

IKONICS® Industrial Inkjet Solutions

# DIGITAL TEXTURING

a **revolution** in mold texturing





## A Revolutionary **Solution**

Today's manufacturers are using decades old methods to accomplish mold texturing. These problematic and labor intensive practices, like the "wax and rice paper" method, various screen printing methods, and others, have survived so long due to the lack of a suitable or economical solution. **Digital Texturing is this solution.**

Using a combination of proprietary technology, including IKONICS' patented photo resist films, and specifically engineered hardware, Digital Texturing offers those in the mold texturing industry an opportunity to work faster, produce more accurate textures, unmatched operational consistency, dramatic reduction of human error/inconsistency, secure digital filing/storage of images and the general standardization of mold texturing operations.







# Digital Texturing **Advantages**

Digital Texturing infuses technical certainty, predictability, and standardization into mold texturing operations that have historically been challenged by slow turn-around, operational inconsistency, and a high degree of labor intensity.

## **Operational Consistency**

Digital Texturing relies on the digital rendering of texture artwork. Using IKONICS proprietary technology, including the IKONICS DTXJet™, the digitized artwork is used to create a self-adhesive acid resist film, which ultimately becomes the “stencil” or “template.” As such, the challenge of registration, particularly with multi-level textures, is significantly reduced.

## **Finer Resolution**

Due to the combination of digital imaging and our proprietary, jettable acid resist fluid, Digital Texturing provides texturing professionals the ability to improve their performance in applications where fine line definition is a challenge using the common “wax” method. While wax is inherently imprecise, the Digital Texturing process is not subject to the operational idiosyncrasies of individual craftsmen.





## Improved Speed

Digital Texturing can dramatically improve cycle time. Since textured films are produced using digital artwork, files may be easily altered, edited or reproduced in a timely manner. Operationally, Digital Texturing films, including DTXFlex™, with an inherently flex-sensitive characteristic, allow operators to accommodate complex curves, corners, recesses and protrusions.

## Large Format Capacity

Due to the DTXJet's large bed size, pattern creation of up to 48" x 96" is simple, fast and accurate. This significant advantage results in less "tiling" or "seaming" during production, saving time and improving quality.



# Precision **Micro Deposition** System

This specifically engineered fluid deposition system produces precise, accurate, and repeatable results. The DTX Jet operates at exceptionally high speeds, providing unmatched image output. This proprietary system integrates UV light technology, digital imaging and specifically engineered hardware to accurately control placement of DTX inks.

Available models:

Small (1.2m x 0.6m), Medium (1.5m x 1.0m), or Large (2.4m x 1.2m) Print Size Options

