

Reynolds Industries Limited

Facilities

Reynolds Industries Limited was formed in 1982 in Newbury, England to duplicate the major capabilities of the parent company, Reynolds Industries Incorporated. Since its founding the company has consistently grown and become ever more autonomous.

In 1989 the company relocated into a new 25,000 square foot (2,500 m²) facility in Newbury which houses four operating divisions:

- High Voltage Products Division
- Microwave Products Division
- Electronic Products Division
- Distribution Division

The High Voltage Products Division designs, manufactures and markets high voltage connectors, cable assemblies and harnesses for customers in Europe. These products can be tested at a voltage level and altitude which simulates the actual operating level. In addition, hot and cold cycling at an altitude level can be imposed along with partial discharge corona tests.

The Microwave Components Division manufactures a comprehensive range of high performance flexible and semi-rigid R.F. microwave cable assemblies and associated products and services.

The Electronic Products Division specializes in electronic firing systems needed to initiate secondary explosive detonators and associated test equipment for weapons systems trial sites, government and private research laboratories and industries involved in explosive operations.

The Distribution Division Imports, distributes and markets other manufacturers products and equipment to customers in the United Kingdom and Europe. A strong technical staff, an approved Quality Assurance system and years of experience importing and marketing products, combine to make this a fast growing segment of the business at Reynolds Industries Limited.

The Quality Control System of Reynolds Industries Limited is approved by BSI to BS EN ISO 9001.

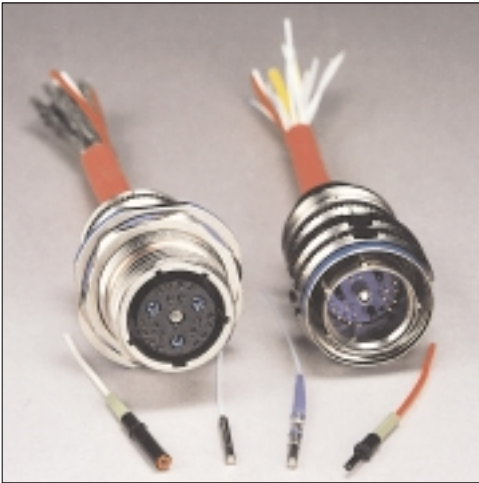
Reynolds Industries, Ltd. factory and offices in Newbury, England. The 25,000 square foot building was dedicated in 1989.



Computer controlled milling, turning and drilling department produces many of our tight tolerance metal and plastic detail parts.



Computer Aided Design System (CAD) provides our engineering staff with an important design tool.



A MIL-C-38999 connector conversion with **HiMate** high voltage lead assemblies, single mode fiber optic lines and low voltage lines combined to form a multi-mode cable harness.



A partial discharge (corona) test being performed.



Cable and harnessing assembly area



A custom designed 30 KVDC multi pin shielded connector for use in an airborne radar application. The connector features Reynolds Advanced interface sealing system.

High Voltage Products Division

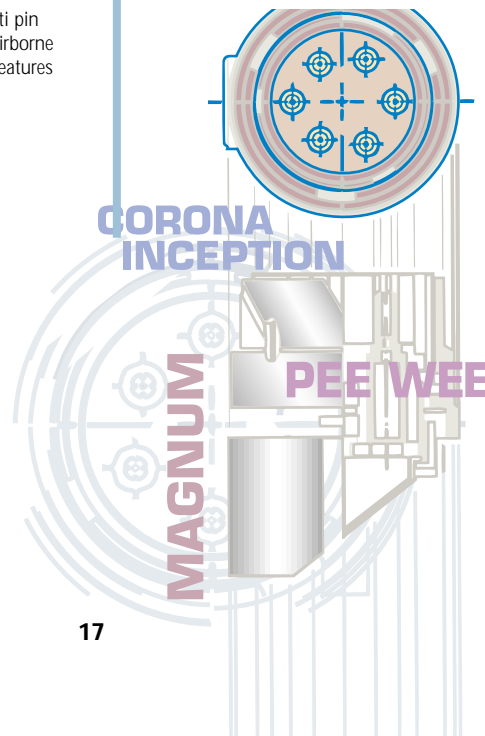
High voltage connectors and cable assemblies are fabricated under controlled conditions in the main factory area. Special bonding and encapsulation processes have been developed and this together with the skilled workers using micro soldering techniques, results in the production of highly reliable components and assemblies.

Hot, cold and altitude chambers are used to subject the products to a variety of simulated environments as may be specified by our customers. Partial discharge (corona) testing can also be performed and is useful in increasing life expectancy and detecting noise generation emanating from high voltage connectors and cable assemblies.

Voltage ratings of our connectors range from 3,500 volts D.C. to 60,000 volts D.C. and most are rated for operation up to 70,000 feet (21,000 m) altitude.

Applications are typically:

- High voltage interconnects for ground based, ship-board and airborne radars.
- Electronic Counter Measure equipment
- Avionic CRT head-up, head down and Helmet Mounted Displays for Electronic Flight Instrumentation Systems.
- EBW and EFI explosive products.



