Testing durability through washing

In 2015, Tesco F&F participated in a project to explore opportunities to enhance the durability of some of its core clothing lines and build upon existing initiatives.

The trial identified three core items for testing using durability washes which enabled feedback on the performance of the garments to be achieved in a relatively short timeframe.

As part of its commitment to continuous improvement, Tesco F&F clothing became a signatory of the Sustainable Clothing Action Plan (SCAP) 2020 Commitment.

This Commitment is managed by WRAP and seeks to significantly reduce the environmental impacts of clothing across its lifecycle. This project was delivered in support of this commitment.

Key Facts
- Existing initiatives by Tesco F&F include:
  - Analysis of customer returns;
  - Working with a charity partner to reuse returned clothing;
  - Wearer trials on new products; and
  - An improved mills programme, which involves greater collaboration between buyers and mills.
- Returns data indicates a very small percentage (<0.01%) of F&F clothing is returned and wearer trials depend upon customers providing feedback, which although useful is often not specific to durability.
- This project reviewed three core products to see how they performed under a durability wash test.

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Identification of core trial items
In order to achieve the aim of this project, Tesco identified core items with long runs in-production that are available throughout the year and not dependant on changing fashions or seasons.

These garments represent high volume and repeat orders. These may provide good investment opportunities at scale to ensure garments from suppliers last for a long time.

Tesco identified three key garments for testing:

- Men’s black formal trousers;
- Men’s white shirts; and
- Women’s black formal trousers.

Durability washes
A durability wash or ‘durawash’ is a garment test method that, in this instance, has a single cycle that equates to 15 washes in a normal household washing machine.

The benefit of this process is that feedback on the performance of garments can be achieved in a short time frame, therefore, any opportunities for improvement can be identified early in the production process.

Whilst a wearer trial provides more realistic feedback on how garments perform throughout their useful life to customers, it requires greater time and resource investment.

F&F tested three samples of each core product in the following way:

1 x durawash = equivalent of 15 household washes
2 x durawash = equivalent of 30 household washes
3 x durawash = equivalent of 45 household washes
Results
The garments all performed well through 1 or 2 durawash cycles with no changes to colour, pilling or product performance. The garments that were subject to 3 durawashes (equivalent of 45 household washes) showed some opportunities for improvement.

The opportunities for improvement after the equivalent of 45 household washes tended to be related to components and the construction of the product, rather than main fabric issues.

For example, delamination of interlinings in the collars was apparent on the white shirt, a common occurrence from repeated stress that gives the appearance of ‘bubbling’.

The quality of the main fabric appeared to be satisfactory for the product based on the testing done and the general feedback.

The next steps for F&F are to work with their suppliers to identify opportunities for continuing Tesco Clothing’s commitment to ongoing improvement, focussing on the construction elements that required modifications to prolong the active life of the garments.

Opportunities
The following topic areas present cornerstones of ongoing monitoring of product durability for F&F and other brands:

- **Specifications:** In its broadest sense, the product specification is used to define the quality parameters for all the major components and processes used in the manufacture of the product. In particular, it looks at components and processes that have a significant impact on the performance of the finished product.

  Specification templates can be provided to suppliers to complete so there is transparency on which specification produces which product. Using the example of the interlining delamination, testing could be carried out by a brand to identify the most suitable interlining products, thread quality and stitch density, for example.

‘At F&F we want to delight our customers with quality products they love, products they know they can wear again and again.’

Dani Baker, Corporate Responsibility Manager, F&F Tesco Clothing
Opportunities (contd)

- **Specifications** (contd): Together this information presents options within the construction guidelines section of the specification.

  Any deviations by the supplier from the specification must be approved by the UK buying team.

- **In-Process Testing**: targeted testing is the most cost effective and efficient way of identifying any potential improvements. It is also important to select the right tests and have clear testing standards to reflect the desired quality of the product. For example, regularly testing the fabric quality when the existing quality problems are associated with puckering is not an effective use of resources.

  Furthermore, the critical points in the product development process where targeted testing has real value is prior to authorisation to cut and production seal.

  For core programmes and long runs in-production, testing is also recommended to ensure there is no drift in quality standards. This is most effective when randomly selected products from brand warehouses or stores are selected for testing.

- **Internal Communication**: The efficiency and effectiveness of identifying quality issues and developing solutions can be enhanced through regular, formalised communication across buying teams when they are developing related products.

  For example, schoolwear and formal menswear buying teams may find it useful to compare quality issues for formal shirts to identify best practice within the business.

- **Closing the Loop**: The impact of product quality, testing and wearer trials can be amplified when it is considered as part of a positive feedback loop.

  The feedback from quality testing can be used to fine tune the product specification, so over time, the specification addresses all the major issues associated with a particular product type. A more robust wearer trial process can be implemented to enhance this activity.
WRAP’s vision is a world where resources are used sustainably. It works in partnership with governments, businesses, trade bodies, local authorities, communities and individuals looking for practical advice to improve resource efficiency that delivers both economic and environmental benefits.

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• **re-thinking** how we use and consume products; and
• **re-defining** what is possible through recycling and re-use.

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