

Coaxial Cable Assemblies



DELPHI



Delphi's Tijuana, Mexico, plant is the leading coaxial cable assembly manufacturer in North America.

The Clear Choice

Lean processes and quick implementation are making Delphi an increasingly valued supplier for coaxial cable assemblies.

Delphi's world-class assembly facility in Tijuana, Mexico, serves as an efficient, cost-effective source of coaxial for a wide range of vehicle, military, aerospace and commercial applications. The facility uses state-of-the-art manufacturing systems to produce robust and reliable coaxial assemblies at specified requirements and quantities for its global customers.

Manufacturers recognize and rely on Delphi's leading edge processes to efficiently deliver the quality products they require.

Complete package

With extensive design and process engineering, Delphi is able to convert customers' specifications to production runs quickly and efficiently. As the leading coaxial cable assembly manufacturer in North America and an expert in electrical/electronic architecture and connection systems, Delphi can leverage a wealth of expertise to deliver a coaxial cable assembly that meets demanding customer requirements.

When working with Delphi, customers gain all the advantages associated with having all testing, production control, and logistics in a centralized location. Delphi's extensive experience in managing complex programs can be easily adapted to any existing program, enabling a smooth supply transition to help maintain uninterrupted production.

All under one roof

The Tijuana facility is Delphi's North American center of expertise for coaxial assemblies, offering manufacturing excellence and global price competitiveness. Tijuana's assembly skills are proven every day, and in nine years it has delivered zero parts per million (PPM) production and flawless delivery. With continuous improvement always in mind, our facility utilizes Green Belt™ and Red X® strategies to help ensure quality.† These are proven systems placed and poised to continue meeting the needs of our global customers.



Our staff of experienced engineers and technicians is dedicated to continuous improvement. We offer advanced manufacturing/assembly in the following areas:

- Leading edge connection system and harness expertise
- Lean and efficient assembly processes
- Efficient material flow
- Quick change set-ups
- Tool design and fabrication in-house
- Manufacturing/Industrial engineering services on-site
- Quality assurance and testing
- Proven and demonstrated implementation of assembly without disruption
- Reduced variation and error proofing

Tijuana's coaxial manufacturing capacity includes approximately 9,000 square feet of floor space, incorporating more than 300 operators. Current coaxial assembly equipment utilizes 18 cutter machines, 23 crimping stations, and three taping machines. Testing capabilities include: pull force; AQL for dB, VSWR and IL; capacitance and 100% electrical continuity; Poke-Yoke; insertion loss; and complete USCAR/FAKRA tests.



In nine years, Tijuana has delivered zero parts per million (PPM) production and flawless delivery.

† Red X® is a trademark of Red X Holdings.

Green Belt™ is an element of Six Sigma, which is a service mark and trademark of Motorola, Inc.

Product Information

Delphi offers a wide portfolio of high performance cable assemblies from a single source. Standard, off-the-shelf or custom designs manufactured in accordance with customer specifications are available.

Benefits/Features

- Flexible manufacturing cells allow high /low volume mix and low/high volume mix
- Extensive experience in transportation E/E architecture design and manufacturing
- Fully certified testing /validation lab
- Full participation in global standards activities
- Build-to-print

Typical Applications

- Antenna applications
- Passenger vehicles
- Commercial vehicles, motorcycles, ATVs
- Military applications
- Avionics, aerospace
- Marine
- Ground position sensors
- Video and multimedia
- Industrial interconnects

Performance Characteristics

- SWR and IL sweeps from 0-3 GHz
- Built in accordance to MIL-DTL-17
- Cable lengths from <1 meter to 8+ meters
- FAKRA, BNC, and Mini-UHF
- ISO/USCAR compliant

Coaxial Cable Assembly with FAKRA Connectors



Facilities

Delphi Connection Systems MAC (Military, Aerospace, Commercial) operations are located in three state-of-the-art facilities in Irvine, California, Tijuana, Mexico, and Landrum, South Carolina.

Irvine, California – Delphi Connection Systems' MAC headquarters are located in Irvine. The facility is the cornerstone for Delphi's military, aerospace and commercial products, offering engineering, testing, and customer services. Integrated with our design and application engineering are advanced modeling and testing services. The modeling department produces engineered samples and customer prototypes, while our fully-certified (MIL-STD-790) reliability test lab performs a wide range of electrical, mechanical and environmental tests on-site.

The Irvine facility employs simulation tools: AnSoft Maxwell® SPICE Link, AnSoft HFSS™, Tektronix IConnect®, AutoCAD® and Solid Edge™ services. †

Tijuana, Mexico – Delphi's Tijuana manufacturing/assembly facility consists of 92,000 square feet [8,550 meters²] of floor space and has been in operation since 1978. The facility is ITAR (International Traffic in Arms Regulations) licensed and compliant. Recipient of six quality and environmental certifications, the facility has extensive testing and validation capabilities. An EMC/RF (electromagnetic compatibility/radio frequency) laboratory performs measurements for coaxial cable assemblies and other products.



The Tijuana facility has more than nine years of experience with assembling coaxial products. With this expertise, we build upon the skills required for other complex assembly products, developing synergies with electro-mechanical, fiber optic, electronic enclosures, and flex products.

Quality Systems Certifications:

- General Systems
 - ISO9001:2000 Certified
 - TS/ISO 16949 Certified
- BAE Systems
 - AUK/SA/001-3
- Fiber Optics Systems
 - MIL-STD-790
- Environmental Certifications
 - ISO14001
- J-STD-2000 (MIL soldering certification)

† Maxwell® and HFSS™ are registered trademarks of AnSoft Corporation.
IConnect® is a registered trademark of Tektronix, Inc. (Tektronix Interconnect Analysis Software is formerly TDA Systems, Inc.)
AutoCAD® is a registered trademark of Autodesk, Inc.
Solid Edge™ is a trademark of UGS Corporation.

DELPHI

Driving Tomorrow's Technology

World Headquarters and Customer Center

Mail Code 483.400.306
5725 Delphi Drive
Troy, Michigan 48098-2815
U.S.A.
Tel: [1] 248.813.2334
Fax: [1] 248.813.2333

Delphi Connection Systems

Military/Aerospace/Commercial Products

1 Vanderbilt
Irvine, CA 92618
U.S.A.
Tel: [1] 949.458.3100
Fax: [1] 949.458.3142

delphi.com