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Pressemitteilung / Press Release

Sustainable labels for jewellery and watches

Solutions and possibilities by eXtra4 Labelling Systems

Birkenfeld, 07.06.2022. When it comes to sustainability, packaging is in the focus of critical examination. Labels are part of the packaging sector and cannot evade this. As a label manufacturer, Ferdinand Eisele GmbH is taking up the issue and is facing up to the sustainability debate with its eXtra4 Labelling Systems brand. The identification technology experts from Birkenfeld near Pforzheim, Germany, discuss the special situation for the jewellery and watch industry and point out options.

Sustainability in detail

The concept of sustainability is broadly defined. It ranges from the recyclability of a product and the use of recycled or at least

renewable raw materials to resource-conserving manufacturing processes and an environmentally and socially responsible supply chain. The aim is to leave as small an ecological footprint as possible for future generations through a product.

The contribution that a small jeweller's label can make to achieving this big goal seems negligible. But brands that use sustainability to differentiate themselves from the market and recommend themselves to their target group must also pay attention to the smallest details. Critical consumers, as well as competitors, take a close look, ask questions and examine.

The traditional tag as a future perspective

The traditional way of labelling jewellery and watches, the classic hand-lettered cardboard tag with a string to attach, really scores in terms of sustainability. As the most elementary implementation of the labelling idea - attaching information to a product = writing text on a piece of paper and attaching it with a thread - it fulfils the most important criteria:

- Cardboard is recyclable and can be made from a mixture of recycled material and wood as a renewable raw material whose environmentally friendly origin from certified sources can be proven.
- The thread can be made of natural fibres, the sources of which can also be certified as environmentally compatible in the production process.

- If the marking is done by hand with pencil or ink, it is unlikely to leave a significant footprint on the environment.

Exclusive tag as eco-seal

Especially with these aspects in mind, eXtra4 has developed an exclusive solution for an eco-friendly tag. The label has a representative size of 28 x 12 mm and also conveys the sustainability idea effectively in the look and feel of the materials used:
The natural brown cardboard is reminiscent of common packaging paper in colour and structure, but has a rougher surface. It is made of 100% PEFC-certified raw material, i.e. the wood used comes from ecologically, economically and socially sustainably managed forests.
A 9 cm long thread (7 cm usable length) is machine-knotted in for fastening. It is made of natural cotton in cream-white and comes from an OEKO-TEX-certified source.

The cardboard is easy to write on by hand with a pencil, biro or ink ball pen. Fibre pens, on the other hand, are not suitable because the open-pored surface has capillary action. If data is to be transferred from a database, it is advisable to stick on an adhesive label created in a thermal transfer printer. In line with the sustainability principle, it must be made of paper, i.e. a renewable, recyclable raw material.
If the label is to convey the sustainable claim additionally by branding, the printing of a logo is recommended. Using hot foil

stamping, opaque, bright colours with defined outlines can be achieved even on relatively coarse cardboard material.

Sustainable and yet detrimental

Thanks to its flexible applicability for all types of jewellery and watches, as well as its ease of use, which requires no additional equipment apart from a pen, the cardboard tag would be a viable solution. However, this type of labelling is opposed by its low level of convenience in everyday practice and other disadvantages:

- Handwritten, only a few data can be legibly placed on a small label
- Neither lettering, nor cardboard or thread are UV-resistant and change in the shop window or showcase
- Handwriting is difficult to keep uniform because writing is individual and not permanently even
- The label can be easily removed without authorisation and reapplied unnoticed when the string is looped
- Cardboard and thread are not tear-resistant, so can be missing unintentionally and unnoticed
- Due to their open surface structure, cardboard and thread easily take on dirt, become unsightly and need to be renewed
- For ultrasonic treatment and steam cleaning, the label must be removed and repositioned correctly on the matching piece
- The manual marking of small labels is tedious and very time-consuming for large quantities
- Individual design in shape and colour is cost-intensive

Suboptimal eco-balance for computer labels

In trade and industry of the jewellery and watch sector, the central functions of a label, which many users are accustomed to, appreciate and today also demand, include:

