

NEW MACHINE NEEDLE RANGE



Klasse'

Superb new Colour Shank system

We are delighted to introduce coloured shanks as a new standard feature across the Klasse' needle range. This outstanding and distinguishing new feature, is the only range wide colour system available. All Klasse' needle point styles are now easily identifiable by consumers and retailers alike. The Klasse' brand is now even more consumer friendly.

Universal - Standard Silver Tops



Ball Point - Black Tops



Stretch - Red Tops



Jeans - Blue Tops



Leather - Brown Tops



Sharps/Microtex - Green Tops



Quilting - Lime Green Tops



Embroidery - Purple Tops



Metalfil/Metallic - Yellow Tops



Top Stitching - Orange Tops



Anti-Glue Embroidery - Gun Metal
Tops



With this new colour shank system, consumers will always know what style of needle they are sewing with. This colour system is completely unique to Klasse' and Hemline needles.

Needle Shank Size Marking

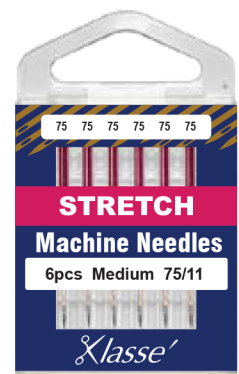
Klasse': the first machine needle brand to provide range-wide shank colour referencing. Klasse' shanks are stamped with the needle size in both metric & imperial measurements.



New Consumer Pack

Klasse' is also introducing a new consumer friendly pack. Super lightweight one-piece design with a unique flip-top and sit function. Needles will simply slide in and out as required. This new pack is a world-first and cuts down on single-use plastic packaging, whilst keeping needles safe, secure and ready to use. So easy to store and use!

Retail space is expensive! From the retailer's perspective, the new compact pack enables retailers to stock a wider range of needles in the same space, generating more sales per square metre/ft.



The Klasse' Website

Visit www.klasse.com for information about correct needle selection, and a wealth of educational material on Klasse' machine needles. Subjects covered include the needles required by specific overlockers and sergers, the importance of changing needles regularly, the reasons for needle breakage and much more.



www.klasse.com

Klasse' sew much better

General Information

Domestic sewing machines today basically use the one needle system (705/130 or HAX1) but they are available in a variety of sizes and types. Selecting the right needle and thread for the fabric is one of the most fundamental steps to achieving a successful stitching result.

Machine Needles come in sizes ranging from 60 to 120, the lower the number, the finer the needle. Thread, however, is the opposite, the finer the thread, the higher the number.

When sewing, the thread lies in the needle groove, if the needle is too fine for the thread, the thread will not fit into the groove causing faulty stitching.

The needle must be in perfect condition, stitching problems occur from using a needle that is blunt, bent or if the tip has been damaged.

WHEN IN DOUBT - CHANGE THE NEEDLE!

Some common stitching problems that may be caused by the needle

PROBLEM	POSSIBLE CAUSE
Machine noisy	Blunt needle
Machine skips stitches	Damaged needle or wrong size or type
Seams pucker when stitched	Damaged needle or wrong size or type
Machine jams	Damaged needle
Upper thread breaks	Needle too small, damaged or wrong type
Tension is unbalanced	Needle size too small, Thread too thick

Needle breakage

QUALITY NEEDLES ARE DESIGNED TO BREAK

"It is true, that the higher the quality of the needle, the more likely it will break, and a low quality needle will almost never break but bend!"

Why is this so? A machine needle is a precision made tool, which is designed to perform within very fine tolerances and at temperatures that vary from room temperature to over 200 degrees Celsius. One of the performance criteria's for a quality needle is that it must break cleanly when deflected more than 15 degrees from the vertical.

The reason for this is that the needle is operating within very fine clearance of the sewing machine hook mechanism, and this expensive and critical part of the sewing machine must be protected from damage.

If the Hook (which catches the needle thread and carries it around the bobbin to form the lock stitch) is scratched or damaged by the needle, this could result in stitching and tension problems and ultimately an expensive repair bill.

If during the stitching process, the needle is deflected more than 15 degrees, or if it is bent and remains bent, it is likely that damage to important parts of the sewing machine will result.

So good quality sewing machine needles are designed to break when something is wrong, so as to protect the expensive mechanism of the machine. When a needle breaks regularly, look for the cause - don't blame the needle!

Possible causes of needle breakage.

- Bent needle
- Needle too fine for fabric
- Stitching over pins or zipper
- Wrong needle system for machine model
- Upper tension too tight
- Changing needle position with needle in the needle hole
- Bobbin case incorrectly fitted
- Loose presser foot
- Needle not properly set or loose
- Material too thick
- Pulling fabric with needle still in fabric
- Pulling fabric towards the front
- Pulling fabric without raising the presser foot
- Bobbin incorrectly set



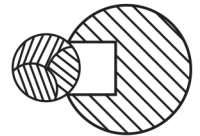
Needle size and Thread diameter Relation

In general the sewing thread diameter should be about 40% of the needle size (Nm).

The reason for this is the ratio of the needle size to the cross-section of the long groove.

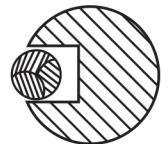
Thread too thick for needle groove

The long groove down the front of the needle plays a critical role in the formation of each stitch. The width of this groove is 40% of the needle diameter, i.e. in a size 100 needle (which is 1.00mm thick) the groove size is 0.40mm. The thread must fit nicely into this groove, and if the thread is too thick as shown in this first drawing, the thread can jam and all types of stitching problems will occur: such as thread stripping, thread breaking, missed stitches, uneven tension etc.



Thread ideal size for needle groove

When the thread size fits neatly into the long groove, this creates the optimum condition for the best stitch, the best tension and hassle free stitching.

