



Cable Design, Engineering and Manufacturing

Highly reliable design and manufacturing of cable harnessing solutions, for performance in harsh environments.

Cable Design and Through-Life Engineering Support

From concept to finished and tested cable assemblies or equipment sub systems, TT Electronics Global Manufacturing Solutions provides comprehensive manufacturing of high quality cable harness assemblies and cable systems for Aerospace, Defence, Heavy Industrial and Rail markets.

With expertise in cable design and on-site engineering support, TT produces conceptualized cable drawings from your project specifications. From simple cable design drawings to more complex engineering, our team of certified engineers use a complete suite of design software platforms including AutoCad and CATIA to produce original wire harness concepts specific to each unique application. We can build to your existing drawing specifications, or collaborate with your team through the development of new designs. Our engineering team has experience developing projects involving 3D modeling of sophisticated harness systems and interconnect solutions.

When you require on-site engineering services, TT Electronics will send qualified engineering resources with IPC-A-620 expertise to your work site. Our on-site support offerings range from design consultation and prototype trial support, to complete installation.

As a DAOS (Design Approved Organizations Scheme) approved design organization, you can rest assured that TT Electronics satisfies the requirements of the Military Aviation Authority.

Cable Manufacturing

TT Electronics has achieved the highest quality standards in cable harnessing including AS9100, MIL-STD-790, and ISO 9001 certifications. We also hold Nadcap accreditations across our facilities in China, UK and USA. Achieving and maintaining these high-level standards enable us to provide custom cable manufacturing to your meet your project specifications without compromising quality.



Should additional harness protection or Electromagnetic Compatibility (EMC) screening be required, we also offer additional specialist services.

Recent cable harness programs include:

- Communication and camera systems on MRAP vehicles
- Screened harnesses for missiles
- Screened and super screened technologies
- Landing gear harnesses on the Eurofighter program
- Cables for Boeing 787 Dreamliner
- Cable systems for Joint Strike Fighter
- Harness specialists for rotor wing aircraft
- Harness specialists for military land vehicles

Complementary specialist services include:

Heat shrink systems

Heat shrink systems provide a means of encapsulating cables and sealing them to protecting the harness from extreme weather, temperature and moisture ingress. In addition, we provide Halogen-free sleeving as a heat shrinkable product for types DR25, NT120 and ZHTM. Halogen-free sleeving enables protection against damage and foreign object debris (FOD). Our products such as 0-Halogen, offer toxin-free solutions at high temperatures.



Conduit assemblies

For those seeking a different cost effective solution to cable harness protection, we offer conduit assemblies as a means of safeguarding your cable assemblies from the elements. System 150 conduit is a plastic over cover that can serve as a suitable alternative to heat shrink systems in certain applications.

Open looming - internal cable harnessing

TT Electronics provides expert open looming capabilities using JIG boards, lacing restraints, tie wraps or spot tie solutions. Custom looming is also available depending on the number of terminations required for multi-branched solutions.

Overbraiding of cable harnesses including transition points

Should you require screening cables to reduce or prevent impedance and interference or signal loss, overbraiding may be right for you. TT provides two forms of overbraiding: pre-woven or machine-driven tin copper or nickel copper overbraiding. We also provide stainless steel overbraiding using our 24-36 cobra braiding machines. With our overbraid machine capability, we can cater to your exacting dimensions and project specifications.

Global Cable Solutions

In an effort to globalize our cable harness offering, the ABI (Smithfield, NC) and New Chapel Electronics (Fairford, UK) businesses have been integrated into TT Electronics Global Manufacturing Solutions. These businesses bring a rich history of serving ruggedized aerospace and defense markets while expanding our regional cable harness offering in Europe and North America.

Americas

Perry, OH, USA
Tel: +1 440 352 8961

Europe

Rogerstone, South Wales,
UK Fairford, England, UK
Timisoara, RO
Tel: +44 (0)1633 892 345

Asia

Suzhou City, China
Tel: +86 512 66611004

For more information, visit us at
www.ttelectronics.com
GlobalSales@ttelectronics-ims.com