

MPE PEOPLE

MPE's innovations attain Royal recognition

MPE has been honoured with the inaugural King's Award for Enterprise for Innovation. Over a long and successful history MPE has led the world with many innovations [Read More >](#)



Spotlight on John Mula

Sales Engineer John Mula provides a valuable single point of contact for existing and new clients. He has recently been focussed on projects for naval platforms [Read More >](#)



MPE ACTIVITY & TECHNOLOGY

Mil-Std-1A filter range is a World First

The only manufacturer in the World to do so, MPE has released a full HEMP filter range compliant with Mil-Std-188-125-1A, 16A to 1200A with 2-, 3- and 4-line options [Read More >](#)



Manufacturing quality assured at MPE

MPE has announced its recertification to ISO9001:2015 for a further three-year period. MPE has now maintained uninterrupted ISO9001 certification for over 30 years [Read More >](#)



MPE DISTRIBUTORS

Protecting defence assets at IDEF 2023 in Istanbul

At the massive 16th IDEF Defence Industry Fair, July 25-28 in Istanbul, MPE will again be supporting its distributors IMCA Elektronik on their stand 700 in Hall 7 [Read More >](#)



Kamic are stars of the show in Sweden

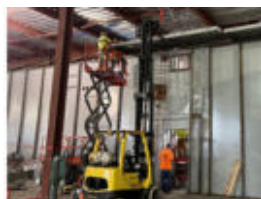
At the biennial, four-day, Elfact energy and electrification show at Gothenburg in May, Swedish distributors Kamic Installation AB displayed many MPE product lines [Read More >](#)



MPE APPLICATIONS

Keeping the lights on with MPE filters

MPE worked alongside shielded structure experts Gaven Industries to supply more than 50 HEMP filters for a new power transmission control centre serving Midwest USA [Read More >](#)



Protecting military shelters in Norway

Via distributors Nordic Defence, MPE supplies custom low-leakage TEMPEST equipment filters for Kongsberg's Fire Distribution Centre (FDC) shelters for air defence [Read More >](#)



FAST FACTS ON MPE LTD

- Trading for over 98 years, MPE employs more than 60 people.
- MPE has designed and manufactured in excess of 10,000,000 high-performance protection filters and feedthrough capacitors across the last 30 years.

- Many products in continuous service for more than 25 years.
- MPE's portfolio spans over 20,000 custom designs.
- MPE is certified to the ISO 9001:2015 quality standard, and its products meet all applicable defence, safety and regulatory standards.

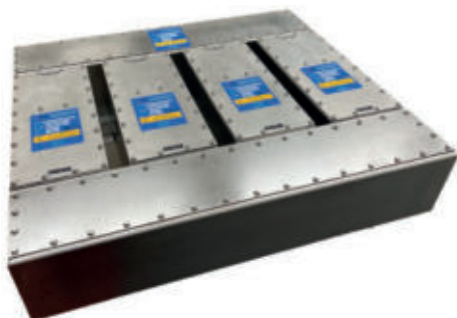


For comprehensive information about MPE's products and services, contact the Sales and Marketing Department, MPE Ltd, Hammond Road, Knowsley Industrial Park, Liverpool, L33 7UL, U.K.
Tel +44 (0)151 632 9100. Email sales@mpe.co.uk. Website www.mpe.co.uk
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The management team at MPE Ltd proudly display their ground-breaking new HEMP protection filter to Mil-Std-188-125-1A. They are, from left to right: Marcus Wright – Manufacturing Director, John Hughes – Engineering Manager, David Seabury – Managing Director, Paul Currie – Sales & Marketing Director.



MPE four-line High-Altitude Electromagnetic Pulse (HEMP) protection filter to Mil-Std-188-125-1A



MPE's state-of-the-art feedthrough varistor system for arresting incoming energy pulses



MPE's innovations attain Royal recognition

MPE Ltd has been honoured with the inaugural King's Award for Enterprise for Innovation.

The King's Award for Enterprise was previously known as the Queen's Award for Enterprise, and the new name reflects His Majesty King Charles III's desire to continue the legacy of HM Queen Elizabeth II by recognising outstanding UK businesses. The Awards programme, now in its 57th year, is the most prestigious one for business in the UK, with successful companies then able to use the esteemed King's Awards emblem for the following five years.

MPE Ltd is one of only 148 organisations nationally to be recognised with a prestigious King's Award for Enterprise. MPE Ltd has been chosen for its excellence in Innovation, with only 47 organisations nationally being recognised within that specific category.

