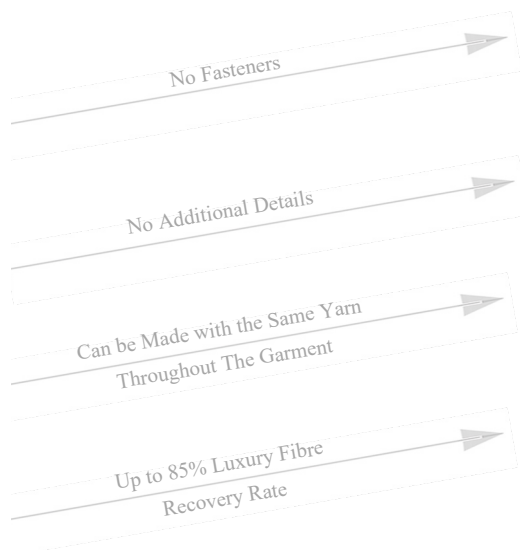


Ultimate Sustainability: Perfect Fit with Circular Logic

The Patented Correlation Method (HiK), removes all major recycling barriers at the design and production level, ensuring that fibre can be fully recovered and reused without the inefficiencies of sorting, disassembly, or material loss. **Apparel can be made from one type of fibre, without the need for external materials, fasteners or elastic fibres.**



EFFICIENCY

| Model | Recovery Rate | Cost per kg Recycled Fibre | Fibre Reuse Quality |
|----------------------|---------------|----------------------------|------------------------------|
| Patented Method | 85% | €1.49 | Reuse in luxury garments |
| Tailored Cut-and-Sew | 55% | €6.71 | Downgraded to non-luxury use |

MAIN RECYCLING PROBLEMS

- Removing Fasteners:** Zippers, buttons, and other fasteners must be manually removed before recycling, which is labour-intensive and time-consuming.
- Separating Different Fabrics:** Garments made from multiple fabrics (e.g., blends of cotton and polyester) are difficult to recycle because the materials must be separated, and many recyclers can only process single-material textiles.
- Different Structures in a Single Garment:** Variations in fabric structure (knit vs. woven, for example) within one garment complicate recycling processes, as different structures require different treatments.
- Presence of Elastics and Padding:** Elastic bands, foam padding, and other non-textile components (e.g., in dresses or jackets) complicate the recycling process, as they often need to be removed or treated separately.
- Coatings and Finishes:** Some garments have coatings, or other finishes that can interfere with recycling, requiring additional steps to remove these chemicals before the garment can be processed.
- Blended Fibres:** Fibre blends (e.g., cotton-polyester) are difficult to recycle efficiently because the different fibre types often require separate recycling processes, it's difficult to reclaim pure fibres from blends.
- Thread and Seams:** Garments sewn with different types of thread (synthetic vs. natural) or reinforced seams can complicate the recycling process as these threads may not be compatible with the recycling methods used for the fabric.

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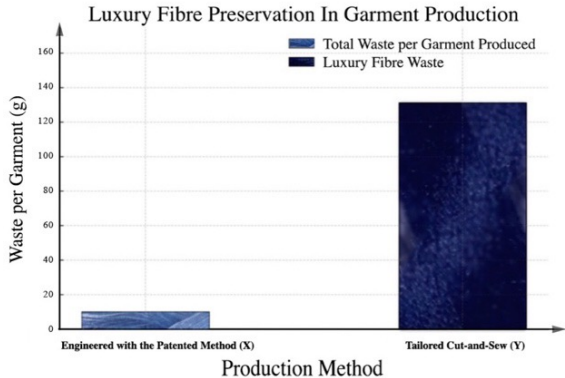
Material Efficiency and Luxury Fibre Preservation

