



Oberthur Fiduciaire (Paris 1842) Title: Fielief<sup>\*\*</sup> title: Fielief<sup>\*\*</sup> cost-2022 Relief<sup>\*\*</sup> creates an optical illusion that heightens the observer's visual perception line a tronger Foel.

## The Art of Relief<sup>™</sup>

by Oberthur Fiduciaire

# Introducing The next generation of 3D threads for the future



## What is Relief<sup>™</sup>?

Relief<sup>™</sup> creates an optical illusion that heightens the observer's visual perception like a trompe l'oeil.

#### Security threads

The pattern created by the striking graphical feature is available for use as a thread.

This new 3D effect is obtained without mechanically embossing the micro-structure, making the visual effect highly durable.

## How does Relief<sup>™</sup> work?

The liquid crystal inks used to produce Relief<sup>™</sup> are layered and manipulated to create a feeling of delicate visual tactility on a perfectly smooth flat surface.

Sharper than physical embossing, Relief<sup>™</sup> technology allows the inclusion of more precise detail.

The effect, which is comparable to that of a 3D hologram, stimulates the observer's senses with a colour shifting play of light and shadow.

#### Why choose Relief<sup>™</sup>?

Relief<sup>™</sup> provides clear, simple, and durable protection against counterfeiting.

A visual rather than physical embossing into the liquid crystal surface creates intricate, detailed, and lustrous images with 3D and embossed effects.

The colour shift effects of the liquid crystal film remain bright and clear.

The unique 3D effects of Relief<sup>™</sup> can be authenticated at-a-glance on both sides of the note, with a negative image on one side and a positive image on the other.

#### Environmentally friendly

Unlike holographic threads or patches, Relief<sup>™</sup> has no metallic components and is not engraved, making it an environmentally friendly option.

Relief<sup>™</sup> brings a completely new and durable visual effect, as revolutionary as holograms or moving threads have been in the past decades. The deep relief effect is highly secure, highly visible and sufficiently affordable to consider using it on your full range of denominations.

## How is Relief<sup>™</sup> used?

Relief<sup>™</sup> creates three visual texture-like effects:

- Colour shift
- Embossing
- 3D on transparent substrates

With Relief<sup>™</sup>, 3D designs are produced without a variation in thickness and with the option to add magnetic properties.

#### Relief<sup>™</sup> security threads

Although available for use in threads of 3mm and wider, the full effect of Relief<sup>M</sup> is best appreciated when it is featured on a broader visible surface.

Oberthur Fiduciaire welcomes a new era with a stunning non-mechanic 3D effect for security threads.

Relief<sup>™</sup> is cost-effective, environmentally friendly, colour shifting and can be produced to your own design, making your security thread unique.

Relief<sup>™</sup> by Oberthur Fiduciaire



## Relief<sup>™</sup> did you know?

Like for penicillin or radioactivity, the technology that led to the development of Relief<sup>™</sup> threads was discovered while conducting very advanced and sophisticated research as part of our ongoing R&D efforts. Indeed, a 3D image of our engineer's fingerprint had unexpectedly materialized in a 3D relief effect. It then took us more than three years to transform this early stage discovery into the impressive and highly secure durable 3D effect of the Relief<sup>™</sup> thread samples available today.





## **Group Headquarters & Sales Office**

Oberthur Fiduciaire SAS, 7, Avenue de Messine, CS 30003, 75384 París Cedex 08, Francia Tel: +33 (0)1 42 99 77 00

www.oberthur-fiduciaire.com