Over a long and successful history of providing high-performance filter protection solutions for applications in defence and aerospace – as well as in key public utilities and other critical infrastructure – MPE has led the world with many innovations.

MPE's latest is another world first – high-altitude electromagnetic pulse (HEMP) protection filters certified to the new defence standard Mil-Std-188-125-1A.

Among many other examples, MPE holds international patents for its transient suppression techniques for arresting incoming energy pulses. Its novel feedthrough varistor system for this purpose has a thermally activated override.

Commenting on the prestigious King's Award, Director of MPE Paul Currie stated: *"Supplying cutting-edge, innovative products with unparalleled performance is key and sets MPE apart from others within our business sector. This has enabled significant business growth across the past five-year period, which has in turn enabled the expansion of our team and also the continued investment within our apprenticeship program. To now receive the King's Award for Enterprise: Innovation is a true honour and fantastic recognition and reward for all of the team here at MPE."*



John Mula



As navigator, John has to keep his rally car on the right track !



In his Peugeot 205 GTi, on the forest stage of a gravel rally in Swansea Bay

Spotlight on John Mula

Following a period of significant growth, MPE expanded its sales team in September 2022 with the addition of John Mula as a Sales Engineer. He manages the accounts of existing and new clients, primarily in the UK, and provides a valuable single point of contact for them.

He handles incoming business enquiries, giving expert guidance through all pre- and post-sales stages. His essential work in customer liaison includes establishing the technical parameters of projects and applications, before recommending and quoting for the optimum product solutions from MPE's portfolio.

As well as conducting client visits and representing MPE at the EMC UK event in Newbury, John has recently been focussed on a number of projects for naval platforms, undertaking detailed design and customer support work for the Royal Navy Type 26 frigate, Type 45 destroyer and the new Type 31 frigate.

John moved to MPE from MVG Industries UK at Haydock, where he had been Technical Sales Engineer for 6-1/2 years in the field of advanced antenna system research and testing for EMC test chambers.

Previous to that, John was Sales Executive for process temperature sensors at Thermosense in Radcliffe, Manchester, supporting their customers throughout the UK, Irish Republic and Europe.

His career has also seen John carry out technical and customer-facing roles for world players such as the SGS Group at Consett, County Durham; Siemens, Landis & Gyr and Pepperl & Fuchs, all in Oldham; and the Eaton Corporation subsidiary Eaton Electric at Chadderton.

In the 1990s John achieved his BEng (Hons) in Electrical and Electronic Engineering at Nottingham University, preceded by his HNC and then HND in the same discipline.

Resident in Bury, Lancashire and with a family heritage in Sicily, John Mula is married with two children, a boy and girl now in their 20s. His principal leisure interest is as a rally car navigator, for which he holds a National B rallying licence.

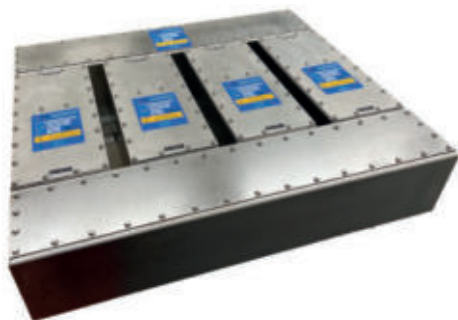
Mountain biking, running, watching rugby union, caravanning and attending music festivals are other activities which he keenly pursues.



Company Bulletin

for EMC, EMP, HEMP & TEMPEST Protection

Issue 31



A 32A 4-line Mil-Std-188-125-1A HEMP filter designed and manufactured by MPE in Liverpool



Development testing at MPE



The testing team at the Jaxon Engineering facility in Colorado Springs



Part of a large HEMP filter order being shipped from MPE

Mil-Std-1A filter range is a World First

MPE has now released its full HEMP filter range compliant with Mil-Std-188-125-1A, becoming the only manufacturer in the World to do so.

This is the culmination of an extensive and innovative research and development program at MPE in Liverpool. Following on from that, an independent pulse current injection (PCI) testing program was all successfully completed for the new MPE HEMP protection filters by Jaxon Engineering & Maintenance of Colorado Springs, acknowledged international leaders in EMP hardening and survivability.

The end result is MPE's range of Mil-Std-1A compliant filters spanning 16A to 1200A and including 2-line, 3-line and 4-line options. For sites with even higher currents, individual 1200A units can be paralleled to address requirements through to 6000A.

Radically different to MPE's previous HEMP filter ranges, these ground-breaking Mil-Std-1A compliant filters feature single-line, modular elements which are line-replaceable and may be easily added to, allowing for future installation expansion where required. The provision of external mounting feet and the inclusion of separate input and output enclosures also greatly simplify installation and reduce the installation time required on site.

