

surface

LUXURY BY DESIGN

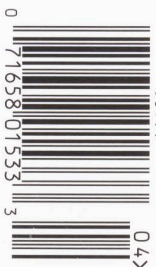
SAME MISSION • A
NEW FORMULA



SPRING FASHION

INDIAN JEWELRY REMIXED
• FOUR NYC LABELS RISE ABOVE THE REST •
DESIGNERS UNFURL THE FLAT

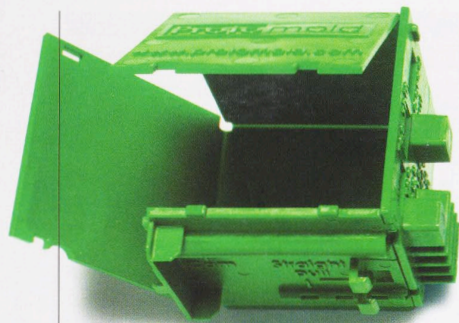
APRIL 2011
DISPLAY UNTIL APRIL 25



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\$6.99

0.47



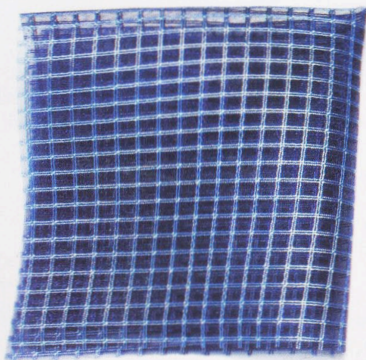
01



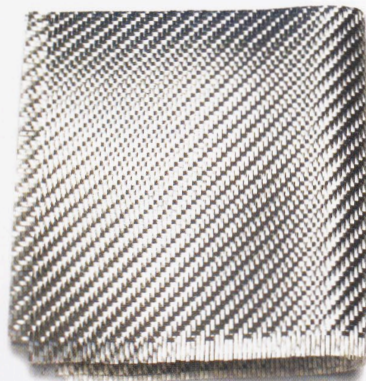
02



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More For Less

SIX CONVENTION-BENDING TOOLS GRANT DESIGNERS NEW ROADS TO SUCCESS.

PHOTO TOM HAYES

In this column, we ask Material Connexion VP Andrew Dent, Ph.D., to select six introductions set to influence what you'll be using tomorrow.

01 Injection molds are expensive and time-consuming to finalize, which makes it difficult to create prototypes in succession. With Protomold's Rapid Injection Molding

process, designers can use 3-D CAD models that are then put into a CNC machine to mill aluminum molds. This fast-tracks the production process before the final investment.

02 Polypropylene is a common, inexpensive, and versatile plastic. It's often reinforced with glass fibers, much like concrete is reinforced with rebar. By using the additive Hy-Perform from Milliken Chemical, the plastic can be stiffened without increasing weight or affecting its recyclability. Applications include chairs, automotive parts, and containers.

03 In order to create fabrics quickly with an anti-slip grip, the Tufpenbeschichtung Mineralpunkt by Wunderlich process adds raised PVC dots without the use of glue. The pieces are applied in a liquid that, like icing on a cake, embeds itself to the fibers as it hardens.

04 A technology called AirDye uses heat and air to transfer colors onto fabrics, rather

than the vast amounts of water required for traditional dyeing. While the process is more akin to printing, the colors seep into the fibers themselves, allowing the textiles to last longer against cleaning agents.

05 Glass fiber fabrics are embedded into plastics for strength. They're also molded for lightweight applications, such as containers. But the results aren't always attractive. Barracuda fabric, however, is finished with a metalizing process that makes it both durable and able to have a glossy surface, for use in products such as tennis rackets and helmets.

06 By using Belland's BelleX, manufacturers can mold this mix of polymers into individual solid pieces or use it as glue. When submersed in a specific water-based alkali solution, it dissolves quickly, which allows for an easy, selective way of recycling or disassembling products.—DAN RUBINSTEIN