

# Hybrid™

Secure and durable



Louisenthal

# Maximum security and longlasting circulation

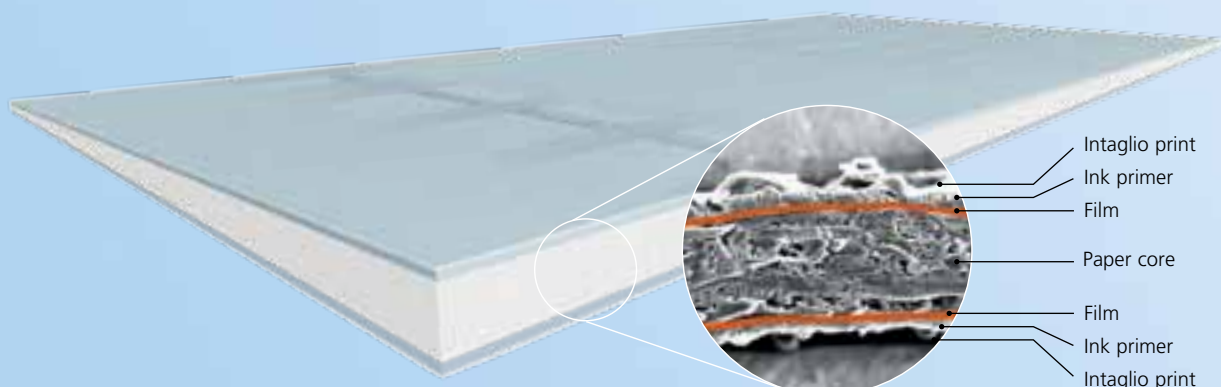
Durability is crucial for banknotes, especially under demanding circulation conditions. But investing in robust banknote substrates only pays off if it is possible to determine authenticity without restrictions throughout the banknote's long circulation life.

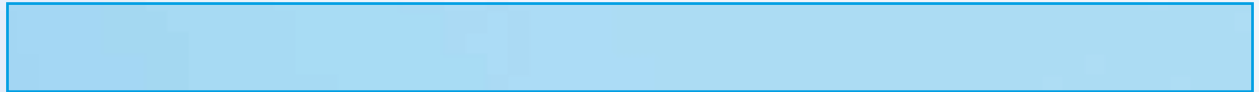
Hybrid, the innovative new banknote substrate from Louisenthal, is the ideal solution to provide durability without sacrificing security, and is the most advanced technology available to date. The appearance of Hybrid banknotes remains virtually unchanged even after long circulation periods. It supports unequivocal authenticity detection by the general public as well by banknote processing systems thanks to its machine-readable features.



The outstanding mechanical strength of Hybrid is based on a new type of structure. An inner cotton fibre core is protected on each side with a thin film layer. The core is as secure as any paper banknote, and the outer layers make the banknote as strong as polymer film.

Hybrid can be combined with any established as well as with new security features, including cylinder mould watermarks, window threads and foil elements. Yet the product retains the typical feel of paper banknotes, and the distinctive tactile characteristics associated with intaglio printing.





## Hybrid – state-of-the-art substrate technology for enhanced security and durability

Hybrid is a combination of a cotton fibre core with a protective film layer on each side. The film layers provide outstanding protection against soiling and tearing. The cotton fibre core integrates all commonly used security features such as cylinder mould watermarks, security threads and fluorescent fibres, thus ensuring reliable authentication throughout the banknote's circulation life. An innovative ink primer ensures optimum printing characteristics on both sides of the banknote. With a total thickness of approximately 120  $\mu$ , Hybrid has the same printing properties as conventional banknote paper. Hybrid is particularly suitable for countries with diverse climate zones and demanding circulation conditions.





## Hybrid™ at a glance:

- Maximum security plus durability
- Integration of established security elements
- Mechanical protection of surfaces, corners and edges
- Same look and feel as paper banknotes
- Same tactile characteristics of intaglio printing as paper banknotes
- Same printing processes as banknote paper

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