

Custom wiring solutions

REDEFINING INTERCONNECT

Engineered solutions designed to save
space, weight and installation costs



Collins Aerospace

ADVANCED WIRING DESIGN CAPABILITIES

Collins Aerospace has the resources and expertise to provide custom wiring solutions that meet your specifications. With over 90,000 square feet of manufacturing space on our 16-acre site, we can design, manufacture and test interconnect wiring systems that are installed in your hardware.

Collins Woven Electronics offers exceptional resources to our customers, such as: DIT-MCO analyzers, eye-pattern testers, digital scopes, CAD machines, wire markers, weaving looms, braiders, milling machines, additive manufacturing and much more. Our expert cable design specialists are available for consultation on solutions to transmission and termination challenges.

Collins will work with you and follow your specifications – or we can suggest modification to improve performance. Starting with your basic problem, we will work to find the right answer for you while utilizing our world-class research, development and quality assurance.

We offer an extraordinary range of interconnect products including:

- Woven and conventional cable harnesses
- Backshells and connectors
- LightLOC perimeter security system

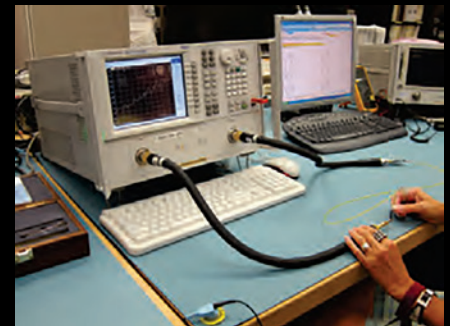
CAPABILITIES

Collins is the premier designer and integrator of interconnect and assembly package solutions.

- Round wire harnessing
- Flat wire harnessing
- Fiber Optic Harnesses
- RF/Coaxial Harnesses
- Molding
- High speed data cabling
- Custom backshells
- Metal and textile braiding
- Integration and box builds

MARKETS SERVED

- Precision munitions
- Aircraft
- Radar
- Launching systems
- UAS
- Marine

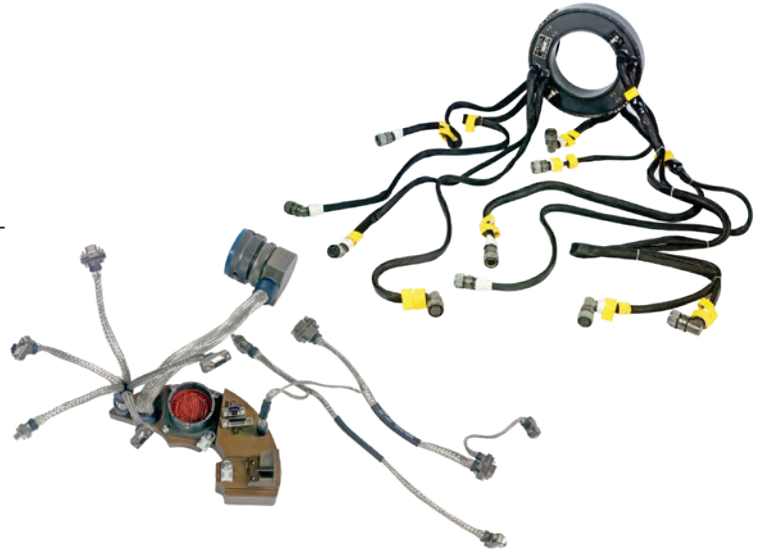




Harnessing

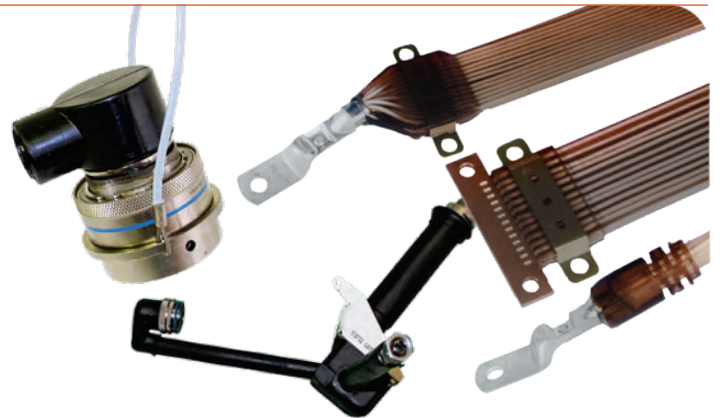
Collins produces interconnect assemblies ranging from simple point-to-point to highly complex harness, such as fabrication of the chassis and installation into the higher-level subassemblies including: coaxial cable, medical cables and wire harnesses. Our skilled technicians are certified to the J-STD-001 and IPC/WHMA-A-620 to meet our customers' high-reliability requirements.

Collins engineering staff are focused on space and weight-saving options, as well as more efficient, cost-effective methods, and will offer suggestions for design improvements on existing customer prints.



