



# MADEIRA

## Tips and tricks to help you get started in commercial embroidery



Threads | Stabilisers | Accessories





**Dear Customers,**

Thank you for choosing Madeira premium embroidery threads.

Your choice enables you to access a comprehensive range of embroidery accessories and materials in certified quality. Rest assured that all items have been meticulously tested and selected for use with industrial and semi-professional embroidery machines.

This beginner's guide provides you with useful tips and advice to help answer the principle questions that initially arise in commercial embroidery. For further information, go to [madeira.com](http://madeira.com) or visit our online shop at [shop.madeira.com](http://shop.madeira.com)

We wish you every success with our threads, backings and accessories.

**Your MADEIRA Garnfabrik**





## **First things first: What do you want to embroider?**

What products are you embroidering? What purpose will the embroidered goods serve? Given that you will need to adapt your materials to the fabric, application area and cleaning process, for example, everything else depends on your answers to these questions.

### **Which thread should I use? And why?**

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Selection of the right thread depends on the embroidery requirements. If the selection of the right thread depends on the embroidery requirements. If the embroidery has to withstand specific treatments (industrial laundering, flames, hot pressing, bleaching etc.), then the selection of threads and backings will no doubt be fairly restricted. Good points of reference in such cases are textile care labels. To play it safe, always precisely clarify the intended purpose of the goods with the customer in advance.

Cellulose embroidery threads are the best choice for any textiles that are not subsequently treated with bleaching agent. Classic high-sheen viscose/rayon thread and the particularly sustainable Sensa Green lyocell matt satin thread are suitable for fine, soft embroideries with an exceptional sheen.

The use of chlorine-resistant polyester threads is recommended where the embroidered textiles are to be industrially laundered or subjected to bleaching. Furthermore, the robust structure of polyester ensures the embroidery has a longer lifespan, particularly in heavy-duty applications. Polyester threads such as Polyneon/Polyneon Green, Frosted Matt and CR Metallic are consequently also the ideal choice for workwear.

### **What does the number after the product name mean?**

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The number after the product name, such as 'CLASSIC 40', indicates the thread weight, whereby 40 is the standard weight. In the case of embroidery thread, the lower the number, the thicker the thread, and the higher the number, the thinner the thread.

**Thread weight 60 is therefore thinner than thread weight 40.**



## How many thread colours do I need to get started?

To begin with, 50 to 80 colours will generally suffice. To ensure you have samples of every colour in a given quality, we offer complete thread kits for most thread types with a spool of each colour.



**Tip:** Embroidery thread should be stored in a dark, dry and dust-free place. Thread stored in such a way has an almost unlimited shelf life.

## Which put-up size is practical?

Most threads are available in a put-up between 1,000 and 5,000 m, sometimes also in both lengths. We recommend 5,000 m cones for frequently used standard colours and 1,000 m spools for B colours.

To reduce set-up times, we recommend allocating a fixed place on the machine for black and white.



Spool

Cone

## How many stitches can be embroidered per spool or cone?

**As a general rule of thumb**  
(calculated thread consumption per 1,000 stitches):

Top thread approx. 5 m,  
bobbin thread approx 3 to 3.5 m

With a standard 40-weight thread, around 200,000 stitches can be embroidered with 1,000 m of thread using a stitch length of around 4 mm. As many as 1,000,000 stitches can therefore be created with 5,000 m of thread.

## Is it practical to use threads with different weights?

Using other threads can be practical depending on the design. Those who frequently embroider smaller lettering or delicate features would be well equipped with a 60-weight or 75-weight thread. Frosted Matt 40 is also suitable as it is similar to a 60-weight thread in terms of thickness and also emphasises the smaller details due to the lack of surface sheen.

A decisive factor for picking the right thread is the size of the smallest detail within a design. In terms of lettering, this is usually the smallest letter. The respective benchmark is:

- Up to a height of 5 mm 40-weight thread,
- Up to a height of 3 mm 60-weight thread,
- Up to a height of 2 mm 75-weight thread.

Small letters can rarely be created using an automatic punch program and therefore have to be individually punched.

To fill larger areas and for voluminous embroidery designs, the use of 30-weight or 12-weight thread can be more efficient as fewer stitches and less thread are required to cover the same area.

Ask your machine technician if threads of this size can be used on your machine. If different thread weights are used regularly, then allocate a permanent position on the machine for these and use a suitable needle.



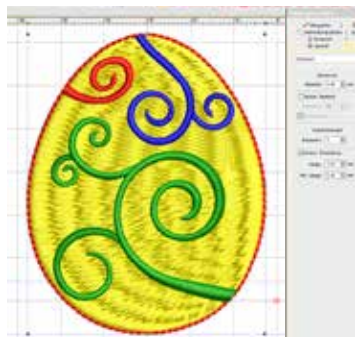


## What should be considered when using diverse thread qualities and weights?

Each thread quality and thread weight requires a correctly programmed design.

The choice of needle size must also be adapted to the thread weight to achieve the best results.

Always notify your puncher of what you are planning and what material you will be using so that the embroidery data can be optimally configured.