- High data density, a lot of information in a small space
- Permanently legible, standardised lettering
- Small dimensions: the smaller the better
- Simple, time-saving attachment, versatile use
- Reliable, non-repositionable fastening
- Long-lasting: dirt-repellent, crease-resistant, tear-resistant, UV-resistant
- Can be applied and removed without residue
- Efficient use

Contemporary product labelling that takes account of modern data management meets these requirements, but performs rather poorly when viewed from a sustainability perspective. Thermal transfer printable loop labels, while popular with jewellers, wholesalers and manufacturers worldwide, are made from self-adhesive foil compound:

- Both foil and adhesive are produced from non-renewable raw materials in chemical processes with a high energy input, are often imported and not sourced locally.
- As a material compound, neither the label nor the production waste can be recycled, but only thermally exploited.
- Inks for design and data printing are not solvent-free or water-based.

Eco-friendly label with loop as a compromise

In order to meet the catalogue of requirements as far as possible and still take sustainability aspects into account, at least in part, eXtra4 Labelling Systems has developed an eco-friendly self-adhesive label with loop:

With labelling areas of 22 x 10 mm (WxH) and a loop of 28 mm length by 3 mm width, it corresponds to a popular standard shape, but its basic material is made of 100% recycled paper. It gives the label its recycled look with brown colouring and irregular structure. Reliable adhesive strength is ensured by a permanently adhesive acrylate glue that is free of solvents.

Laminate as a technical concession

Without further finishing, the label would thus be more sustainable, but neither sufficiently tear-resistant nor satisfactorily markable with data and, above all, codes in thermal transfer printing. Only when laminated with a thin film layer can the recycled paper label meet industry-standard requirements. Now the loop has enough stability to ensure reliable fastening. The smooth foil surface offers ideal conditions for data printing. Even logo printing is possible and barcodes are reproduced clearly legible.

Whether glossy or matte laminate film is used is merely a question of design. From a purely visual point of view, the new label with loop offers a sustainable look and is based on around 30% recycled

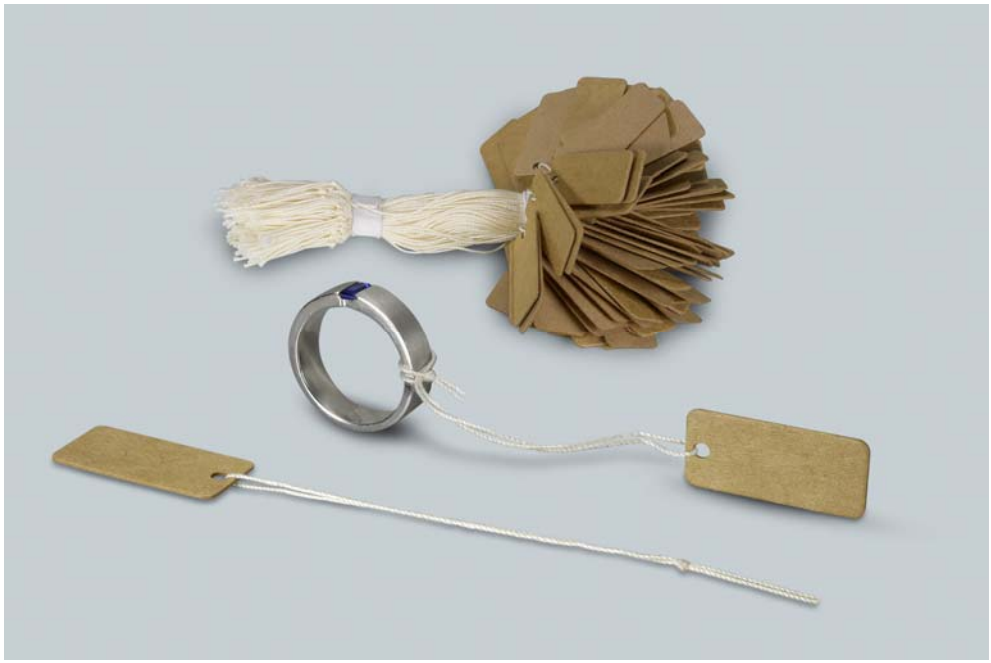
materials, which is significantly more than standard labels with loop in jewellers‘ quality have to offer.

