

#### **APPLICATION MANUAL**

# Crystal Net

PRECIOSA



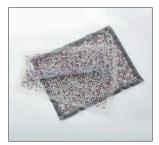
### Crystal Net Application Methods

Soft, light and flexible, our stunning Crystal Net is the first innovation of its kind and literally covers whatever it touches in authentic Bohemian crystal. Each piece is a customizable masterpiece of a combination of up to 10 different stone colors and sizes, allowing limitless possibilities and making the Crystal Net a high fashion frontrunner. Made with our premium quality, lead-free MC Chaton Rose MAXIMA hotfix stones, the Crystal Net comes in eight stone sizes, (ss 10 – ss 48), and our full range of colors and coatings.









Neat edge

Looped edge

Loose edge

Filled-in edge (for machine sewing)

#### MACHINES, TOOLS AND AIDS

#### Tools for sewing







Household sewing machine

#### Tools for hotfix application







Hand-held applicator

Dry iron

Heat press

### Preparation & Cutting

Our Crystal Net is able to be cut into any desired shape, size or length.



1. Customizable according to any textile pattern.



2. Light weight and easy to handle.

### Machine Sewing

Appropriate for household sewing machines, (filled-in edge recommended).



1. Align the sewing machine with the edge.



2. Sew along the edge.



3. End sewing with backwards motion as with any textile.



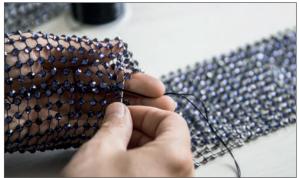
4. Crystal Net joined with textile.

**NOTE:** Crystal Net with a filled-in edge cannot be applied by iron or heat press, which could cause possible damage.

### Sewing by Hand

Crystal Net can also be sewn together and applied to textile, both by hand.





1. Crystal Net being sewn together.

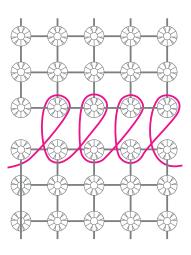




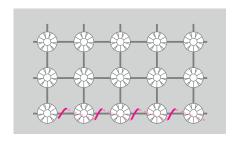
1. Crystal Net being sewn to textile.

#### Recommended stitching technique

Crystal Net to Crystal Net



Crystal Net to textile





### Hotfixing

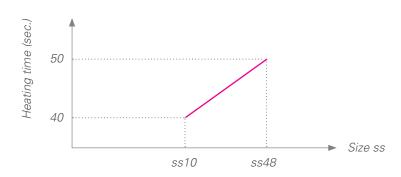
### Overview of temperature and time combinations for different materials (MC CHATON ROSE MAXIMA Hotfix)



Front side (ss20)

String type	Fabric	Temperature	Time (sec.)
elastic/non-elastic	cotton, chiffon, PES, silk, wool, denim	150°C	40

Time of heating depends on the size of the Chaton Rose





#### TIPS AND TRICKS

- To achieve optimal results, it is necessary to test all application parameters in advance on samples of materials chosen for the application. Use the parameters in the Application Time table for setting approximate values.
- Please note that the glue is cured and the bond between the applied stone and the base material becomes firm only 24 hours after the application. Until then, products containing hotfix stones should be handled with care; it is not recommended to check the bond quality or to wash the product.



### Warning:

Do not steam or iron textile to which the Crystal Net has been applied.

### **Heat Press**

For frequent and large-scale application of Crystal Net, a heat press is recommended.



1. Place and adjust the crystal net as desired.



2. Correctly placed Crystal Net on textile.



3. Heat for the recommended length of time according to the table found on the opposite page.



4. Crystal Net applied to textile.

#### Positioning of Heat Press Plates

Make sure that the upper and lower plates are placed parallel to the fabric and stones so that the temperature and pressure are evenly distributed.







Plates are parallel - correct!

Plates are not parallel - incorrect!

### Dry Iron

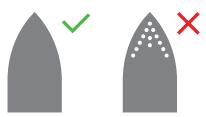
Crystal Net is easily applicable with a household dry iron, (without steam). For best results, place a sheet of baking paper between the iron and the stones during application.



1. Place the Crystal Net on the textile.



2. Carefully apply pressure; when applying pressure to a different spot, lift the iron and replace, (avoid the back-and-forth motion)



#### Advantage:

A dry iron can be used to apply any/all hotfix Chaton Roses.

#### Disadvantage:

Application can be uneven because it is done manually, as opposed to that achieved by a heat press.