## Which is the correct needle?

The point and size of the needle are pivotal in terms of the quality of the embroidery. Selection of the needle size is determined by the design size, thread and the thickness of the material. The thinner the fabric and smaller and more detailed the embroidery design, then the thinner the needle.

### Needle recommendation:

12-weight thread = 100/16

30-weight thread = 75/11

40-weight thread = 65/9 to 75/11

60-weight thread = 60/8 to 65/9

The size details are metric and shown at a scale of 1/100. A needle with needle size 65 consequently has a diameter of 0.65 mm at its thickest point. Needles sized 65 to 75 are deemed all-round solutions and can be used for most applications.

In principle, work should always be carried out using the smallest possible needle. Change needles on a regular basis to avoid material damage and broken threads.

Further information on needles and their various points is available under the search term 'embroidery needles' at [madeira.com](http://madeira.com).





**Tip:** The batch number on cones and spools identify the production batch. We are therefore able to ascertain, even after a number of years, whether the colours of older thread samples are still available without change or whether a new colour is to be recommended.

## **Creative design opportunities with special effect threads**

In addition to its strengths with regard to smaller details, Frosted Matt polyester thread is also excellent for expressive embroidery as it precisely conveys colours and does not reflect light. Backgrounds created with Frosted Matt make foreground designs embroidered with high-sheen thread look brighter and more effective, while also providing sharper contours to lettering.

We offer a broad array of metal effect threads to create a metallic sheen for awards, religious motifs and logos. Application of these threads usually necessitates an exact configuration of the machine and a customised embroidery program. CR 40 Metallic is the exception. This easy-to-use thread can be processed with the same settings as Polyneon 40. CR is consequently the ideal special effect thread for newcomers to metallic thread embroidery.





### **Tip: Practice makes perfect**

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Having to try out a number of configurations before finally achieving the perfect embroidery result is nothing unusual. Change thread weights, types and tensions, as well as backings, etc., and discuss the various results with your customer until the desired quality is achieved.

### **How do I find the right bobbin thread**

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We recommend newcomers use the pre-wound bobbin threads also popular with professionals. These can be placed directly in the machine and have a long lifespan. In conjunction with precise winding, the high standard of thread quality enables processing with extremely low tensions, which counteracts embroidery distortion. As an alternative, we also offer bobbin threads to wind yourself.





## Why do I need backings and toppings?

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Embroidery backing and special embroidery topping are essential components of good quality embroidering. They stabilise the surface of the textile to be embroidered and therefore improve the result.

As a wide variety of textiles of varying thicknesses and material is available, there is also an extensive selection of backings. On our website, you will find the latest stabiliser brochure and a backing selector to help you choose the right materials.





## **Which are the best backings and toppings to use when starting out?**

Strictly speaking, every material has an ideal backing differentiated by material composition and strength. That said, you will certainly be well equipped with the following products:

- A CMX tear-away backing in the 50 g/ cm<sup>2</sup> and/or 75 g/ cm<sup>2</sup> weight class as a versatile all-rounder.
- Weblon or Weblon+ is a good choice for embroidering lettering on T-shirts and polo shirts. These thin, cut-away backings are almost invisible due to their transparent structure. Nevertheless, they keep their shape and lend stability to embroidery wash after wash.
- Fusible backings such as Weblon+, CMX or SMX are an excellent choice for delicate or stretch fabrics that cannot be framed without distortion.
- Depending on the preferred application, special backings such as the self-adhesive Stick-On or cap backing Caps Squares may also complement your range as needed.
- Embroidery toppings such as Avalon prevent the embroidery thread from sinking into the material when using terry cloth and coarse knitwear. This water-soluble topping is also recommended for embroidery on shirt and polo shirts.



## Why choose Madeira as a supplier?

100 years of experience in the production and manufacture of embroidery threads makes Madeira one of the leading specialists in the sector. Consistently geared towards high quality and optimal machine processing, our products give you the warm feeling of not only having the right product at your side, but also a strong, globally successful partner.

Obtain all your embroidery accessories in a practical and convenient way from a single source in the Madeira online shop or from our sales advisers. And should you encounter difficulties, our website and support team are available to provide solutions for virtually any problem.

Our aim is to make your first steps into embroidery as easy and pleasant as possible and be on hand with help and advice.

**We look forward to accompanying you as your future partner.**  
**Your MADEIRA Garnfabrik**

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Additional embroidery information, products and accessories are available in our product catalogue!

[www.madeira.com](http://www.madeira.com)  
[www.shop.madeira.de](http://www.shop.madeira.de)





This modest brochure only covers part of our comprehensive thread range, of which a brief overview is provided below.

