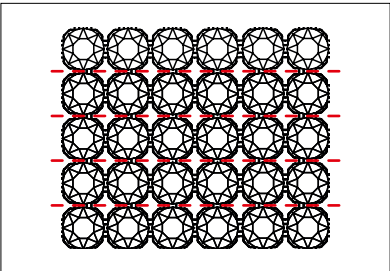
The length of the stitch (C) should be equal to about 2/3 of the width of the stitch. In some cases the tension of the upper thread must be reduced.

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

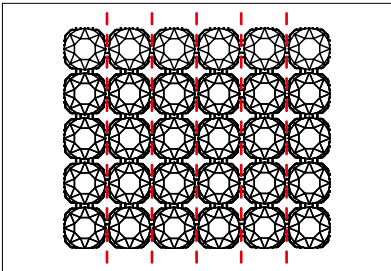
Button sewing program

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

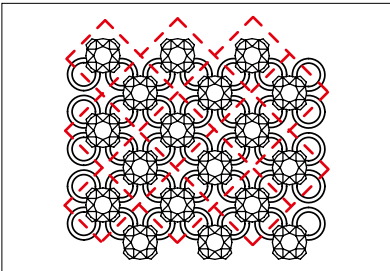
Types of stitch direction



Multi-row products
Straight stitch in lateral direction



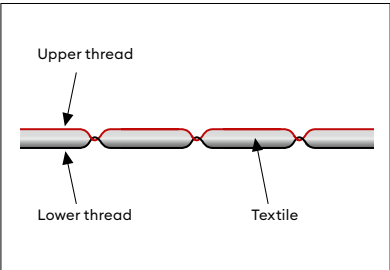
Multi-row products
Straight stitch in longitudinal direction



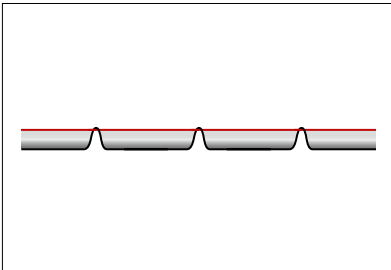
Multi-row products
straight stitch in diagonal direction to the outside

Adjusting the upper thread tension

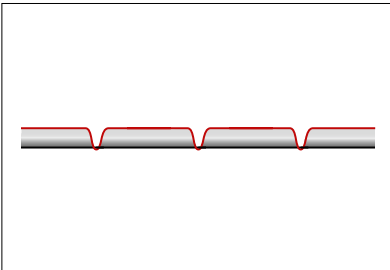
If the upper thread tension is too tight or too loose, the resulting seam is not strong. The tension of the thread must therefore be adjusted accordingly.



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

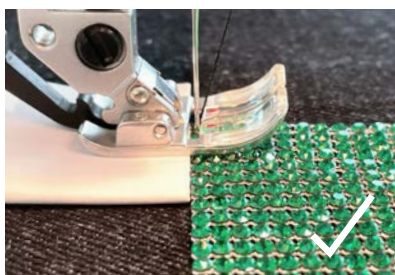
SWAROVSKI PRODUCTS		MACHINE	TOOL	PROGRAM	NOTE
Sew-On Articles & Crystal Buttons	Sew-on Articles	Sewing machine	Button foot	Buttong sewing program or zigzag stitch without feet fuction	Switch off the lower feed, adjust the stitch width to the product. The use of the application tool in some type of sewing machines can require some readjustment of the tension release.
	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.
		Buttons sewer		Button sewing program	Holding clamps must be adjusted to the shape of the button
Crystal Textures	Crystal textures with foil overlay	Sewing machine	Standard presser foot	Straight stitch	
Linked Crystal Components	Crystal Mesh Standard/ Caviar 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
	Crystal Light Mesh/Crystal Light Mesh Mini	Sewing machine	Standard presser foot	Straight stitch	Stitching lines of mesh are set diagonally to the outside
	Cupchains	Sewing machine	Beading presser foot	Zigzag stitch	Adjust the stitch width to the product
	Multirow Cupchains for PP14	Sewing machine	Standard presser foot	Straight stitch	Pre fix the cups on the fabric and straight stitch the space between cups in lateral direction
	Multirow Cupchains for PP18 And PP24	Sewing machine	Standard presser foot	Straight stitch	Pre fix the chups on the fabric and straight stitch the space ebetween cups in longitudinal direction
	Fishnet Bandings	Sewing machine	Special presser foot	Straight stitch	Stitch the banding between the rows of crystals by using 3d models of the special sewing feet

Application using a sewing machine

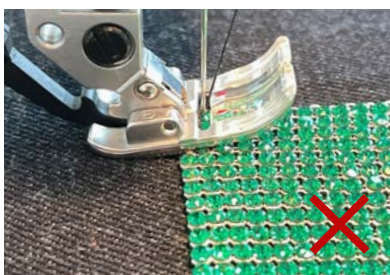
The right choice of needle (strength Nm 70 – 100), sewing thread and thread tension (upper and lower thread) are particularly important for applications with a sewing machine. The fabric must not become gathered and the upper and lower thread should run easily and smoothly.