**DTX<sup>®</sup> JET 3.0**  
PRECISION MICRO DEPOSITION SYSTEM







## Digital Texturing Consumables

**DTXMEDIA**<sup>™</sup><sub>CLR</sub>

Digital Texturing Media

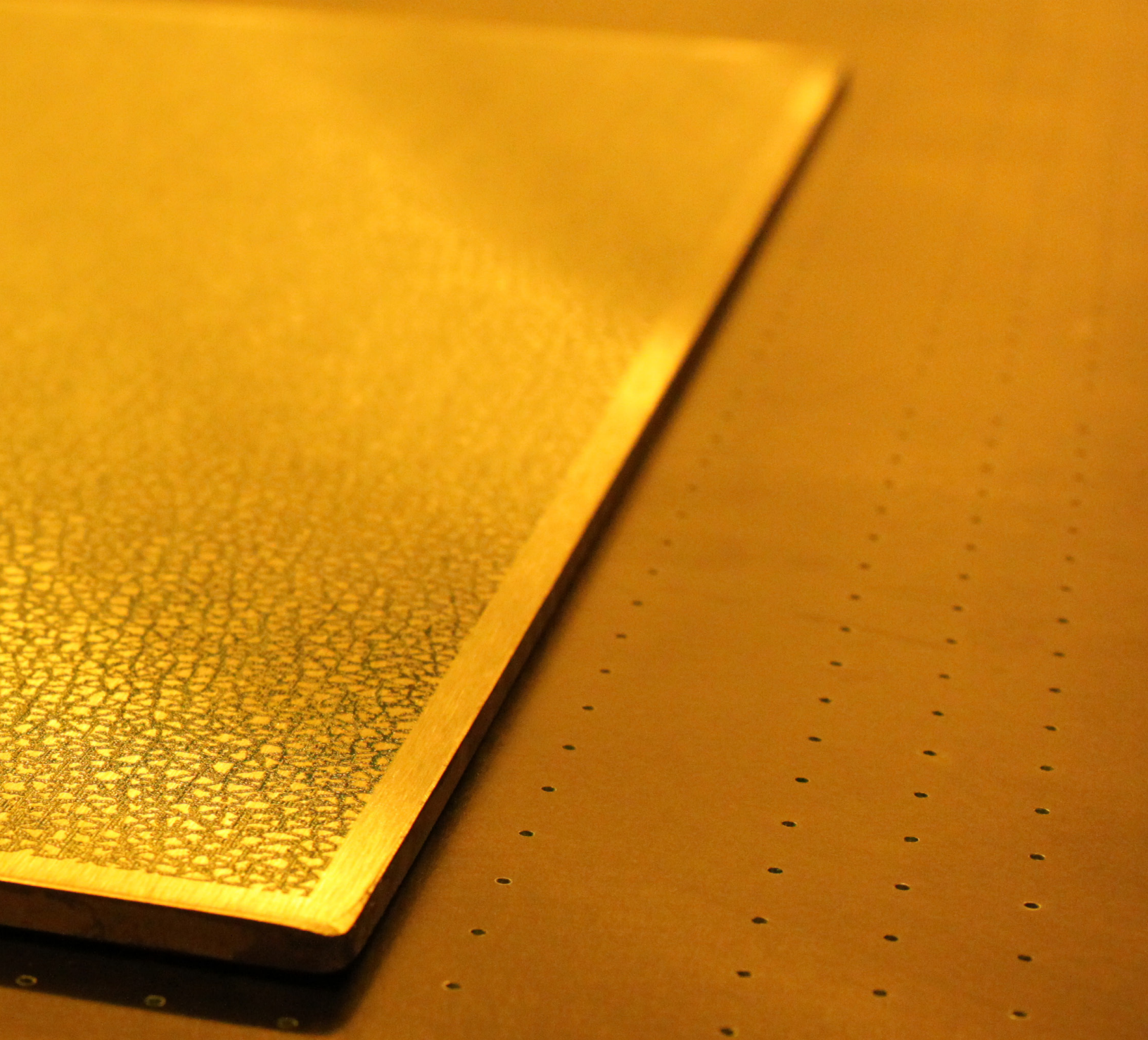
For use in production and pattern development applications where consistent, accurate, predictable registration and print quality are imperative.

**DTXFLEX**<sup>™</sup>

Flexible Digital Texturing Media

For use in applications where the ability to maneuver the textured film around corners, convexes and into recesses is necessary.





## DTXBAR™

Black Acid Resist Fluid

UV-based jettable fluid which cures to a tacky, residue-free, acid resistant solid. The jettable nature allows DTX Bar to be precisely deposited, resulting in unsurpassed resolution and print quality.

## DTXRED™

Removable Acid Resist Fluid

UV-based, red, jettable fluid which cures to a tacky, residue-free, acid resistant, yet removable, solid. DTX RED's unique formulation allows it to rinse cleanly after the initial etching process. The jettable nature allows DTX RED to be precisely deposited, resulting in unsurpassed resolution, registration, and print quality.