The **Patented Correlation Method (HiK)** developed for high-tech programmable knitwear, redefines garment production by combining precision-engineered adaptive fit with highly efficient fibre usage. Applying the principles of the Method extends the life of garments by minimising wear and tear, with panels that seamlessly adapt to the wearer's movements while naturally shaping the silhouette. By replacing the rigid eight-size system with a streamlined three-size model, the Method ensures a perfectly tailored fit across multiple standard sizes, reducing unsold garments and extending market reach while optimising material use. Traditional cut-and-sew woven production achieves a tailored look at a significant cost—not only in unsold stock, but in wasted luxury material. Approximately **20% of luxury fabrics are discarded** as offcuts—a direct loss of premium material. In addition, predefined static sizing systems leave little room for customers who do not fit standard sizes, creating further inefficiencies. **Unsold stock waste is reduced by 78.6%** and entirely eliminating material waste from cutting (**0% luxury fibre waste production**), the mass luxury market can balance efficiency with sustainability - without compromising quality and precision.

| METRIC | ENGINEERED WITH THE PATENTED METHOD, HiK | TAILORED WITH CUT-AND-SEW, Woven |
|---|--|---|
| 1. Fibre per Garment Required | 350g | 420g |
| 2. Luxury Fibre per Garment Required | 350g | 350g |
| 3. Luxury Fibre Waste during Production (%) | 0% | 20% |
| 4. Overall Production Waste | 10g <i>(All non luxury fibre)</i> | 70g <i>(20% of luxury fibre)</i> |
| 5. Luxury Fibre Waste during Production | 0 g | 70g |
| 6. Unsold Stock Rate | 3.75% | 17.5% |
| 7. Unsold Stock Fibre Waste | $350\text{g} \times 3.75\% = 13.125\text{g}$ | $350\text{g} \times 17.5\% = 61.25\text{g}$ |
| 8. Total Waste per Garment Produced | $10\text{g} + 13.125\text{g} = 23.125\text{g} = \mathbf{6.61\%}$ | $70\text{g} + 61.25\text{g} = 131.25\text{g} = \mathbf{37.5\%}$ |
| 9. Adjusted Waste per Sold Garment | $23.125\text{g} \div (1 - 0.0375) = \mathbf{24.05\text{g}}$ | $131.25\text{g} \div (1 - 0.175) = \mathbf{159.12\text{g}}$ |
| 10. Luxury Fibre Waste per Garment Sold (%) | $100\% - 42\% = 58\%$ | $159.12\text{g} \rightarrow 100\% \text{ Luxury Fibre}$ |
| 11. Final Luxury Fibre Waste per Garment Sold | $58\% \text{ of } 24.05\text{g} \rightarrow 13.95\text{g}$ | $100\% \text{ of } 159\text{g} \rightarrow 159\text{g}$ |
| Luxury Fibre Waste Reduction | 91.2% | |
| Overall Production Waste Reduction | 84.9% | |

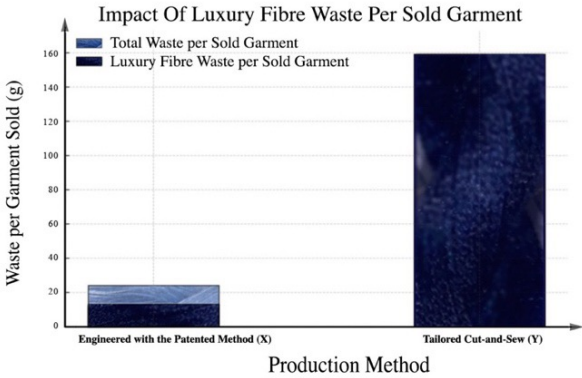
These two graphs visually confirm the magnitude of impact of the Patented Correlation Method over traditional cut-and-sew woven production to achieve a fully tailored appeal in terms of overall fibre waste reduction and **luxury fibre preservation in particular**. The move to the 3-size model with the Patented Method represents a revolutionary leap in material efficiency and waste reduction. Even when comparing identical garment production volumes, the Patented Method with high-tech knitwear demonstrates the potential for significant global savings, conserving luxury materials at an unprecedented level.

Graph 1



Luxury Fibre Waste Reduction: 100%
Total Production Waste Reduction: 85.7%

Graph 2



Luxury Fibre Waste Reduction: 91.2%
Total Production Waste Reduction: 84.9%

This demonstrates that the Patented Method is not only a sustainable alternative,
but a transformational solution for the future of apparel manufacturing and accessibility
of the luxury products for mass market.

