

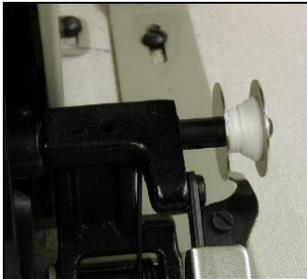
Pre-wound Bobbins versus Sewing Machine Wound Bobbins

Pre-wound bobbins will have significantly more yardage than bobbins being wound by the sewing operator contributing to:

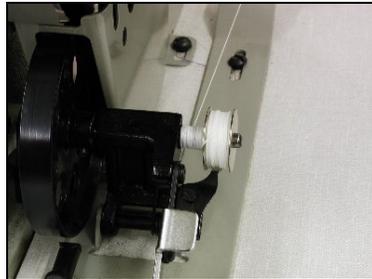
- fewer and quicker bobbin changes – higher productivity
- predictable run-times – fewer costly repairs and better quality seaming
- less thread waste

Precision pre-wound bobbins also help eliminate common bobbin winding problems that occur during winding bobbins on the sewing machine. These include:

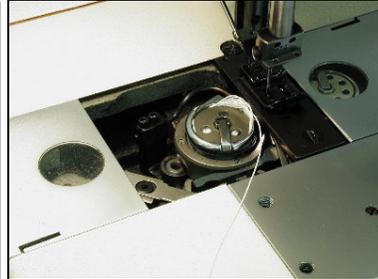
- not completely filling the bobbin – less yardage – less production
- improper wind on bobbin – inconsistent thread tension – inconsistent stitch balance
- spill-overs – where thread spills over the side of the bobbin during winding wasting time and thread.



Improper wind



Spill-over



Bobbin Over-spin

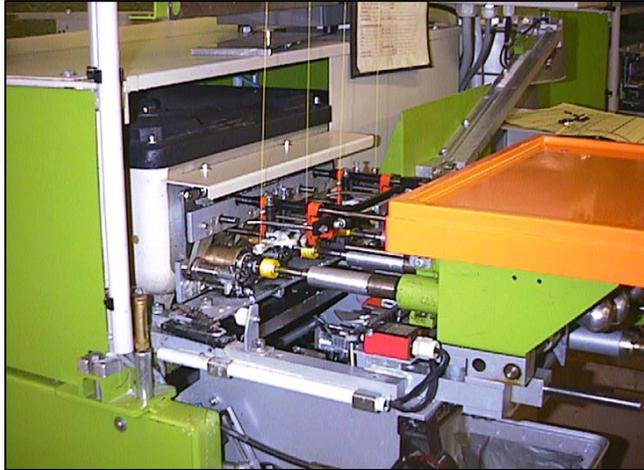
Sewing machine wound bobbins will vary in yardage depending on the knock-off adjustment of the bobbin winder, the tension applied by the bobbin winder, and the alignment of the bobbin winder components. Misalignment of the bobbin winder components will not allow the bobbin to wind uniformly adversely affecting both the amount of yardage and the bobbin tension during sewing. Pre-wound bobbins are wound on industrial bobbin winders that control the wind angle, tension, and precision of the wind.

A&E Precision Filament Bobbins (*Anecord*[®] or *Anefil*[®]) are also wound with “tack” to minimize bobbin overspin and give a consistent thread tension all the way to the bobbin core. Consistent “tack” application is a key to consistent sewing performance and seam quality.

What is “overspin” and why is it a problem?

“Overspin is when the bobbin continues to rotate when the operator stops sewing causing excessive slack thread in the bobbin case. Sometimes this will cause the bobbin thread to hang or break.”

A&E has spent years perfecting the tack on our continuous filament bobbins to minimize overspin and optimize tension control from the start to the finish of each and every bobbin.



**American & Efid's
Precision automatic
Filament bobbin
Winder**

Typically a precision wound pre-wound bobbin has at least 15 to 40% more yardage than bobbins wound on a sewing machine bobbin winder. The yardage that can be wound on a bobbin is primarily dependent on the following:

- The thread type and size (the smaller & flatter the thread - the more yardage)
- The bobbin style (which determines the size of the core, diameter & width of the bobbin)
- The precision of wind during manufacturing

Example of yardage per bobbin comparing Machine Wound and Precision Wound Bobbins:

Thread used: T-70 (M40) *Anefil*[®] Nylon

Bobbin Syle: **M**

Average Yardage - Machine Wound Bobbin	=	38 yards or 35 meters
Average Yardage - A&E Precision Wound Bobbin	=	46 yards or 42 metres
% Difference	=	20%

FILAMENT BOBBIN THREADS

When selecting the right bobbin for your application, the following decisions should be made:

- Size and Type of thread? (T-70 (M40) *Anefil*[®] *Nylon*)
- Style and Size of Bobbin? (Style M or Style G)
- Sided or Sideless (if available)? (Sideless)
- Color? (Black)

Many footwear and furniture manufacturers are using A&E's *Anefil*[®] *Nylon* twisted multifilament needle thread along with a smaller diameter *Anecord*[®] *Nylon* monocord bobbin thread. This sewing combination allows them to take advantage of the excellent sewability and seam performance characteristics of *Anefil*[®] *Nylon* and the higher loop strength, lower seam profile, and much higher yardage per bobbin of *Anecord*[®] *Nylon* monocord bobbin thread.

Needle: T-90 (M30) *Anefil*[®] *Nylon* | T-90 (M30) *Anefil*[®] *Nylon*
Bobbin: T-90 (M30) *Anefil*[®] *Nylon* | T-70 (M40) *Anecord*[®] *Nylon*

Seam Break Strength		What Failed?	Seam Break Strength		What Failed?
171		Ndl. Thd.	184		Ndl. Thd.
193		Bn. Thd.	172		Bn. Thd.
190		Ndl. Thd.	190		Bn. Thd.
174		Bn. Thd.	186		Bn. Thd.
168		Ndl. Thd.	174		Bn. Thd.
182		Ndl. Thd.	174		Ndl. Thd.
182		Bn. Thd.	180		Bn. Thd.
192		Ndl. Thd.	195		Bn. Thd.
182		Both	170		Ndl. Thd.
186		Both	180		Ndl. Thd.
Avg.	182.0	lbs.	180.5		lbs.

[Example of yardage per bobbin using smaller Anecord™ Nylon monocord bobbin thread](#)

Thread used: T-70 (M40) *Anefil® Nylon*

Bobbin Style: **M**

Average Yardage on Machine Wound Bobbin = 38 yards or 35 meters

Thread used: T-45 (M60) *Anecord® Nylon*

Average Yardage - A&E Precision Wound Bobbin = 78 yards or 71 metres

% Difference = 105% more thread

You should use caution when using a smaller diameter sewing thread of the same thread construction in the bobbin because the resulting seam strength will be only as strong as the smaller thread used.

SUMMARY

Bottom-line, studies have proven that pre-wound bobbins will pay for themselves due to fewer bobbin changes, higher production and better quality sewn products.

If you would like to try some of our new high performance bobbins, please contact your local A&E sales representative for samples or contact us at:

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