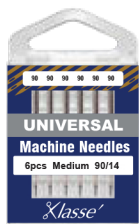


Thread too fine for needle groove

When the thread is much thinner than the groove, this creates a situation where an excessive amount of thread can form in the groove, which in turn may reduce the size of the loop and skipped stitches, uneven tensioning etc can result.



Colour Coded Range



Universal Needle

Ideal for most woven fabrics, knits and synthetics. The Universal Needle has a slight ball point making it extremely versatile. It works well on most machines and is the most commonly used needle for synthetic woven and natural fibres. The finer needles are generally used on lightweight fabrics and the larger size needles are for medium to heavyweight fabrics. Threads range from 100% cotton and silk to a variety of synthetic and polyester/cotton blends.

Available in sizes: 70/10, 75/11, 80/12, 90/14 and 60/8, 100/16, 110/18, 120/20 assortment pack and Titanium 75/11.



Ballpoint Needle

Ideal for cotton knits, interlock, rib knits, fleece, double knits, suede and most knit fabrics. The tip is more rounded than Universal needle and is designed to push the fabric fibres apart than cutting them, preventing the knit fabric laddering or running after stitching. Generally threads are polyester or polyester/cotton blends, once again the finer the needle the finer the thread used.

Available in sizes: 70/10, 80/12, 90/14 assortment pack.



Stretch Needle

Designed especially for two-way stretch knits, spandex, power net, silk jersey, spandex and highly elasticised synthetic fabrics, also ideal for sewing elastics. The Stretch Needle has a specially designed scarf which prevents skipped stitches. Threads are usually polyester or cotton wrapped polyester, and for extra stretch woolly nylon threads are available.

Available in sizes: 75/11, 90/14.



Jeans Needle

Ideally suited for denim fabrics, heavy twill, workwear, and densely woven fabrics such as canvas and heavy linens. Engineered to have a very sharp point and a stiffer shank to resist needle deflection and allow penetration of dense fabric. Threads range from synthetic or blends, cotton wrapped polyester, 100% polyester and topstitching threads.

Available in sizes: 90/14 and 100/16, 110/18 assortment pack.



Metallic Needle

Ideal for sewing and embroidery with rayon and metallic threads on woven or knitted fabrics. The Metallic Needle is designed with a very large eye, allowing the threads to feed freely as you sew without splitting, burring or shredding. This needle is also suitable for general purpose sewing, giving the added advantage of being easier to thread due to the enlarged eye.

Available in sizes: 80/12, 90/14 assortment pack.



Sharp / Microtex Needle

The sharp point of this needle is designed for stitching tightly woven fabrics and is ideal to use with silk, microfibre and other synthetic fabrics. The sharp point will give you a perfect straight stitch, making it an ideal needle for topstitching, and patchwork. The finer needles such as size 60 must be used with a very fine thread such as size 60 & 80.

Available in sizes: 80/12, 90/14 and 60/8, 70/10 assortment pack.



Quilting Needle

Ideal for piercing and quilting layers of cotton fabrics with batting, a strengthened shaft also helps to reduce needle deflections as the needle penetrates multiple layers of fabric.

Available in sizes: 75/11, 90/14 and Titanium 80/12.



Leather Needle

The Leather Needle has a cutting point and is used for sewing leather, suedes and difficult to sew projects. It is often referred to as a chisel point needle as the point resembles and acts as a chisel in motion. Do not use with Ultra Suede or textiles.

Available in sizes: 80/12, 90/14, 100/16, 110/18 assortment pack.



Colour Coded Range



Topstitch Needle

Extra large eye accommodates thick topstitching thread. Extra sharp point allows needle to penetrate easily through all fabrics.

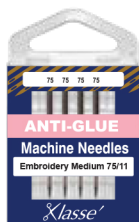
Available in sizes: 80/12, 90/14 and 100/16.



Embroidery Needle

The Embroidery Needle is specially designed for machine embroidery using Rayon, Polyester or Cotton machine embroidery threads. This needle features a wider hole to allow the thread to pass freely. Another feature is a pontoon scarf with oversize bump to reduce the chance of skipped stitches which can result when fabric is flexing up and down rapidly with the fast moving needle.

Available in sizes: 75/11, 90/14 and Titanium 80/12.



Anti-Glue Embroidery Needle

High and long lasting effect of the anti-adhesion with smooth surface. It has a very good embroidery property. It is particularly suitable for materials which are fixed with adhesive sprays, e.g. fleece or Velcro. It significantly reduces the appearance of glue remainders in the groove and the eye of the needle. The life time of Anti-Glue needles is remarkably longer in comparison to ordinary embroidery needles. When using Anti-Glue needles thread breaking due to glued needles is minimized.

Available in sizes: 75/11, 90/14.



Wing / Hemstitch Needle

Single "wing" blade on the side of needle cuts a narrow hole in fabric, creating popular heirloom style decorative stitching.

Available in size: 100/16.



Twin Needle

The Twin Needle is used for practical and decorative sewing such as pintucks, seam finishes, topstitching etc. The size of the needle is measured in mm from tip to tip (2mm needle has a 2mm space between the points). Available in many types and sizes. Klasse' twin needles are uniquely colour coded for easy identification.

Available in Universal, Ballpoint, Stretch, Jeans, Embroidery and Metallic types, in many sizes.



Serger / Overlockers

Sergers / overlockers use different needle systems according to the make and model of the sewing machine. Refer to the machine instruction book or the list opposite to select the correct needle.

Available in size: 80/12, in type A, B, E, G, J, K, L. 90/14, in type M.



Triple Needle

For heirloom sewing and decorative topstitching. Size indicates distance between needles. Triple needles are fixed in a nylon block and should be used at slower speeds and not for prolonged periods.

Available in Universal size 80/12 only.

