

# A little help goes a long way...



With the expansion into embroidery and print, many of our readers may benefit from the expertise of companies such as Your Embroidery Services (YES Ltd). Last year we spoke to Roy Burton (MD of YES Ltd) and his team about some of the things to watch out for with embroidery needles. This time we are back with them talking about the needles partner – embroidery thread. Once again we realise that some of you will be more experienced than others, but we make no apologies for ‘stating the obvious’ as this is all too often what is forgotten.

**Follow the thread**

These days polyester has taken over the lead role from rayon which was, for many years, the staple of embroidery design. Made from viscose, rayon was created to replace the attractive, but increasingly expensive, silk. The lustrous finish of this thread was the perfect replacement and importantly was much more economical to use, but it does, however, have some disadvantages such as being flammable and quite weak. When the much stronger polyester came along it seemed to be the natural successor but, in truth, the early versions of this thread did not perform well. Improvements to manufacturing and finishing techniques though now mean that poly’ performs just as well as rayon and has the added advantage of being flame retardant (not resistant) and far less likely to ‘bleed’. These advantages have put polyester at the top of the tree and although rayon is still available and, in some cases, desirable, polyester is now the main stay of embroiderers all over the world. Let’s start off by looking at how thread should be stored.

Care should be taken when storing threads that the environment suits them. In general what suits one suits all but incorrect storage will have a different effect on each of them. The strength of polyester for instance is rarely affected by a damp environment, whereas rayon may be weakened and, in severe cases, ruined. The lack of effect on poly’ however, does not mean that you need less care. Whilst it may not be weakened, it will be affected in some other way and will have a detrimental effect on your production and quality. We are not going to tell you here how you should store your thread as

different manufacturers may have different criteria, but what we will advise you to do is to ask the question of your supplier. After all, if you follow their instructions and then something goes wrong, at least you have a decent argument.

The relationship with the needle is paramount when using embroidery thread, particularly the needle’s size. The two key areas on a needle, where the thread is concerned, are the eye and the long groove, as this is where the thread makes contact. As you would expect, the larger the size of the needle the larger these are and, therefore, the more room the thread has. As needle sizes reduce however, there comes a point where the eye and groove will be too small for the size of thread you are using, resulting in fraying or breaking. Needle and thread manufacturers and suppliers should know where this demarcation line is and be able to advise accordingly.

This can be one of the causes of threads breaking, but there are other criteria that can affect this and one of the key ones is the design (this is something we will cover in a future issue of TEN/eurotrophex magazine). Thread breaks are something that most embroiderers will experience and the thread tends to be the easy target, but it is often the innocent party. It is a problem however, that must be solved and as quickly as possible, so it is useful to have a method of isolating the cause. A way of doing this is with a simple chart with the rows relating to the number of heads on the machine and the columns of the needles per head. By monitoring where the breaks occur and putting a mark in the relevant cell you will see a pattern start to develop. Whilst it may seem that the breaks are happening evenly over the whole machine, it is far more likely

THREAD BREAK CHART

NEEDLES/HEADS	1	2	3	4
1	/			/
2				
3		+++ - - - -		
4		/	/	
5				
6				//
7				
8				
9	/			
10			/	
11				
12				

Here we can see that, although the user may think they have an even problem over the whole machine, the grid shows that the majority of the thread breaks occur on head 2 needle 3

that some heads/needles represent more of the fault. Once you know, for instance, that head 3 / needle 5 has more breaks, you can then move the thread from that part of the machine to another needle and see if the problem goes with it. If it does then it is the thread that is at fault but if it doesn’t then you need to look elsewhere.

If it is the thread that is at fault some may consider that it needs extra lubrication such as silicone - thus improving how the thread travels through the machine guides. Generally speaking this is a bad idea. Thread manufacturers spend a lot of money researching the best way to lubricate their thread and by adding a third party substance you could be creating a bigger problem. The coating on a thread is also there to protect it and this could also be affected. If you firmly believe that the thread managed to make its way out of the factory

without being finished properly then you should contact your supplier and make your feelings known.

Embroidery thread represents a massive subject and we have only scratched the surface here. As with needles, thread is a relatively low cost item in the grand scheme of things and, whilst it is good business to minimise your overheads as much as possible, remember the old saying: ‘penny wise, pound foolish.’ How you store and make use of that small package of thread, together with its quality, can have a massive effect on the excellence of the embroidery you produce as well as the productivity of your machine.

Should you wish to contact Your Embroidery Services Ltd you can do so on 01623 863343 or alternatively you can visit the website at [www.yesltd.co.uk](http://www.yesltd.co.uk).