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Case Study

Product identification | Organic FMCG



SINCE 1911

**Töpfer**

## Preserving and developing a legacy of sustainable, organic products for over one century

Reducing environmental impact across its packaging operations was the key concern of German organic FMCG brand Töpfer when considering its coding provider. Among the printing technologies the company uses are the Markem-Imaje 9450 Continuous Inkjet, the **SmartDate**<sup>®</sup> X40 and **SmartDate**<sup>®</sup> X60 thermal transfer overprinters, the 5800 **Touch Dry**<sup>®</sup> High Resolution Inkjet and the 2200 Pallet, together with **CoLOS**<sup>®</sup> Packaging Intelligence software to meet its requirements.

### Customer

Leading manufacturer of organic baby food and natural cosmetics. Certificated with EU organic seal, German Bio-seal and COSMOS organic cosmetics seal.



Dietmannsried, Allgäu Region,  
Germany

Founded in 1911

190 employees

Products sold across Germany,  
Switzerland, Austria, and other  
European nations

[www.toepfer-babywelt.de/en/](http://www.toepfer-babywelt.de/en/)





## Challenge

Reducing the environmental impact of its operations, including using only recyclable packaging whilst cutting materials and waste, in line with the company's reputation for being environmentally friendly.

Töpfer is a 112-year-old family-run business which has only ever made organic products, becoming Germany's leading producer of organic baby food as well as milk-based natural cosmetics. The most important factor for the producer for its printing and packaging operations was lessening their environmental impact.

"For us, sustainability means environmentally friendly corporate governance. This means that we observe the entire production chain and place a big deal of emphasis on innovation and further development," says Christine Breyer, Marketing Manager at Töpfer. "The topic of packaging is a perennial issue for us. There is a growing demand for better recyclability of packaging. We need strong partners who will work with us to drive innovation, to support us

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– Christine Breyer,  
Marketing Manager at Töpfer

on how we can save more packaging material and use environmentally friendly materials," Breyer continues.

The company had already collaborated with Markem-Imaje for several years but wanted to use only recyclable materials in its packaging and to cut waste, highly important for a producer renowned for the organic nature of its products. A technology that is able to print outstanding quality codes on new recyclable substrates while preventing ink from migrating through them was a must for Töpfer as well as the possibility to gain traceability—a growing concern for its consumers.



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## Solution

The Markem-Imaje hardware offer for Töpfer includes the 9450 Continuous Inkjet, the **SmartDate**® X40 and **SmartDate**® X60 thermal transfer overprinters (TTO), the 5800 **Touch Dry**® High-Resolution Inkjet and the 2200 Pallet Print & Apply, combined with the Markem-Imaje **CoLOS**® Packaging Intelligence software suite.

For its primary marking technology on foil bags containing the milk formula, thermal transfer overprinting (TTO), a technology especially designed for flexible film coding was chosen, with Markem-Imaje's SmartDate® X40 and SmartDate® X60 models selected for their high-resolution and high-speed properties.





Töpfer chose the Markem-Imaje 9450 Continuous Inkjet (CIJ) printer for its coding requirements on carton boxes and on its cosmetic packaging because of its precise and fast marking as well as versatility in terms of substrate applicability. The technology now uses less environmentally harmful, MEK-free inks which cut Volatile Organic Compound (VOC) emissions by up to 50%.

The Markem-Imaje 5800 drop-on-demand inkjet printer using patented **Touch Dry**<sup>®</sup> hot melt inks, a Large Character Inkjet (LCIJ) printer, was selected by Töpfer to mark its products' case packaging. Hot melt inks are solvent-free, safe to handle and less harmful for the environment. The printer is ideal for corrugate cases and also facilitates late-stage customization permitting full traceability information.

The pallets are coded with the Markem-Imaje 2200 Pallet, a Print and Apply (P&A) technology, customized for pallet coding operations. The CIJ, LCIJ and P&A hardware were implemented in conjunction with **CoLOS**<sup>®</sup> Packaging Intelligence software suite's Pallet Track & Trace module's camera verification capability. The software can integrate with the production line and ERP systems to digitalize, automate and verify production, whilst providing data and reporting insight for optimized productivity and other key KPIs, like sustainability.



## Benefits

- Elimination of consumable items accounting for a significant amount of paper waste
- Ability to now print at high-quality on new recycled substrates
- Improved ability to automatically verify legibility of all product coding and GS1 standards
- New possibility to trace, authenticate all products

As an only-organic producer of longstanding tradition, Töpfer wanted to use only recyclable materials and to lower its waste and consumables output introducing the use of recyclable tubes in cosmetics, for example, in order to omit an additional level of packaging for the product. Using the Markem-Imaje 9450 Continuous Inkjet (CIJ) printer, the producer can now print directly onto recyclable plastic cosmetics containers.

◀ 2200 Pallet  
Print & Apply for  
pallet operations





For its signature product, organic baby formula, which is packed into foil bags, Töpfer opted to use the Markem-Imaje **SmartDate**® X40 and **SmartDate**® X60 thermal transfer overprinters (TTO) to print directly onto the substrate, providing perfect code legibility on foil and eliminating the previous need for pre-printed labels. The containers are then coded using the 9450 CIJ printer which enables Töpfer's customers to have customized and compliant coding on the primary carton to satisfy their particular demands. The quality and legibility of the coding is now verified using the camera verification, a feature available with the Markem-Imaje Pallet Track & Trace module of the **CoLOS**® Packaging Intelligence software.

◀ The 5800 drop-on-demand inkjet printer uses patented **Touch Dry**® hot melt inks directly onto the cardboard, achieving GS1 compliant levels of marking.



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The packages are then packed into corrugate cases and marked using the 5800 drop-on-demand inkjet printer which uses patented **Touch Dry**® hot melt inks directly onto the cardboard, achieving GS1 compliant levels of marking. This change has resulted in a significant reduction of paper waste. The final stage of packaging operations employs the dedicated pallet printing solution of Markem-Imaje, the 2200 Pallet, a Print and Apply technology.

Töpfer has also started using **CoLOS**® software that integrates with its production machinery to send brand item and batch number to the marking technology. It can also provide proof of traceability and authentication directly on

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the product, an advantage for the company in protecting its brand. Using **CoLOS**®, Töpfer's printer messages can be changed automatically, allowing the storage of less preprinted corrugate case inventory and the ability to print only when required, meaning the potential for further reduced waste.

Next, Töpfer plans to replace the CIJ systems' inks with MEK-free, less environmentally harmful inks, avoiding the use of the contaminant Methyl Ethyl Ketone. The ink also generates up to 50% fewer volatile organic compounds (VOCs), than other brands.



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