All MPE filters can be quoted for and supplied delivered duty paid (DDP) inclusive of shipping and all duties. MPE has been granted an Approved Exporter status by UK HMRC and utilises a specialist freight forwarding partner to ensure the swift and smooth transportation of goods.

In addition, features such as Tip'n'Tell® indicator labels are incorporated, ensuring the integrity of shipments. Once such a label has been affixed to a packing case, that crate cannot be tipped without leaving evidence of mishandling.

The average lead-time for the supply of this Mil-Std-1A filter range is 10 to 12 weeks from receipt of an order. Credit card, proforma and credit payment terms are all available and, for clients in the USA, units can be quoted and payment made in US Dollars (USD), ensuring that order placement and contracting are as seamless as possible.

MPE's full range of Mil-Std-188-125-1A filters can be viewed at <https://www.mpe.co.uk/products/mil-std-188-125-1a-hemp-filters/> and independent PCI test certificates for these filters at www.mpe.co.uk/downloads/test-certificates/



MPE
Quality. Reliability. Performance.





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Here Rob Williams, Quality Manager and Paula Venn, Quality Assurance Engineer are inspecting new designs against engineering drawings



Metrology procedures at MPE include calibration with a gauge block set of the vernier caliper tool used to measure the internal and external dimensions of components

Manufacturing quality assured at MPE

MPE is delighted to report its recertification to the quality management standard ISO9001:2015 for a further three-year period.

MPE has now maintained uninterrupted ISO9001 certification for over 30 years, having first attained it in June 1986, and the new certificate is valid to August 2026.

Whilst ISO9001 requirements demand a single audit to be conducted every three years, MPE, in line with its own rigorous internal policies, undergoes a regular six-monthly audit, conducted by the certification body BSI.

Each audit explores and reviews different elements of MPE's business, ranging from manufacturing processes to staff training plans and risk management. Audits consist of a one- or two-day physical visit to MPE by BSI, with a detailed report produced after each visit.

The results of MPE's last audit showed no non-conformances, either major or minor. This again confirms that, whilst MPE's manufacturing output has virtually doubled over the past four years and new team members have joined, MPE is strictly adhering to all its published policies and processes across the entirety of the business.

Quality is critical to MPE and one of the three fundamentals of its company strategy. Whilst the whole workforce contributes to delivering this high level of quality, MPE's quality team is vital to ensuring that policies and processes utilise current best practice, are fit for purpose and comply with all requirements.

Expanded in 2022 and comprising Rob Williams – Quality Manager and Paula Venn – Quality Assurance Engineer, the quality team works across all areas of MPE's production on a daily basis. Alongside physical checks of products to be shipped and first article inspections for new designs, the team undertakes monthly internal audits of all manufacturing processes, which are then adjusted or refined as necessary.

MPE's current ISO9001:2015 certificate valid to August 2023 can be found at www.mpe.co.uk/wp-content/uploads/2020/07/ISO9001-Certificate-14th-August-2020.pdf

The new certificate, valid through to August 2026, will be uploaded to MPE's website once this current certificate expires.

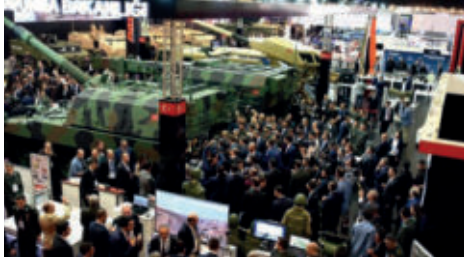
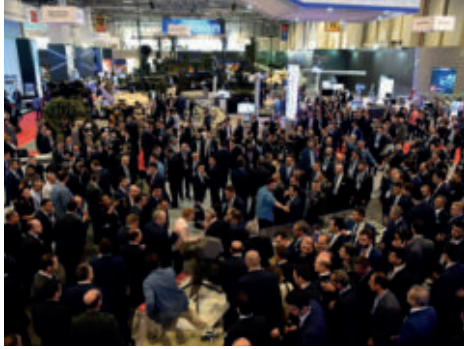




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The International Defence Industry Fair (IDEF) in Istanbul



Cemal Alpay, Managing Director of IMCA Elektronik

Protecting defence assets at IDEF 2023 in Istanbul

The IDEF International Defence Industry Fair has been held every two years in Turkey since 1993 and in Istanbul since 2009. Hosted by the Turkish Ministry of National Defence (Millî Savunma Bakanlığı), IDEF is among the top five defence exhibitions in the world. Among the visitors last time were numbered 163 official delegations from over 80 countries and 70,000 visitors from 94 countries.

