Temporary Hem Stabilization Applications in Garment Manufacturing

Durafil Water Soluble Thread (WST)

Technical Application Reference Document

1. Introduction

Temporary hem stabilization is a garment assembly operation where hem sections must be temporarily held in accurate position before permanent stitching or finishing operations are completed.

Hem constructions often involve folded fabric sections, shaped garment edges, layered assemblies, and appearance-sensitive garment areas requiring controlled positioning during sewing operations.

Because hems are highly visible garment features, temporary stabilization is often required to maintain consistent folding, alignment, and garment presentation throughout production.

Accurate temporary hem stabilization is important for:

- Hem consistency
- Garment appearance
- Fold alignment
- Sewing stability
- Production efficiency

Durafil Water Soluble Thread (WST) can be used as a temporary stitching solution during hem stabilization operations.

After washing, the temporary stitches dissolve and disappear.

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2. Production Challenge

During garment assembly, hem sections often require temporary stabilization before final sewing operations.

Common production challenges include:

- Movement of folded hem sections during sewing
- Inconsistent hem alignment
- Shifting during repeated garment handling
- Distortion of lightweight fabric edges
- Maintaining consistent hem width throughout production

Factories traditionally use temporary stitches to stabilize hem constructions before permanent attachment.

Because hem sections involve folded fabric geometry and visually exposed garment edges, maintaining alignment consistency throughout production can become difficult during sewing and handling operations.

3. Traditional Method

In conventional garment production, temporary hem stabilization is often achieved using:

- Standard sewing thread
- Manual tacking
- Temporary holding stitches

After permanent stitching is completed, operators manually remove the temporary stitches.

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4. Limitations of Traditional Temporary Stitching

Manual removal of temporary stitching may create several production issues:

- Additional labour requirement
- Slower finishing operations
- Risk of accidental fabric damage
- Inconsistent removal quality
- Increased handling time

On lightweight or appearance-sensitive garments, manual stitch removal may increase the risk of:

- Surface damage

- Yarn pulls
- Hem distortion
- Marking
- Accidental cutting of the garment

Repeated handling during stitch removal may also disturb hem alignment and garment presentation.

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5. Durafil Water Soluble Thread (WST) Solution

Durafil Water Soluble Thread (WST) provides a temporary stitching solution for hem stabilization applications.

The thread behaves like a normal sewing thread during assembly operations, holding hem sections in position during garment construction.

During washing, the temporary stitches dissolve and disappear.

This removes the need for manual stitch removal after sewing.

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6. Typical Temporary Hem Stabilization Applications

Durafil Water Soluble Thread (WST) may be used in applications including:

- Shirt hem stabilization
- Trouser hem positioning
- Skirt hem alignment
- Lightweight woven hem constructions
- Curved hem stabilization
- Temporary folded hem positioning

The thread may be used wherever temporary hem stabilization is beneficial during production.

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7. Operational Benefits

Using Durafil Water Soluble Thread (WST) for temporary hem stabilization can provide several operational advantages.

Improved Hem Alignment Stability

Temporary stitches help maintain accurate positioning and consistency of hem sections during sewing and handling operations.

Reduced Manual Labour

Because the temporary stitches dissolve during washing, manual stitch removal operations can be reduced.

Reduced Risk of Fabric Damage

Because temporary stitches dissolve during washing, the risk associated with manual cutting or pulling of stitches is reduced.

This is particularly beneficial for:

- Lightweight fabrics
- Delicate fabrics
- Folded hem constructions
- Tightly woven fabrics
- Appearance-sensitive garment areas

Improved Production Flow

Hem assembly operations can proceed without requiring a separate stitch removal operation after sewing.

Cleaner Garment Finishing

After washing, the temporary stitching disappears, leaving only the permanent seam construction and finished hem.

8. Garment Types

Temporary hem stabilization applications using Durafil Water Soluble Thread (WST) may be suitable for:

- Shirts
- Trousers
- Skirts
- Uniforms
- Fashion garments
- Appearance-sensitive garment constructions

Production trials are recommended for specific garment constructions.

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9. Production Outcome

Using Durafil Water Soluble Thread (WST) in temporary hem stabilization operations may help garment manufacturers:

- Simplify assembly workflow
- Reduce manual finishing operations
- Improve hem consistency
- Reduce handling complexity
- Improve operational efficiency

10. Related Application Areas

Additional temporary stitching applications may include:

- Pleat stabilization
- Temporary seam holding
- Cuff positioning
- Collar alignment
- Multi-layer fabric positioning

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11. Disclaimer

Performance depends on garment construction, washing conditions, and production processes.

Users are responsible for conducting suitability trials under actual production conditions prior to commercial use.

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12. Technical Support

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