IDTechEx



Stretchable 3D ink-jet texture media

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IKONICS Corporation, known for its Digital Texturing technologies, has developed an ink jet media for making stretchable, three-dimensional textures that can accelerate 3D rapid prototyping and mold-making processes. IKONICS DTX® RPM, or Rapid Prototype Media, uses proprietary ink jet methods and materials to build the high-resolution 3D texture as a series of 20-micron layers. With the ability to print consecutive layers, each DTX RPM layer can have an altered pattern or graphic—creating extremely smooth transitions between each level, and therefore, the highest resolution 3D textures possible.

DTX RPM stretchable membranes are optimum for product designers and mold makers to wrap 3D prototype parts for quick concept communication and approval. DTX RPM allows for complete pattern customization and adjustment (including logos), making changes to any texture design an easy fix-just print, and wrap again! For industries such as Automotive Interiors, this technology has provided a more efficient, lower cost process for approving prototypes and moving them into production.

The 3D texture membranes can be printed up to 44" x 52", exhibit excellent scratch resistance, and are able to stretch over 200%—making it possible to wrap complex geometries and curves. The flexible 3D textures are easily applied to parts using standard adhesives, and finished using stock paints and coatings. A pressure sensitive version of DTX RPM is also available.

DTX RPM is currently the only technology able to simulate mold-like, striation free, stretchable 3D textures that mimic the high-resolution results of texture-house etching processes. The technology is currently being embraced and implemented in the automotive industry, and will benefit any application requiring an efficient, cost effective method to incorporate detailed texture patterns into their product designs.

Source and top image: IKONICS Corporation