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



Cupchains

Make sure that the Cupchain runs parallel to the foot.



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.



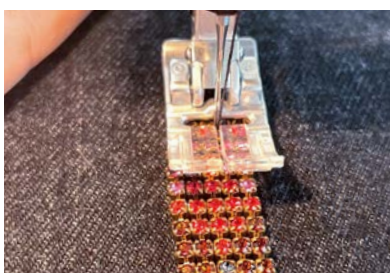
Fishnet Bandings

Stitch the bandings between the rows by using 3D models of special sewing feet.



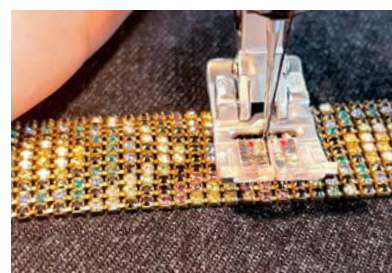
Crystal Light Mesh and Crystal Light Mesh Mini

Stitching lines of mesh are set diagonally to the outside



Multi-Row Cupchains

Sewing application in longitudinal direction.



Multi-Row Cupchains

Sewing application in lateral direction.

Application Instruction Movie

Sewing Plastic Trimmings

Watch Sewing instruction movie online at
<https://b2b.ecommerce.swarovski.com>



Application Advice for Crystal Texture Foil Overlay when using the sewing technique:

Window technique

Benefits:

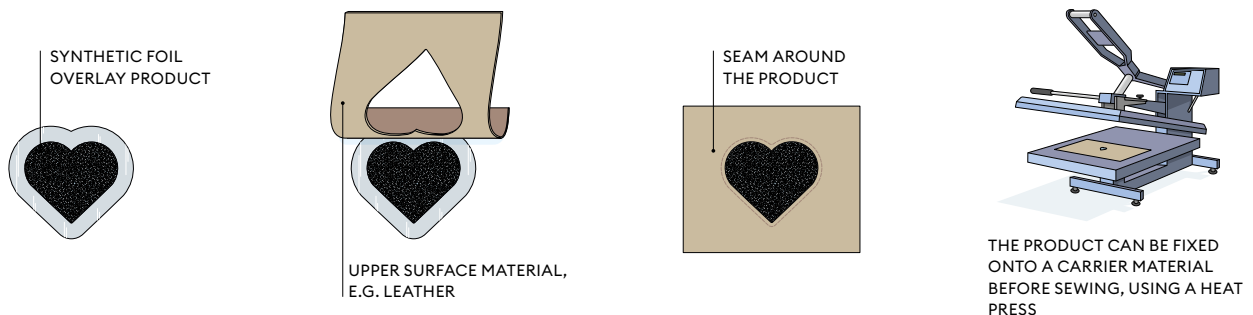
- this means that even if the product gets buckled, there is no visible gap between the carrier material and the upper surface.
- Saves on cost thanks to the ease of application (no sewing onto crystal-covered areas is required) and less crystals are used because areas are covered by the upper surface material anyway.

A chosen material, such as leather, with a cut-out in the shape of the Crystal Texture Foil Overlay motif is placed over the product. Using a sewing machine, the upper surface material can be sewn together with the Synthetic Foil Overlay.

Due to the fact that the foil overlay comes with Hotfix glue on the reverse side, the Crystal Texture Foil Overlay can be fixed onto a carrier material

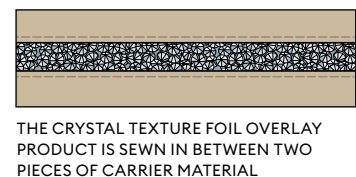
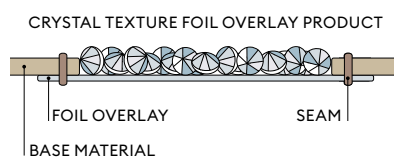
using the Hotfix technique before sewing the various parts together. The application parameters relating to the relevant product groups apply. The Hotfix Selectors can be found in the chapter Hotfix Application.

07



Sewing between two materials

Thanks to the foil overlay, the Crystal Textures can now be used between two materials (e.g. leather, fabric,...) without having to be applied to another carrier material beforehand.