**MADEIRA**, your manufacturer of high quality special effect threads for embroidery, decorative stitching, quilting and more. Variety both in look and to the touch:

### **CLASSIC**

naturally shiny viscose in 4 thread weights  
sustainable 100 % lyocell matt satin thread



**SENSA**  
green

### **POLYNEON**

durable polyester in 2 thread weights



**POLYNEON**  
green

recycled polyester thread in original Polyneon quality

### **FROSTED MATT**

matt polyester, NEW also in 30-weight thread

### **BURMILANA**

for a woolly effect

### **LUNA**

luminescent effect thread

### **FS - CR**

metallic effect thread in 10 thread weights

### **SUPERTWIST**

metallic sparkle in 2 thread weights

### **FIRE FIGHTER**

hardly flammable

### **BURMILON**

polyester bobbin thread in 2 thread weights

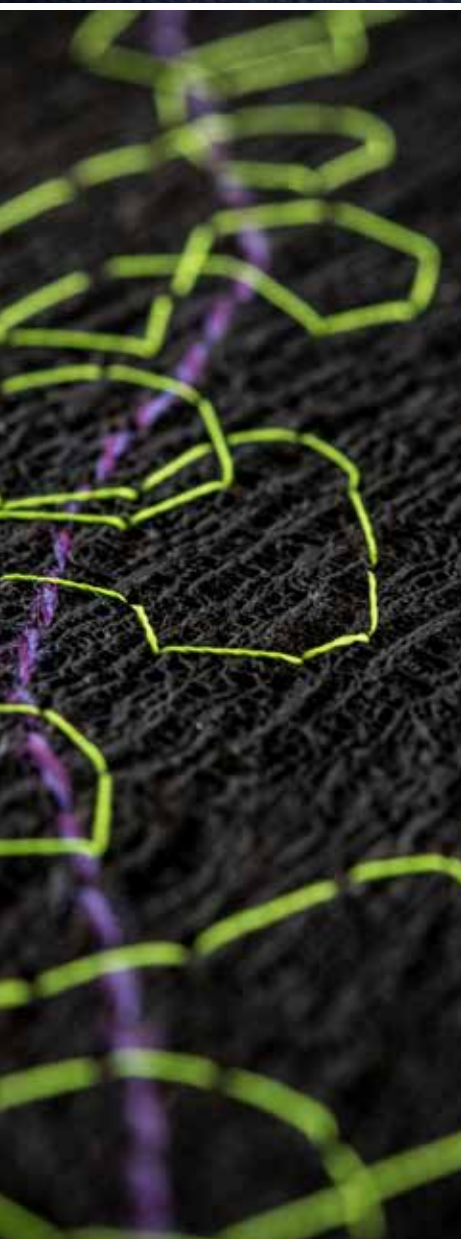
### **UNTERGARN**

pre-wound or to wind yourself

### **E-ZEE**

embroidery backings and toppings

AMEAL





## Quick-start help

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If you want to get started immediately, then Madeira is the right place for you – it's easy, convenient and rewarding.

The following products are recommended by our specialists for a successful start to embroidery.



## Basic materials for newcomers to embroidery

Product group	Item	Art. no.
Cut-away backing	Weblon Plus 55g	051WP59W
Tear-away backing	CMX 75g	051CMX7W
Cap backing	Squares caps* <sup>1</sup>	051QC71W
Water-soluble topping	Avalon, for embroidering towels and uneven fabrics	035AVA20
Polyester embroidery thread	Polyneon No. 40 - 5,000 m white	9181801
Polyester embroidery thread	Polyneon No. 40 - 5,000 m black	9181800
<b>NEW for sustainable embroidery: Polyneon Green made from recycled PET bottles</b>		
Recycled polyester embroidery thread	Polyneon Green No. 40 - 5,000 m white	7186801
Recycled polyester embroidery thread	Polyneon Green No. 40 - 5,000 m black	7186800
Polyester embroidery thread	Polyneon No. 60 - 1,500 m black	9241800
Bobbin thread for self-winding	Burmilon 120/2* <sup>2</sup>	301501
Pre-wound bobbin thread	Magnetic core bobbins	317501
Cutting tool	Seam ripper	020N9469
Cutting tool	Curved embroidery scissors, gold-plated	020N9476
Needle System DBxK5	60 FFG/SES - standard chrome	021060HR
Needle System DBxK5	70 RG SAN1 - titanium nitride coated	022070RG
Needle System 130/705H	65 RG* <sup>4</sup>	024065RG
Adhesive spray	MSA 1100 Temporary adhesive spray	025MSAN
Machine oil	Oil pen	050PEN
Shade card	Polyneon shade card	001PL84
Information material	<a href="http://www.madeira.com/de/service/support/downloads">www.madeira.com/de/service/support/downloads</a>	

Not quite sure or prefer to test again?

Then our sales service and all our partners are on hand to help:

**[www.madeira.com](http://www.madeira.com)**

\*<sup>1</sup> only when cap embroidery planned

\*<sup>2</sup> if winding machine available

\*<sup>4</sup> only for machines with flat shank needles

# Discover even more interesting facts on [madeira.com/faq](https://madeira.com/faq)

- ✓ Sample orders
- ✓ Technical data
- ✓ Colour selection
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Try our new sustainable  
embroidery threads now

- Sensa Green 100% Lyocell
- Polyneon Green 100%  
recycled polyester

We are happy to support you

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