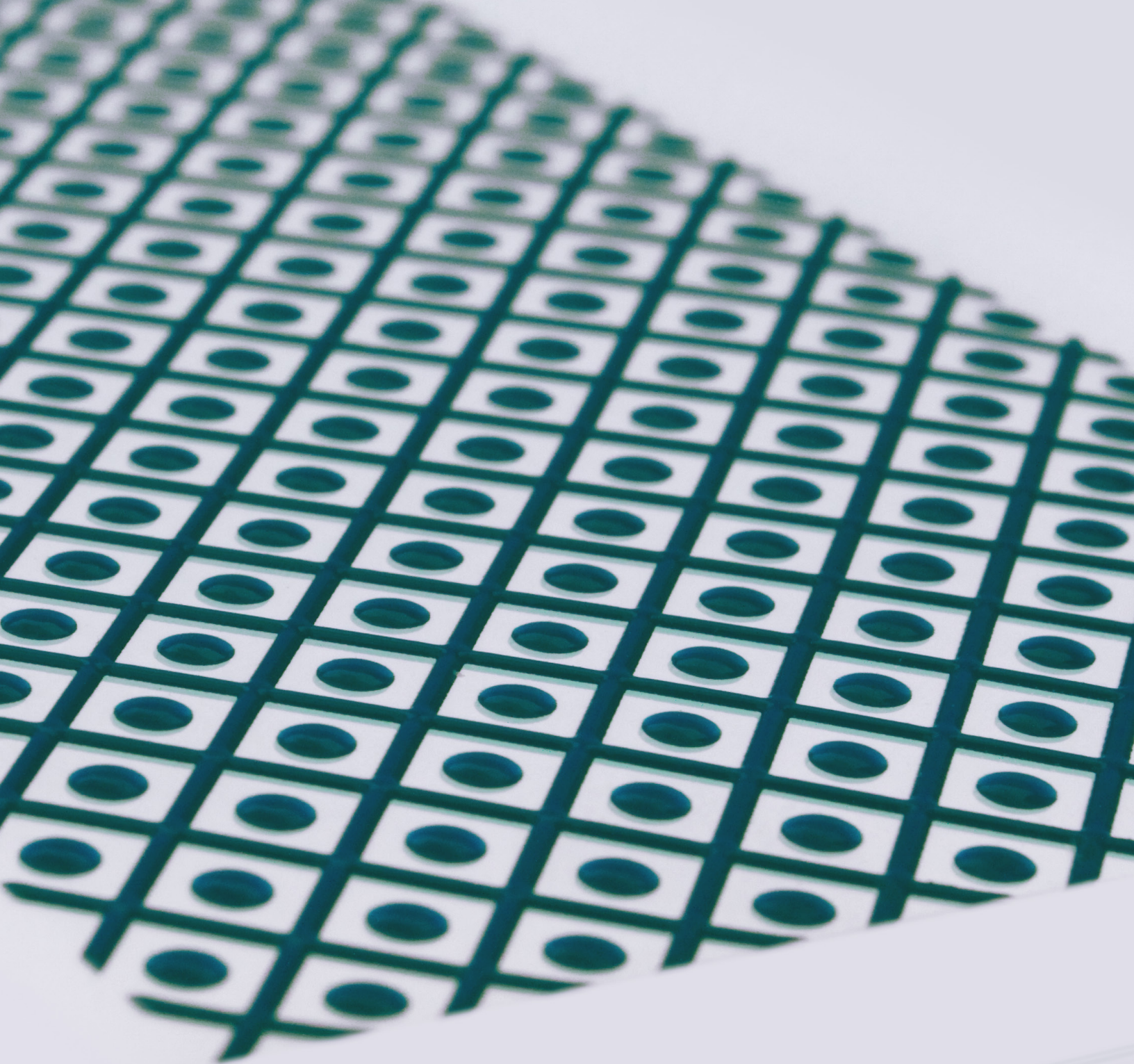




## DTX Rapid Prototyping

- Allows the direct transfer of the image onto a part or work piece to create an actual prototype of the textured item.
- 3-D texture with domed edges and actual prototypical look, shape, feel. (No flat top and sides as with photo-resist prototype methods)
- Digital adjustment/image editing for precise duplication of texture.
- UV curable fluid for maximum durability.





## Prototyping Consumables

### DTXR.P.<sup>f</sup>

Rapid Prototyping Fluid

For use in the production of textured prototypes where durable, residue-free deposition fluid is necessary. DTX RPF is a “build-able” fluid, allowing multiple, precise deposits for the “building” of multiple-level texture.

### DTXR.P.<sup>m</sup>

Rapid Prototyping Media

For use in the production of textured prototypes where consistent, accurate deposition registration is imperative. DTX RPM is a flexible media, accommodating complex curves.



## Introducing Digital Texturing

For over 50 years, the IKONICS has provided unique imaging solutions to a wide variety of imaging-intensive industries around the world.

Currently conducting business in over 90 countries, IKONICS has recently targeted its digital imaging technology toward the application of surface texturing, or “mold texturing.”

**Digital Texturing is this initiative.**



An **IKONICS** Company | **ISO** 9001 Certified

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