Conclusion: consider each case on its own merits

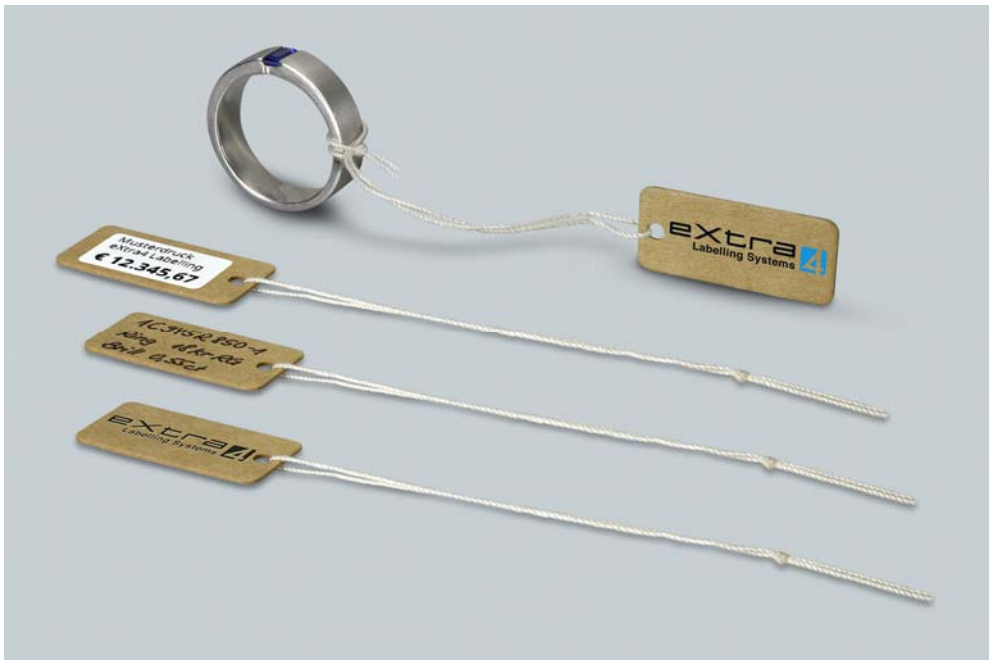
Basically, the decision for more sustainability is currently still accompanied by the renouncement of functionality. Whether labels that appear to be ecologically ideal then really prove to be sustainable in a sustainability balance that also takes into account additional expense and additional consumption due to the disadvantages of the label, must be judged by each user for his or her individual case.

As a specialist in identification technology for jewellery, watches and gemstones, eXtra4 Labelling Systems will keep its hand on the pulse of developments to show the industry new and more sustainable ways of labelling. (8.254 digits with blancs)