Microwave Products Division

Reynolds Industries Limited manufactures a complete range of R.F. and microwave cable assemblies in its Newbury, England factory. These products include:

- High performance flexible cable assemblies up to 40 Ghz
- Microporous semi-rigid cable assemblies
- Vector network analyser test cables
- Direct entry waveguide transitions

These high quality products are provided to both military and commercial customers. When a specific application requires properties not available in standard off- the-shelf products, our comprehensive in-house engineering, manufacturing and test facility permits us to produce prototype quantities for evaluation.

The Microwave Products Division is also staffed to design and fabricate special microwave test equipment.



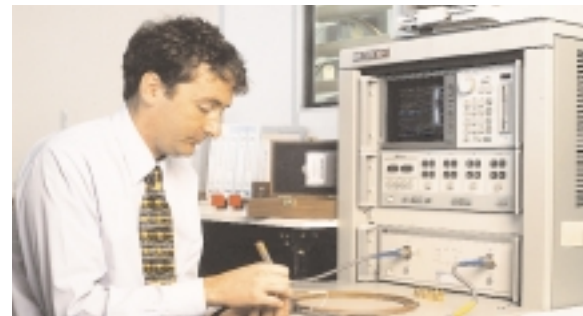
Flexible microwave cable assemblies are available in five diameters ranging in size from 5.3mm to 13.5mm with an operating range of 8 to 40 GHz



Semi-rigid microwave cable assemblies including a direct transition waveguide



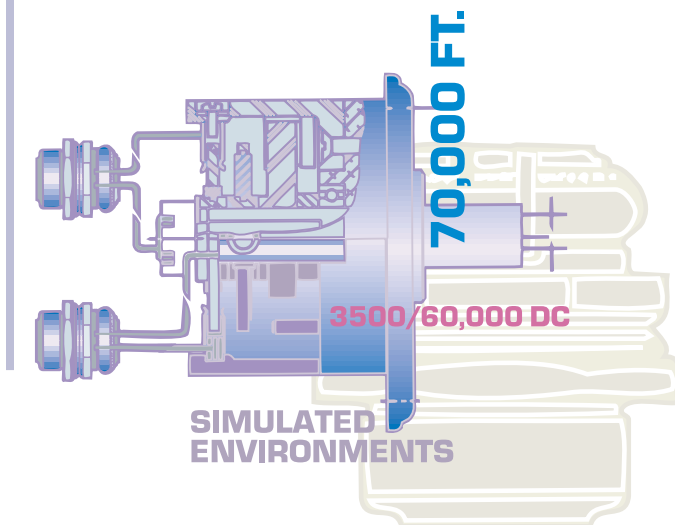
The Microwave Products Division designs and manufactures special microwave test equipment. Shown is a tester with a bank of microwave switches.



Measuring Insertion Loss of a flexible microwave cable assembly using a network analyzer.



Assembly area for microwave cable assemblies



Electronic Products Division

The Electronic Products Division of Reynolds Industries Limited manufactures and supplies a wide range of secondary explosive detonators, electronic firing units and associated test equipment. These products are used in weapons systems, weapons systems trial sites, government research laboratories and other areas involved in explosive operations.

Our engineering and programme staff have been involved in explosive operations since the early 1970's. The Explosive Products Subsidiary of our parent company, Reynolds Industries, Inc., have been producing EBW and EFI detonators since 1968.

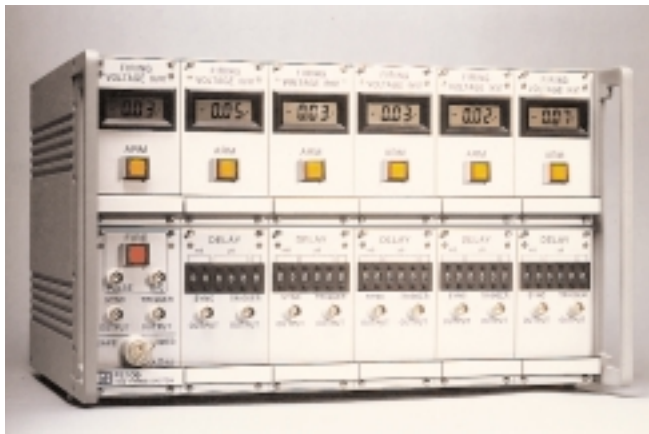
The Electronic Products Division produces electronic systems for explosive applications in the following categories:

- Single and Multi point firing systems with or without delays for firing ranges and research establishments
- Self destruct or breakup units
- Rocket motor ignition systems
- Tandem warhead systems
- High voltage modules for Safe, Arming and Firing Units (SAFU's)

This division also specializes in the design, assembly, encapsulation and testing of custom high voltage power supplies using proprietary potting and encapsulation techniques.



Battery operated firing system with separate firing module



A six channel laboratory firing system with adjustable firing delays



7 KVDC power supply for an airborne radar application. This power supply was designed by the customer and assembled and tested by personnel in the Electronic Products Division using special encapsulation techniques developed at Reynolds Industries Limited.