Troubleshooting & Performance Guide

Durafil Heat Soluble Thread

Optimising Temporary Stitching Performance and Heat Removal Results

1. Purpose

This guide helps users optimise sewing performance, temporary stitch holding strength, and final heat removal results when using Durafil Heat Soluble Thread.

The product is designed for **bobbin thread use only** and must never be used as a needle thread.

Because final performance depends on sewing method, garment construction, heat process, and operator discipline, controlled trials are strongly recommended before bulk production.

2. Common Performance Issues and Corrective Actions

Issue	Likely Cause	Corrective Action
Thread breaks during sewing	Excess tension or rough thread path	Reduce tension, clean guides, check thread path
Poor stitch formation	Incorrect bobbin settings	Adjust bobbin tension and balance machine

Thread melting during sewing	Excess friction heat or used as needle thread	Use only as bobbin thread, reduce speed
Temporary hold too weak	Stitch density too low or poor seam design	Increase stitch frequency or improve placement
Thread remains after pressing	Insufficient heat or dwell time	Increase heat exposure gradually
Partial removal	Uneven heat contact	Improve pressing consistency
Residue visible	Incomplete melting or excessive thread usage	Optimise settings and reduce unnecessary stitches
Fabric marking	Excessive heat	Lower temperature or protect fabric
Distortion after pressing	Over-processing delicate fabric	Reduce heat / pressure and retest

3. Sewing Performance Guidance

Best practice:

- Use Durafil Heat Soluble Thread in the **bobbin position only.**
- Use conventional sewing thread in the needle position.
- Never use as needle thread due to needle heat and friction risk.
- Maintain balanced machine tensions.

- Use smooth thread path and clean machine parts.
- Avoid unnecessary high speed if friction heat develops.

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4. Temporary Holding Performance

For effective temporary holding:

- Place stitches only where needed.
- Use enough stitch density for holding function.
- Avoid excessive stitching which increases removal load.
- Review seam design for stable positioning.

The thread is intended to hold temporarily, not act as a permanent structural seam.

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5. Heat Removal Performance Guidance

Heat removal depends on:

- Temperature achieved in stitch area
- Exposure time
- Fabric thickness

- Number of garment layers
- Moisture / steam presence
- Contact efficiency of press or iron

Small controlled adjustments are preferred over aggressive changes.

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6. Fabric Performance Considerations

Always trial first on:

- Heat-sensitive synthetics
- Delicate fabrics
- Coated fabrics
- Dark shades prone to shine
- Multi-layer constructions
- Structured garments

Different fabrics transfer heat differently.

7. Productivity Risks

Common avoidable losses:

- Manual rework due to incomplete removal
- Garment damage from manual untacking
- Delays from poor settings
- Excess thread consumption
- Repeated pressing cycles

Approved standard settings help reduce these risks.

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8. Process Discipline Checklist

Before bulk production:

- Confirm bobbin-only usage
- Confirm correct needle thread selected
- Trial sewing settings
- Trial heat removal process
- Check residue acceptability
- Check fabric appearance
- Record approved conditions

9. Important Note

Durafil Heat Soluble Thread is designed for **bobbin thread use only** and must never be used as a needle thread.

Final performance depends on garment construction, fabric type, heat method, machine settings, operator discipline, and process control.

Users are responsible for testing, process adjustment, and validation before production.

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10. Contact for Technical Support

Email: info@durafil-group.com