#### Warning:

- Pressure and temperature regulations may vary.
- Pressure accuracy depends on the individual feeling of the person carrying out the application.
- Double checking the iron to make sure that it does not have any steam holes is recommended.
- Make sure to carry out the application on a firm, flat and even iron-safe padded surface.

### Hand-held Hotfix Applicator

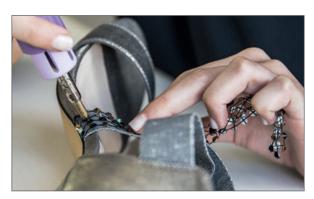
Hotfix by a hand-held applicator is also possible but is generally only recommended for DIY projects and individual or small-scale application of Crystal Net.



1. Cut the Crystal Net into the desired shape.



2. Begin by attaching/hotfixing the edge of the Crystal Net first.



3. Continue by hotfixing one stone at a time in the direction of the opposite edge.



4. It is recommended to use the application head one size smaller than that of the stone being applied so as not to burn the string or the textile.



#### Note:

- When using a hand-held applicator, always closely follow the instructions of the manufacturer, especially with regard to the temperature setting.
- Learn as you go! Base the application time and proper temperature setting on previous experience working with the base material.
- Hand-held applicators are generally only recommended for DIY projects.

### Heat Press Manufacturers

PRODUCER	TYPE OF MACHINE	LOCATION	WEB SITE
Bestblanks	Heat press	USA	www.bestblanks.com
Jesse J Heap & Son Inc.	Heat press	New Jersey, USA	www.jesseheap.com
PRO World	Heat press	Philadelphia, USA	www.proworldinc.com
RPL Supplies, Inc.	Heat press	New York, USA	www.rplsupplies.com
Stahls Europe GmbH	Heat press	Dillingen, Germany Ceské Budejovice, Czech Republic	stahlseurope.com
Teva	Heat press	Innsbruck, Austria	www.teva-organisation.com
Thermopress Europe	Heat press	Ransbach-Baumbach, Germany	www.thermopress.de
Wagner GmbH	Heat press	Geretsried, Germany	wagner-transferpressen.de
Avetech	Heat press	Prague, Czech Republic	www.avetech.cz
Lotus press	Heat press	Milan, Italy	www.lotustransfers.com
ColDesi, Inc	Heat press, Ultrasonic device, Stone setting machine	Florida, USA	www.coldesi.com
Zhejiang Huangyan Garment Machinery Factory	Heat press, Ultrasonic device	Shanghai, China	www.ji-feng.com
Geo Knight & Co., Inc.	Heat press	Massachusetts, USA	www.heatpress.com

### Dry Iron Manufacturers

PRODUCER	WEB SITE
BOSCH	www.bosch-home.com
ETA	www.etasince1943.com
Tefal	www.tefal.com
Philips	www.philips.com
Orava	www.orava.eu
Severin	www.severin.com

## Important Information

### POSSIBLE PROBLEMS, THEIR CAUSES AND RECOMMENDATIONS

PROBLEM	CAUSE
The stone does not adhere to the base material.	1, 2, 3, 4, 5, 6
0 1	7, 8, 9, 10
The stone does not hold on seams or layered materials.	1, 2, 3, 4, 5, 6

CAUSE	RECOMMENDATION	
1 The application temperature is too low.	Increase the temperature by at least 10 °C (20 °F).	
2 The application time is too short.	Prolong the application time. In case of a thick or multilayer material apply the heat from the front side through the stone.	
3 The pressure is too low.	More likely to occur when applying to thicker material - increase pressure.	
4 Uneven distribution of heat on the heated surface.	Check the temperature with a measuring tape or a laser thermometer. If the difference is higher than ca 5 °C (10 °F) repair the heat press.	
5 The heat press closes askew.	Repair the heat press.	
6 The application pad is not suitable.	Test different application pads and choose the most suitable one.	
7 The application temperature is too high.	Lower the temperature by at least 20 °C (40 °F).	
8 The application time is too long.	Shorten the application time.	
<b>9</b> The pressure is too high.	Decrease the pressure of the heat press.	
10 The application pad is too hard.	Use a softer application pad.	





**Preciosa Components** A Member of the Preciosa Group

Preciosa Group is a global leader in products manufactured from crystal. From the world famous Czech Beads and Crystal Components used in fashion industry, to tailor made Lighting projects for luxury hotels, royal palaces and yachts, the true craftsmanship of crystal production has been present in Bohemia since 16th century.