

Product showcase

Intelligent fastening

Textron Fastening Systems, in partnership with **TZ Limited**, a subsidiary of **Telegogy**, is marketing the Intevia line of intelligent fastening systems and products featuring TZ technology. Intevia fasteners are equipped with embedded microprocessors remotely controlled by intelligent tools; fasteners can be installed on printed circuit boards by electronic commands while the production line is moving. Customized software systems control, manage, diagnose, and document each fastener process and total life cycles. Future applications for Intevia products include the global aerospace industry.

For more information, circle 100



Composite material

DSM Somos' NanoFormT 15120 is a composite stereolithography (SL) material that incorporates non-crystalline nano-particle technology for improved performance, including high stiffness and heat resistance. Heat deflection temperatures of more than 500°F make it suitable for aerospace applications. Other product benefits include improved dimensional stability, low shrink, and low coefficient of thermal linear expansion. The material is processed like unreinforced liquid SL resins and requires no mixing or special handling.

For more information, circle 101



Seam sealing tape

Tyco Plastics & Adhesives introduces an aerospace tape for seam sealing and repair in aircraft cargo compartments. Polyken 296FR was designed for use on covering pins and rivets needing high adhesion and flame resistance. The product's adhesion-to-cargo liner rating is 30 oz/in. The tape does not contain polybrominated biphenyl ethers and features a construction that minimizes adhesive residue when the tape is removed. A glass cloth design resists flame penetration, and improved adhesion properties eliminate lifting and curling. When unwound, repositionable Polyken 296FR hangs straight and resists curling during application. The product does not wrinkle when applied. The acrylic adhesive cures in 24 h. Width sizes of 1, 2, 3, and 4 in are available.

For more information, circle 102



Power module

L-3 Communications Electron Devices has expanded its line of microwave power modules (MPMs) with a 28-V dc prime power version designed to provide peak RF (radio frequency) output power as high as 1 kW on narrowband applications within the same relative form factor. The M1221 Series features up to 100 W in output power over an operating range of 6 to



18 GHz. The latest offering is able to meet the needs of the dominant BUS (broadband up-link station) voltage common to most global aerospace platforms, according to the company. The MPM combines a solid-state driver with a vacuum power booster and an integrated power conditioner in a smaller, lighter package.

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High-strength fasteners

SPS Technologies offers fasteners made from SPS MP98T superalloy, which offers improved strength and corrosion resistance. The MP98T fasteners feature a minimum tensile strength of 180 ksi. Suitable for aerospace engine and airframe applications, the alloy also resists embrittlement in high-pressure hydrogen environments, such as rocket motors using liquid hydrogen for fuel. MP98T bolts are offered in various configurations and in sizes up to 1.75 in and larger. Nuts also have been manufactured.

For more information, circle 104



Powered enclosure

The Euro-Cage D+ 1600 Series powered enclosure from **Triple E** offers improved structural features for performance and durability in military and aerospace applications. Features include solid aluminum construction to provide structural integrity and protection of boards under rigorous use and a stainless steel inject/eject plate that provides up to 463 N of insertion force. An extruded aluminum card guide system does not flex or break like plastic and minimizes cooling airflow, according to the company, while an all-aluminum powder-coat finish offers durability in harsh environments. Two models are offered; both include ball bearing fans, an auto-ranging power supply, and either a VME64X or cPCI backplane.

For more information, circle 105



Polymer fiber

AmberStrand metalized polymer fiber from **Syscom Technology** features metal-clad polymer fibers that offer textile-like wiring applications and shielding at a reduced mass. The fiber can be terminated like regular metal wire with the choice of soldering or band connector. It is also a suitable replacement for the 26-gauge copper wire or 28- or 30-gauge beryllium alloy wire currently used on space and aerospace systems. Other applications include aircraft rewiring/retrofitting applications as well as aerospace, space, and military vehicles. AmberStrand is 26.6% lighter than beryllium copper wire and offers twice the breaking strength while requiring 4-10 times the dynamic cut-through force. Custom types, thicknesses, and lengths are available.

For more information, circle 106