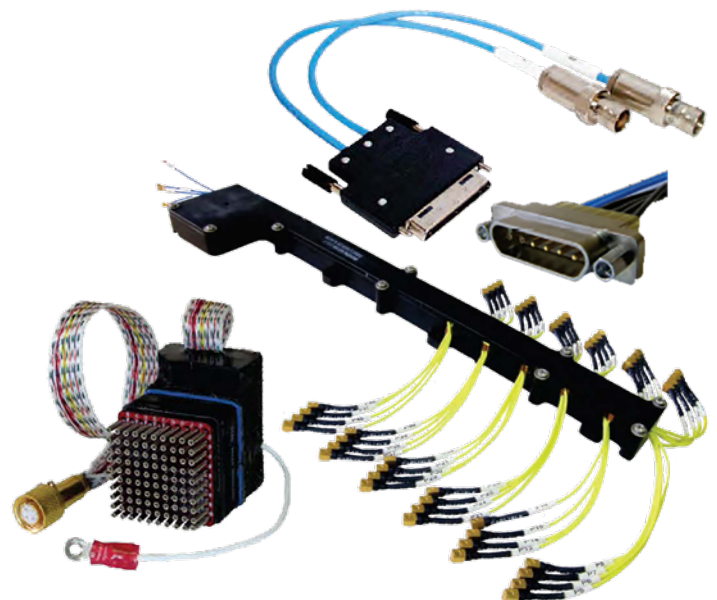
Molded

Where encapsulation offers advantages, Collins offers a wide variant of interconnected options. Our low and high pressure molding includes urethane, silicone, Stycast, epoxy, Sanprene and PVC. A full range of tooling options is also available, including soft and hard tools, silicone and 3-D printed. Our molded products have been proven reliable in a wide range of applications, including defense, aerospace, industrial, telecommunications and medical.



High speed and microwave

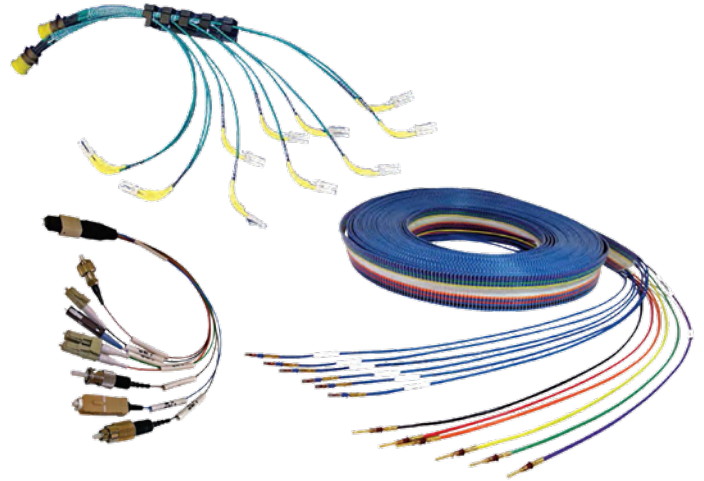
We are a leading manufacturer of mission critical RF/microwave assemblies and wire harnesses. Collins ability to package and harness RF/microwave assemblies is unrivaled in the industry. Complex harnesses, ribbonized coax, custom backshells, molding and flexible conduits are just a few of the ways we package these assemblies to meet your requirements. Electrical parameters include VSWR and phase matched performance to 65GHz. Our manufacturing is divided into cells for quick prototypes, small and medium volumes. Applications include: radar, control systems, avionics, strike weapons and telecommunications.





Fiber optic

Collins designs and manufactures custom fiber optic cable harnesses for the military, telecommunications and medical markets. We terminate and polish most types of multimode or singlemode fiber optic connector, or military termini, using precision pneumatic polishers and premium quality diamond and silicone polishing films. All of our products are inspected for cracks, pits, scratches and contamination at 400x or above. We produce lab quality UPC and APC singlemode connectors using interferometry, and insertion and return loss testing to adhere to all Telcordia and military standards for ferrule shape and accuracy.



Backshells

As an enhancement to cable design or as an independent product line, Collins backshells provide improved EMI shielding, environmental seals, strain relief for cable assemblies and housing for boards and circuits. Designed to fit the application, our backshells can be tooled, machined or injection molded, and manufactured with the right materials and plating to meet performance specs and hostile environments. High temperature materials can be utilized for extreme applications such as hypersonics.

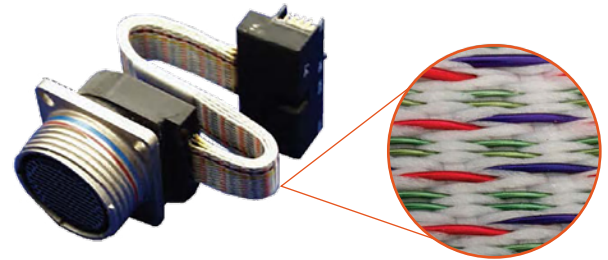


Engineering

Collins engineering takes your design from the 3-D model concept phase to an additive manufactured part. We can verify functional fit and provide a mechanical enclosure that is integrated into the final full-up assembly.

Engineering services include:

- Prototypes
- Harness drawings
- Custom mold designs & drawings
- Custom backshell design and drawings
- Custom shielding & jackets
- PCB design & layouts
- Custom connector design & drawings
- Custom ribbon cable design & drawings
- Signal integrity
- Performance & life verification



To learn more, go to
collinsaerospace.com/woven

Collins Aerospace

864.963.5131 | +1.864.963.5131

fax: +1.864.963.1761

learnmore@collins.com

collinsaerospace.com