The technologies on display span land, sea and air defence and security, equipment supply, logistics and transportation. The 16th IDEF event will run from 25th to 28th July 2023 in 14 halls of the TÜYAP Fair and Congress Center in Istanbul.

There MPE will again be supporting and contributing to the large exhibition space of its territory distributors IMCA Elektronik, stand 700 in Hall 7.

John Jephcott of MPE will be in attendance on the stand, which will feature many of his company's EMC and EMP protection products, such as high-performance feedthrough and installation filters for fixed and mobile military shelter applications and pluggable and hardwired TEMPEST filters.

Cemal Alpay, Managing Director of IMCA Elektronik, commented:

"Having exhibited successfully at many previous editions of IDEF, IMCA will again have a large stand and presence at this year's event. IDEF provides IMCA with a fantastic platform to meet with a large number of our principal clients and explore new business opportunities.

"Specifically, for MPE's products, the IDEF exhibition allows us to interact directly with end-users and integrators from the fixed and mobile shelters market, where IMCA and MPE are the clear market leaders."


IDEF'23



Gold Partner

imca



Views of the Kamic Installation stand and its display of MPE products at Elfack 2023 in Gothenburg



Kamic are stars of the show in Sweden

The Exhibition and Congress Centre in Gothenburg, Sweden's second largest city and main seaport, hosted the biennial Elfack exhibition and conference over four days 9th to 12th May 2023.

Northern Europe's largest energy and electrification trade exhibition and conference, Elfack is an international event focussed on product and services in sectors ranging from electrical installation, power transmission and lighting technologies to energy storage and management and building automation and security.

Visitors benefit from the opportunity to advance their understanding and knowledge of significant trends and developments in these fields, whilst also welcoming face-to-face meetings with major suppliers, integrators, installers and consultancies.

On their impressive stand C02:02 were Kamic Installation AB, MPE's distribution partners for Sweden. Having enjoyed much success exhibiting at the previous Elfack, Kamic Installation were more than eager to participate this time.

Proudly celebrating their 40th anniversary this year, the Kamic Group are a private organisation with headquarters in Karlstad, Sweden, comprising more than 20 operating companies split into four business divisions. Their product solutions serve a number of well-defined market areas such as indoor and outdoor lighting, emergency lighting, evacuation alarms and EMC shielding technology for buildings and industry.

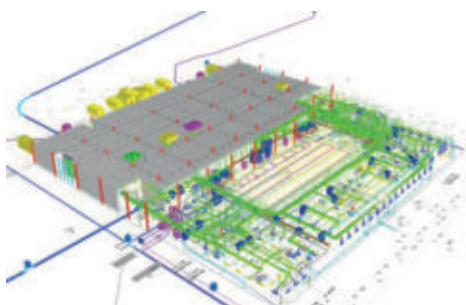
Since their appointment in late 2018 and following intensive product and applications training conducted in both Sweden and at MPE in Knowsley, Kamic have developed into proactive and trusted partners. John Jephcott, Distribution Account Manager at MPE, has made regular visits to Kamic, witnessing how their client base and sales have grown steadily over the past two years.

Accordingly, at Elfack Kamic displayed a wide selection of MPE product lines including feedthroughs and equipment, powerline and TEMPEST filters. A steady footfall on the Kamic stand over the four days resulted in a number of new project enquiries which are now being progressed into live orders at MPE.

Torbjörn Jansson, Technical Sales Engineer at Kamic Installation AB in Karlstad, commented: "The Elfack event provided the perfect platform to showcase MPE's filters and capacitors, not only to our existing clients but also to many new ones. The event was very successful for Kamic, with detailed discussions taking place on our stand about interference and disturbance in electrical systems and promising new opportunities being created for MPE filter solutions."

The next Elfack event will take place from 6th May to 9th May 2025, again at the Swedish Exhibition and Congress Centre in Gothenburg. For further information on Kamic, check out their website www.kamicemc.com





New control centre for power transmission operations serving Midwest USA



A 10x6ft double-leaf air-seal HEMP protection door designed and manufactured for the US power station project by Gaven Industries

Keeping the lights on with MPE filters

Last year MPE supplied more than 50 of its world-leading HEMP protection filters of different power ratings for a major power station project in the USA.

For this new transmission operations control centre serving the Midwest United States, MPE undertook a consultation and design process of several months in conjunction with shielded structure experts Gaven Industries of Saxonburg, Pennsylvania.