SELECTING THE OPTIMUM THREAD

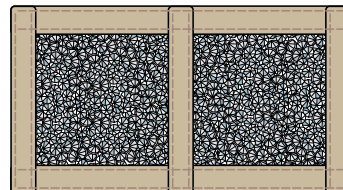
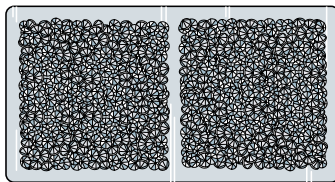
SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD TENSION

APPLICATION

"Weaving-look"

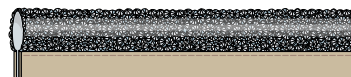
Motifs with big foil surfaces (not covered with crystals) can easily be added to carrier materials by using the sewing technique, which makes them look as though they have been woven into other materials.



Create a tube

A tube-shaped product can be created by folding the Synthetic Foil Overlay and sewing it into position. If the tube needs to be stronger and more stable, a cylinder-shaped material such as cord can be added as a core element.

This technique is ideal when using a Crystal Texture Foil Overlay tube to create a border on a sleeve or to decorate a fringe on a garment, for example.



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.

SELECTING THE OPTIMUM THREAD

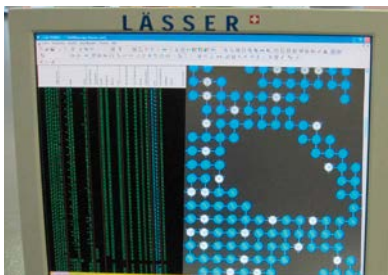
SELECTING THE STITCH TYPE

ADJUSTING THE UPPER THREAD TENSION

APPLICATION



1 Draw the desired motif.



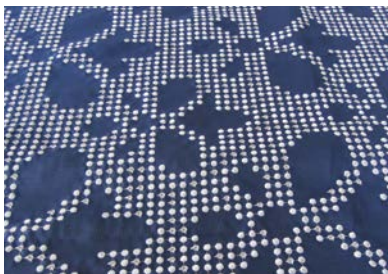
2 Enter the design into the embroidery software.



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.



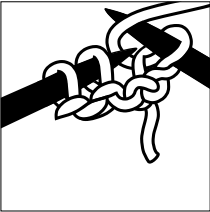
5 The embroidered material is now ready for further processing.

Picture source: S. Jurkowitzsch

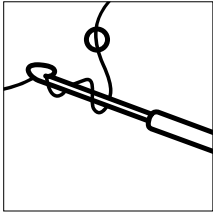
Hand application techniques

Some of the Swarovski products listed in the product overview at the beginning of this chapter can be

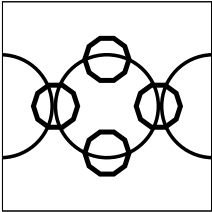
applied by hand. This means a range of creative application techniques in addition to sewing.



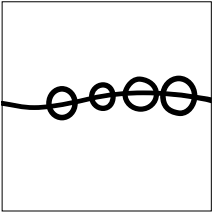
Knitting



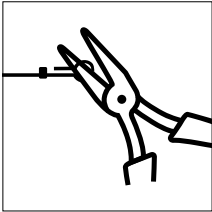
Crocheting



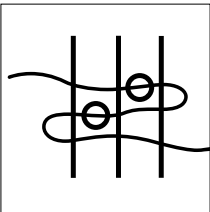
Beading



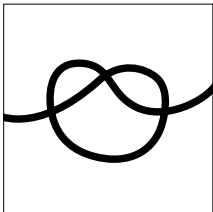
Threading



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.

Useful information

Cutting and sewing Crystal Mesh

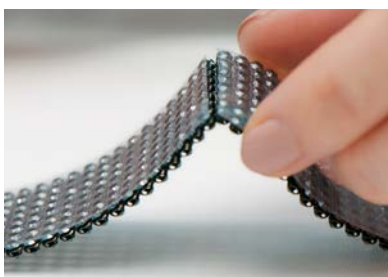
Before cutting and sewing, the transparent film must not be removed. The film allows the individual crystals to be aligned perfectly, and provides Crystal Mesh with the stability

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.

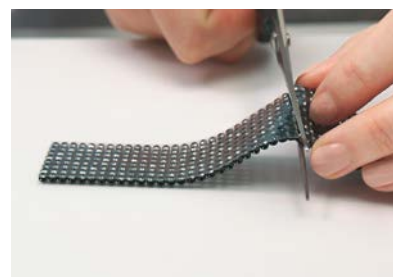
Cutting



- 1 Cut the transparent film between the rows of crystals with a knife, but do not pull them apart, otherwise the stability of the crystals will be lost.



- 2 After cutting the film, there is some space between the rows which allows you further processing.



- 3 Cut the metal mesh with a scissor 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.

Application Instruction Movie

Cutting Crystal Mesh

Learn how to cut Crystal Mesh properly by watching our instruction movie online at <https://b2b.ecommerce.swarovski.com>



Quick assistance

The following table outlines typical sewing, 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.