



# A TOUCH OF TEXTURE

Ten years after Kalogridis International introduced Deconel to the interiors of business jets, the company is branching into hospitality and residential work with new and exciting designs. However, private aviation remains their major business line.

**By Jill Stockbridge**



For a Middle Eastern flavour, the sand dune design reflects the patterns made by the wind in the sand.

Dallas-based Kalogridis International Ltd specialises in artistic aircraft interiors. Following years of cladding aircraft in heavy woven materials, the company came up with Deconel, a lightweight composite of foam and fabric, which can be enhanced by adding custom designs, stitching, embroidery, beading, metal leaf, paint and other decorative touches. It can be applied on all wall coverings from window panels, lower sidewall panels, headliners and PSUs to bulkheads, with Deconel seat pods currently on show on the Airbus 380 first class mock-up in Toulouse, France.

Since the first complete order in 2007, the company has continually pushed the design boundaries.

Nichole Davis, Deconel Director, said: “Our initial objective with Deconel was to create a material to replace the heavy and outdated Nomex carpeting still flying on airline bulkheads. We wanted something lightweight, fire retardant, and sound absorbing.

“Our first completed order, in 2006, was a head of state 747 aircraft. Soon after, we began production on panels for American Airlines, which are still flying today. Currently, the majority of the company’s business is creating decorative surface coverings for business jets, although we are working on material for several airlines.”

Since its launch, the team has found that the flexibility of Deconel has allowed the designs to be-

come much more elaborate. Davis said: “We began doing a lot of logos, printed materials and plain material without design. Now, most of our orders are much more decorative with embossed or three-dimensional sculpted elements. We manufactured our first fully 3D sculpted window line material last year, completed by Constant Aviation. We are currently working on a commercial project featuring a 3D sculpted material with LED accents.”

The team has the capability to create custom designs using a designer’s desired fabric and colour choice, as opposed to using patterned fabrics that only come in single material choices and small colour ranges. They can either work directly from files sent by the customers or work with them through the entire design process from initial concept to finished product.

Davis said: “We have hundreds of designs in our library, but are constantly being pushed to create different techniques and explore new design options by demands in the changing market. The designers are only limited by the type of fabric selected and how many colours are offered by the manufacturer. Almost any design is possible with Deconel, within the surface fabric’s limitations as well as flammability requirements.”

As always with aircraft interiors, safety is paramount and nothing can go onboard unless it is fully certified. The Kalogridis team built on their many years of experience, as Davis explained. “One of the biggest challenges we have faced is flammability, especially in regards to commercial aviation. There are only a handful of fabrics that pass strict OSU 65/65 testing. Up until recently, we relied mainly on customising Nomex fabrics, which were sometimes lacking in texture. After extensive research and testing with Tapis Corp, we have managed to find a winning combination. This allows us to offer a broader range of surface materials to the commercial market that still have the luxurious look and feel that is required in a VIP business interior. Our material is handmade in the United States and we use only the highest fire-rated materials.

“Deconel’s sound absorbing qualities are always a benefit for any aviation environment,” she added.

The newer sculpted designs have proved to be very popular; with the hand pleated “Motion III” design one of the company’s top sellers and one of Davis’ favourites, along with Rain. Davis said: “It gives a feeling of organic movement that works well in almost any interior.

“My current goal for Deconel is to introduce fine art to the aircraft cabin. We can create these pieces of art by adding special details with metal and stone



inlays, gold leaf, paint, beadwork, and other techniques. Each project is unique; we love to try new things and never turn down a challenge.”

Success has brought its own challenges, with the work expanding from business jets to larger commercial aircraft. Davis said: “I would have to say our biggest challenge has been recreating the VIP interior in a commercial environment due to limitations in fabrics and sometimes design. We have been working closely with Tapis to develop passing combinations for commercial aerospace applications. Now, we are able to offer a broader range of fabrics and colours than the very limited selection previously.”

As well as new designs, the Deconel panelling continues to find new applications, with private jet clients requesting the same level of décor in other environments. This is something that Kalogridis has embraced.

Davis said: “We plan to expand on our current capabilities enabling us to offer new and interesting materials to the aerospace, yacht, hospitality and residential markets. I would like to create materials that are works of art in the aircraft; something very artistic and unique that’s never been done before. Bulkheads and window panels are the perfect canvas. We are also working more in the commercial aerospace market and are able to continue to learn and grow by never turning down a challenge.”

Each year, the company exhibits at both NBAA and EBACE, where they debut the newest carpet and Deconel creations and techniques.

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The Deconel designs add movement and interest in interiors that tend to be quite neutral.



The hand-pleated Motion III has a natural, organic feel, which is very popular.



There is a growing demand for Deconel in residential and yacht projects.

“PANELS CAN BE ENHANCED WITH CUSTOM DESIGNS, STITCHING, EMBROIDERY, BEADING, METAL LEAF, PAINT AND OTHER DECORATIVE TOUCHES”

**KEY FEATURES OF DECONEL:**

- lightweight
- sound absorbing
- resists bubbling and dimpling
- completely customisable