MOST SEWING machines have the ability to create the zigzag stitch (ZZ), yet many quilters overlook the tremendous design opportunities when the length is shortened and the ZZ is turned into a *satin stitch!* I will cover some basics in this article and then delve deeper into tapering and edge finishes later in *Satin Stitch Techniques – Part Two*, in the January/February 2015 issue of MQU.

**A Few Essentials**

A major consideration for achieving a pretty satin stitch is the *thread* you choose. There are many threads on today’s market that are made specifically for decorative purposes. Polyester is probably the most widely available, but I am not talking about the polyester threads of yesterday! *Do not* pick polyester sewing thread, serger thread or anything made for utilitarian use. Select the high sheen poly threads made for embroidery machines, quilting and decorative use. These will definitely enhance your work! Silk, rayon and cotton threads can also be used. I choose cotton when I do not want a high sheen. ([Photo 1](#))

I try to stay with a 30 or 40wt. thread for the top. When lighter/finer threads are used the stitching may not be ‘satiny’ enough because there is too much space between the stitches. I always use the finest thread I have in the bobbin, usually a 60wt. cotton or poly in a neutral color, and I do not change the bobbin thread during the project.

Using the correct presser foot is important for this technique. I find that an *open toe*...
ZZ and shortened the length as I went, but not enough to obtain a nice satin stitch. Row B has the length set short enough so the threads are lying just next to each other, which is necessary for satin stitching.

When working with a dense satin stitch, you must use a stabilizer. I often simply use computer or scrap paper placed under the base fabric. The needle perforates the paper with the very close stitches required by satin stitching so it pulls off effortlessly when you have finished stitching. As a bonus it is readily available. Some will argue that this paper dulls your needles. Well, yes, that is true! So I just purchase a few extra needles.

There are also many great tear away stabilizers on the market today. These are designed to be sewn through without dulling needles. I prefer to use this type of stabilizer when I am sewing my built-in machine decorative stitches.

**Testing Your Satin Stitch**

Set your machine to the ZZ stitch. On many modern computerized machines, it will automatically set itself to a medium width and medium length. First we will play with length adjustment. Make a practice sample similar to the one shown in Photo 3. The bottom section of Photo 3 shows the stitching from the back and the paper stabilizer. In Row A, I started with the basic ZZ and shortened the length as I went, but not enough to obtain a nice satin stitch. Row B has the length set short enough so the threads are lying just next to each other, which is necessary for satin stitching.

**Row A:** Basic zigzag stitch, with the length shortened as it was sewn. This is not quite shortened enough for good satin stitching.

**Row B:** Basic zigzag stitch, at the correct length for satin stitching, but not the correct tension.

**Row C:** Zigzag stitch with correct length and tension loosened appropriately for satin stitching. Some bobbin thread is showing on the back side.

**Row D:** The tension is loosened too much in this example; no bobbin thread is showing on the back side.
The upper tension generally needs to be loosened for a good satin stitch. **Rows A** and **B** show normal tension and **Row C** shows the perfect tension for satin stitching. The threads look more even and soft on top and the bobbin thread is not pulling up. If the upper tension is loosened too much, you will see no bobbin thread. (**Row D**) The upper tension needs to be tightened back up a little on this row.

In **Photo 4**, I played with the width adjustment. **Row A** is sewn with widths of 1, 2 & 3mm respectively, down the row. **Row B** is sewn with widths of 4, 5 & 6mm. **Row C** is sewn with 7, 8 & 9mm. 9mm is the widest ZZ my machine will sew. Of course, increments in between the whole numbers can also be used. I generally accomplish my satin stitch appliqué with a width of 2, 2.5 or 3mm. Choose the width that best suits the project you are working on.

Notice how **Row D** in **Photo 4** is puckering left to right and does not have an attractive look? Often people think this is a tension problem but it is not. This is called ‘tunneling’ and it is caused by not enough stabilization to hold the fabric flat on wider ZZ stitches. Simply add more stabilizer if this happens.

**Maintaining a Beautiful Satin Stitch**

To maintain a beautiful satin stitch around a curve, the fabric cannot just be pushed around. The stitches become uneven and slanted. You must stop with the needle down and then raise the presser foot and slightly pivot the fabric. Modern machines with the needle down function and knee levers and/or buttons to raise the presser foot are fabulous for satin stitch work! Sew in a clockwise direction.

On an outside curve, stop with the needle down on the outside of the curve (the right hand swing of the ZZ). Raise the foot and slightly pivot the fabric. If you stop and pivot on the incorrect side it will produce a gap in the stitching.

On an inside curve, stop with the needle on the inside of the curve (left swing), raise the foot and slightly pivot the fabric.

To turn an outside corner, stop with your needle down on the right swing or the very outside edge of the appliqué piece. Lift the presser foot, then turn and stitch over the previous stitches. Keep your fingers very close to the foot and ‘assist’ it up and over the dense, close satin stitches. This does not mean that you have to push it through the machine. Just a slight pressure from your fingers is enough to help coax it over.

Satin stitching to a point is probably the most challenging skill to learn—yet also the most fun! While you are sewing the satin stitch, the width of the stitch needs to be changed to taper down to a point. Stop at the point with needle down and then turn and taper your stitch width back up, going over the previous stitching. This does

---

**Row A:** Line sewn with widths of 1, 2 and 3mm respectively down the row.

**Row B:** Line sewn with widths of 4, 5 and 6mm.

**Row C:** Line sewn with widths of 7, 8 and 9mm.

**Row D:** Tunneling, caused by not enough stabilization on a wide satin stitch.
require some practice but the results are well worth the effort! In *Part Two* of this article tapering will be addressed in more detail.

In Photo 5, the arrow on the left was stitched by pushing the fabric around the curves and pivoting on the incorrect side. The arrow on the right was stitched by stopping and pivoting the fabric correctly for curves. The points were tapered by gradually turning the width control on my machine. Do you see the difference in the quality?

**Satin Stitch Machine Appliqué**

Machine appliqué is the perfect place to use satin stitch techniques. I apply a paper backed fusible web, such as Wonder Under or Steam-A-Seam, to the wrong side of a ‘chunk’ of my fabric and then cut out my appliqué shape. This seals the edges so there is no unsightly raveling. Fuse the appliqué into place. Be sure to stabilize before satin stitching the edges of the piece and follow the basic pivot rules listed here. For the nicest look, keep your satin stitch on the appliqué fabric and let the needle fall just off the edge as in Photo 6.

My finished arrow appliqué is shown in Photo 7. The arrow in Photo 8 can be traced and enlarged and used as an appliqué to practice the basic pivots and turns described here, or the arrow image

5. Arrow A shows satin stitching sewn incorrectly. Arrow B shows satin stitching sewn with the correct needle placement for inside and outside edges and pivoting.

6. Zigzag position on appliqué.

7. Finished arrow appliqué.
Satin Stitch Appliqué in Quilts

I prefer to accomplish the satin stitch appliqué on my quilt blocks before they are sandwiched with batting. It is much easier to work with a small block and one layer of cotton fabric. The base fabric should be cut a little larger than needed and a stabilizer applied. Fuse the appliqué design to the fabric and satin stitch the edges. Tear away the stabilizer and give the block a good pressing. Trim the block to the correct size. After layering the quilt with batting and backing, I always outline quilt around the appliqué design. This stabilizes the quilt and makes the appliqué truly stand out!

Button Flowers was a fun wall hanging I made from the book Flowering Quilts by Kim Schaefer. Scraps were satin stitch appliqué onto the blocks prior to quilting. (Photos 9 & 10)