Application Notes

Durafil Heat Fusible Yarn

Tex 40 | Low Melting Polyamide | Natural Colour

1. Product Description

Durafil Heat Fusible Yarn is a low melting polyamide functional yarn designed for reinforcement, bonding support, and stabilisation where controlled heat activation is required.

The yarn may be used directly in suitable sewing or assembly operations, or supplied to sewing thread manufacturers for rewinding onto kingspools and other user-ready packages.

When exposed to suitable heat and pressure, the yarn softens and bonds adjacent materials, helping improve structural integrity and product durability.

2. Main Functional Uses

The yarn is primarily used for:

- Thermal seam reinforcement
- Internal bonding support

- Structural stabilisation
- Position holding before permanent bonding effect
- Rewinding into smaller packages for end-user markets
- Sewing applications where heat fusible function is beneficial

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3. Typical Applications

A. Garment Reinforcement

Used in selected garment areas requiring extra internal support, such as:

- Blind Hems
- Waistbands
- Collar Zones
- Cuffs
- Structured Seams

B. Uniform and Workwear

Used where durability and cleaner internal reinforcement are valued.

C. Sewing Thread Conversion

Supplied to thread makers for rewinding onto kingspools or retail packages for factory use.

D. Technical Sewn Products

Used in suitable stitched products requiring thermal reinforcement.

E. Non-Textile Uses

Potential trial uses include:

- Soft Covers
- Organisers
- Sewn Industrial Accessories
- Filter Assemblies
- Protective Products

Trials are essential.

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4. Key Benefits

- Low temperature activation

- Internal reinforcement without separate adhesive systems in some uses
- Cleaner construction options
- Suitable for thread converting / rewinding programs
- Useful across textile and selected non-textile sectors
- Can support product durability and consistency

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5. Recommended Use Method

1. Select suitable stitch or construction area.
2. Introduce Durafil Heat Fusible Yarn into seam or reinforcement zone.
3. Complete sewing or assembly process.
4. Apply controlled heat and pressure if bonding effect is required.
5. Allow cooling before handling.
6. Confirm final performance before bulk production.

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6. Typical Heat Sources

Depending on application:

- Garment press
- Flat press
- Controlled ironing process
- Heated platen systems
- Industrial heating equipment
- Other suitable thermal systems

Trials are essential.

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7. Common User Sectors

- Garment factories
- Uniform manufacturers
- Sewing thread companies
- Workwear producers
- Industrial sewing sectors
- Technical sewn products manufacturers
- Selected non-textile assembly users

8. Important Process Variables

Performance depends on:

- Yarn placement
- Temperature reached in bonding zone
- Exposure time
- Pressure applied
- Material thickness
- Substrate composition
- Cooling conditions
- Operator handling

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9. Important Cautions

- Always run trials before production.
- Confirm substrate tolerance to heat.
- Excessive heat may damage sensitive materials.
- Bond strength depends on construction and process conditions.
- Cooling before handling may improve consistency.
- Different materials may respond differently.

10. Important Note

Final performance depends on construction design, substrate type, heat method, operator technique, and process control.

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

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11. Contact for Technical Support

For technical queries:

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