Over almost 40 years Gaven Industries have become market-leading integrators in EMI, RFI, EMP and IEMI shielding. Employing 90 staff at their manufacturing facility of over 50,000 ft², they provide, with the complete in-house fabrication of enclosures, standard and custom solutions to protect against the threats of electromagnetic interference and pulse.

Gaven's clients extend over wide-ranging applications for the US armed forces, government agencies, critical infrastructure and the Department of Homeland Security. Their long history as a most reliable provider – coupled with the proven record of MPE's filter products for unmatched performance over long continuous service – were key factors determining their selection for this power plant project.

The power plant covers approximately 60,000 ft². A new building was constructed on the site, necessitating the HEMP protection of facilities occupying some 30,000 ft² of space. Being present from day one of virtual design coordination (VDC), Gaven Industries assisted with the evaluation of critical systems and the specification of precisely what shielding would be needed.

Having provided guidance on the layout and configuration of the building, Gaven then brought in MPE for the specification and design of HEMP filters to meet the overarching criteria of Mil-Std-188-125-1 Appendix B, the protection and test requirements for shielded structures.

Following the design process, MPE manufactured and supplied more than 50 HEMP filters spanning 32A units through to custom 3600A units, including all termination enclosures and connection hardware.

Installation was carried out to the detailed plans and schedule created by Gaven Industries. Post-installation Gaven then performed all required HEMP performance validation testing and also prepared a hardness maintenance / hardness surveillance (HM/HS) plan for facility use.

This plan ensures that the proper care and maintenance of harness critical items (HCI) are performed to ensure the year-over-year viability and protection afforded by the originally installed shielding components.

For comprehensive information on Gaven Industries, please check out their website www.gavenindustries.com. To find out more about MPE's HEMP filter ranges, go to www.mpe.co.uk/category/hemp or contact a member of the expert technical team at MPE in Liverpool on +44 [0]151 632 9100.



Prime contractor Kongsberg Defence & Aerospace's fully integrated FDC Command, Control, Communications and Computing (C4) system for air defence, shown here mounted on a transporter



MPE equipment filters filter incoming power and include AC and DC, single- and three-phase, and switched mode power supply (SMPS) variants



KONGSBERG



Protecting military shelters in Norway

Through Nordic Defence, its authorised distributor for Norway, MPE has been supplying quantities of equipment filters to protect shielded military shelters.

MPE has a long and proud history of supplying such high-performance equipment filters for applications around the world. These solutions for filtering incoming power span AC and DC, single- and three-phase, and switched mode power supply (SMPS) variants. Typical applications include equipment racks, vehicle platforms, and shielded rooms and shelters.

As well as its catalogue range of the more commonly requested equipment filter models, custom variants are routinely designed, manufactured and supplied. Along with Nordic Defence's well-established track record of supply and support, MPE's capability and appetite for customisation were the primary reasons why MPE was chosen as the provider for these mission-critical shelter applications for Norway.

Founded in 1976 and based at Nydalen in a borough of Oslo, Nordic Defence & Security A/S boasts more than 35 years' experience working with the armed forces and civilian authorities across Norway. Having both consultancy and solutions capabilities, the company offers the most advanced and cost-effective solutions for land, sea and air defence, fire and rescue, police, and civil aviation.

Dialogue with the prime contractor, Kongsberg Defence & Aerospace, was initiated in late 2018, with MPE completing presentations alongside Nordic Defence. Following a period of dialogue, MPE's equipment filter range was identified as a starting point for the development of a custom solution to meet the exacting requirements of Kongsberg's state-of-the-art Fire Distribution Centre (FDC) shelters.

Following development work at MPE and prototype testing, a custom low-leakage TEMPEST equipment filter was ultimately supplied. In addition to bespoke electrical performance, the end product included mechanical customisations such as integrated input and output connectors to meet Kongsberg's particular shelter design.

Production volumes of this high-performance TEMPEST protection solution have been supplied by MPE since 2020. The FDC, a fully integrated Command, Control, Communications and Computing (C4) system for managing air defence operations, is one of the most advanced integrated C4 systems ever delivered. It is now in service with, or under delivery to, 12 different countries.

For details of MPE's range of high-performance equipment filters, check out www.mpe.co.uk/category/equipment-filters. Alternatively, please contact the expert MPE technical team via +44 (0)151 632 9100 or sales@mpe.co.uk

Further information on Nordic Defence & Security A/S is available at www.nordicds.no or by emailing bhl@nordicds.no