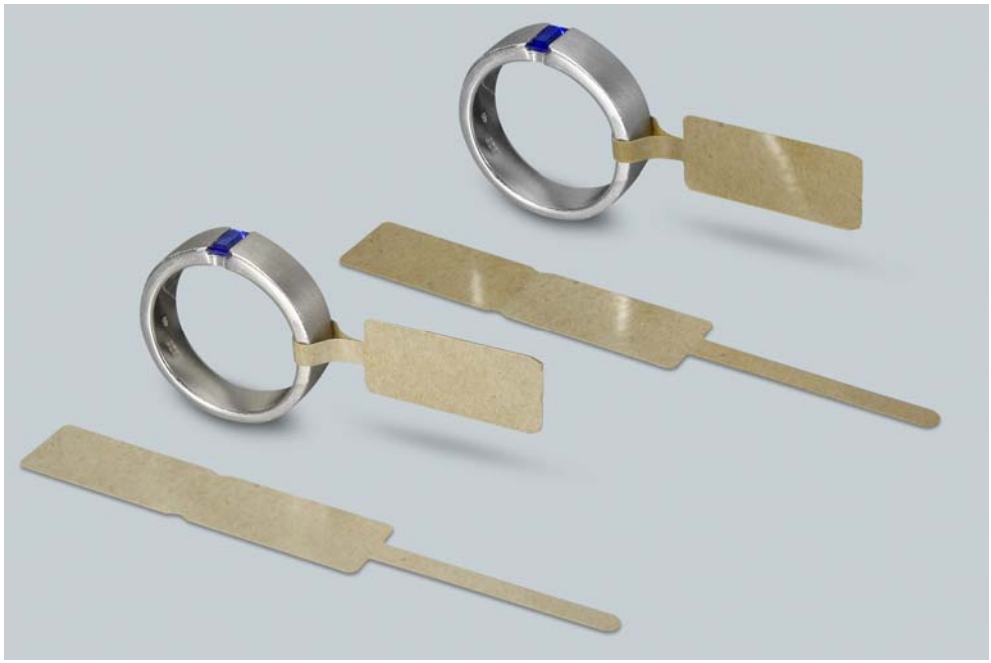
Images and captions



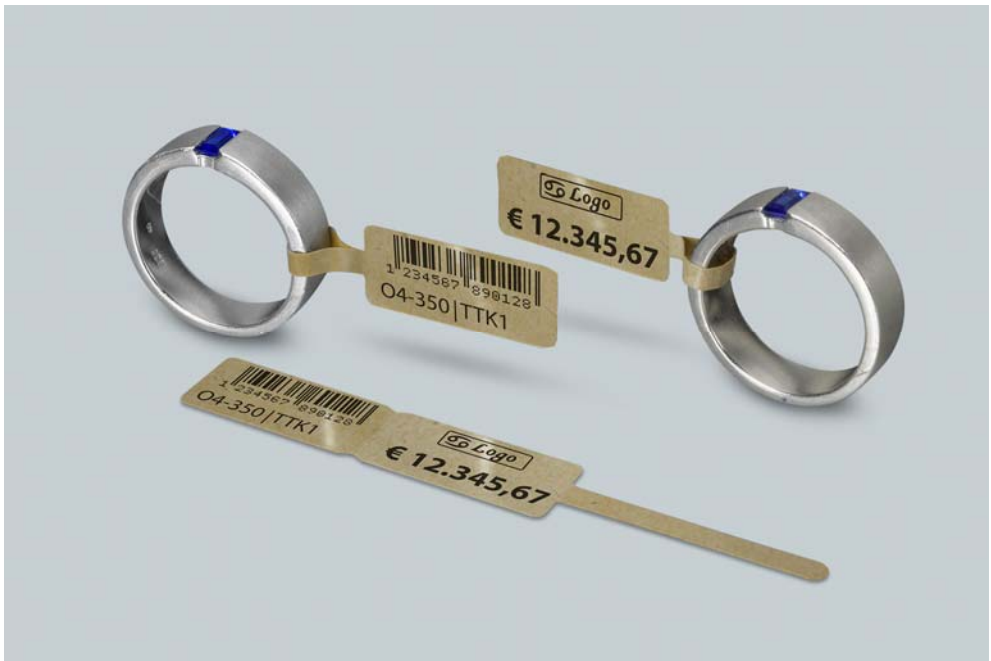
Img.1: New at eXtra4 Labelling Systems: Label made of PEFC-certified cardboard with natural cotton thread for labelling jewellery and watches with an emphasised sustainable claim.



Img.2: Individualisation options for sustainable tags: Branding via colour printing or embossing, marking with data in handwriting or via adhesive label from a thermal transfer printer



Img.3: More sustainable through recycled paper: self-adhesive label with loop from eXtra4 Labelling Systems, optionally matt or gloss laminated



Img.4: Eco-friendly loop label from eXtra4 suitable for marking on thermal transfer printer even with code and logo data