

# **QUALITY OVERVIEW**

MPE is certified to ISO9001:2008

#### Reliability

During the last 30 years, MPE Limited has designed manufactured and shipped in excess of 8 million filter and capacitor products. Many of these products have been in field service for over 20 years.

Having interrogated and analysed customer return data, product return level is minimal at 0.012%

During 2011, following an installation upgrade, MPE had the opportunity to analyse 40 filters that had remained in continuous service with the UK MOD for 20 years. Following test, all 40 filters were found to be operating within their original specification.

### **Service & Support**

MPE products are supplied with a 12 month warranty from date of despatch as standard.

On-going logistical support and post design support services outside of warranty can be offered by MPE on fair and reasonable commercial terms and these can be provided upon request.

Through life availability of product for programmes is of key importance to MPE and our facilities and organisation are dedicated to provide the level of support necessary to achieve the levels of availability expected for today's programmes.

Dedicated obsolescence management, repair and support services, where employed, cater for cost effective support of many mature EMC/EMI products developed and installed over 20 years ago and still in service.

#### **Manufacturing**

MPE Limited embraces and fully utilizes current processes and techniques to enhance the quality of our manufactured products whilst optimising cost efficiency.

MPE's assembly and test team operate in a cell based structure. Collectively they have many 100's of years' experience of manufacturing complex, high reliability, bespoke components and products to the exacting performance and environmental requirements of the military marketplace. Where allowed, staff are cross trained to enable the flexibility to re-deploy, as required, to meet the fluctuating volumes and requirements of our customers.

Should a standard MPE catalogue product not fully meet the required programme requirements, MPE specialise in the design and manufacture of custom solutions to provide the optimum solution both in a technical and commercial sense.



# **QUALITY OVERVIEW**

### **Engineering**

MPE has been designing high performance EMC filters and specialist capacitors for more than 40 years.

All designs are carried out using bespoke software and strict design rules to ensure quality, reliability and maximum production efficiencies. Latest materials and techniques are continually evaluated and optimised to provide the best practical performance and deliver the greatest purchase economy benefits to the customer.

Metallised plastic film was adopted as a standard capacitor technology more than 30 years ago due to its many significant advantages over more traditional oil filled paper designs. This plastic film technology is well proven in the field and is now accepted as the industry preferred technique largely due to its superior longevity and reliability coupled with its increased safety.

MPE specialise in the design and manufacture of feedthrough capacitors which are essential component parts of filters which are required to operate at a frequency above a few tens of MHz. These are incorporated into many state of the art filter designs used to satisfy the latest high performance HEMP and Tempest requirements.

All design is carried out in house at MPE which permits prototypes to be developed and produced rapidly and with great flexibility. Custom designs form a significant part of the MPE capability and with over 30,000 designs on file, a wealth of experience can be called upon when addressing new and challenging requirements.

MPE's design laboratory has a number of specialist test capabilities to allow in house evaluations of new designs. Tests which can be carried out at MPE include: EMC pre compliance; pulse injection; insertion loss DC - 3GHz; shielding effectiveness and high current