

MPE PEOPLE

2023 . . . a year of great significance

The surge in demand worldwide for MPE's products across the board went hand in glove with our major investment in the expansion of our manufacturing facilities . . . [Read More >](#)



Spotlight on Steve Cunningham

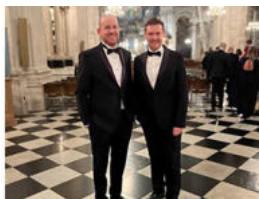
Manufacturing Supervisor since 2011, Steve Cunningham has been appointed to the new position of Production Manager responsible for all processes and 33 employees . . . [Read More >](#)



MPE ACTIVITY & TECHNOLOGY

MPE shines at National Manufacturing Awards

Chosen from 15,000 manufacturers, MPE represented the North West of England in two categories of the 2023 National Manufacturing Awards held at St Paul's Cathedral . . . [Read More >](#)



MPE Christmas raffle for local charities

Proceeds of the annual MPE Christmas raffle for 80 prizes were divided between Claire House Children's Hospice and Liverpool CHICS Children's Cancer Support Group . . . [Read More >](#)



MPE DISTRIBUTORS

Annual awards honour top performing distributors

Nine MPE distribution partners received Awards in the eighth year of the MPE Partner Program, with Radiotechnika of Poland advancing from Bronze to Platinum status . . . [Read More >](#)



MPE delivers for Accelonix in Utrecht

At the annual EMC-ESD Event in Utrecht, Engineering Director John Hughes gave a lecture on HEMP Protection Design in support of MPE's Dutch distributor Accelonix . . . [Read More >](#)



MPE APPLICATIONS

Extended Performance filters for spy-proof shelters

Armag Corporation insisted upon custom MPE TEMPEST power line filters for its spy-proof A.R.C. vault shelters fulfilling a major Department of Defense shelter program . . . [Read More >](#)



Preventing shocks in Switzerland

MPE supplied a suite of high-performance HEMP filters, proven in the Federal Spiez Laboratory to withstand seismic shocks up to 16G, for a Swiss Government project . . . [Read More >](#)



FAST FACTS ON MPE LTD

- Trading for over 99 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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David Seabury

2023 . . . a year of great significance

For several reasons MPE's 98th anniversary year of 2023 was the most momentous in my 27 years with the company.

Even surmounting our incredible growth experienced over the previous five-year period, product revenues continued to increase. This was most evident for one of MPE's lesser publicised product ranges, ceramic filters, where overall revenues grew by almost 175% on the year before.

So the massive surge in demand for MPE's products across the board went hand in glove with the major investment which we undertook in the expansion of our manufacturing capability.

MPE's production facility was expanded by some 400 m², and back in August new paint spray and drying rooms were installed and commissioned, doubling MPE's capacity in that area. Towards the end of the year, a new automated capacitor winding machine was also brought on stream, again effectively doubling MPE's capacitor winding capacity.

The implementation of this expansion whilst maintaining uninterrupted manufacturing was challenging. However, with careful planning, MPE continued to satisfy clients, spread across 28 different territories, achieving a 93% on-time delivery (OTD) rate measured throughout the year.

The key to maintaining lead-times and this very high OTD rate was MPE's dedicated and experienced team.

Having completed their apprenticeships with MPE, Ben Meadley and Gillam Prescott moved onward and upward to join our Engineering team, ensuring that the next generation of talent is nurtured. In conjunction with this, the addition of Tobias Okech as senior design engineer increased MPE's capability in Engineering by 50%. The expertise and experience in our Engineering team were further bolstered when John Hughes was appointed as Engineering Director in August.

Investment in people has always been of central importance to MPE, and this is reflected in the dedication and loyalty of our employees. At the end of 2023 their average length of service had increased to 9.4 years, with 20% of our team now having more than 25 years' experience with the company.

In 2023 we sadly had to say goodbye to some longstanding team members who retired. Most notably, Mary Hampson left MPE after three decades of unstinting service in our Manufacturing team.

In the field of technological development, early 2023 saw MPE launch its full range of Mil-Std-188-125-1A compliant HEMP filters. These filters have subsequently been manufactured and supplied for integration into several major defence and infrastructure projects in the USA.



The fine skills of ceramic filter soldering at MPE



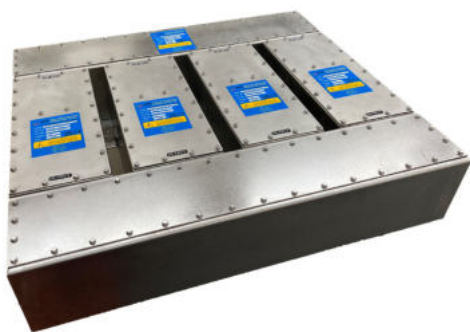
A meeting of the Engineering team at MPE led by John Hughes – Engineering Director (left)



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

Our process of continuous development culminating in these Mil-Std-1A HEMP filters reached the pinnacle of achievement in April 2023, when MPE was invited to Buckingham Palace to receive the King's Award for Enterprise: Innovation.

MPE was one of only 148 organisations in the UK to be recognised with a King's Award for Enterprise and, of those, one of only 47 to be recognised for Innovation. To receive this most prestigious of Awards was a true honour and a wonderful tribute to the efforts of the entire complement of people working here at MPE.

During 2023 MPE was named as a Finalist in nine different categories for various industry and business awards – and was indeed the outright winner of three awards for Business Growth, Innovation and Strategy.

Confirming 2023 as the most momentous year of my time at MPE, in November MPE entered the next stage in its evolution, with the company being acquired by NYSE-listed ESCO Technologies, Inc of St Louis, Missouri. Whilst MPE will continue entirely as before, operating from its facility in Knowsley and with no change at all to its product brand, the acquisition provides necessary significant investment and ensures that MPE is best placed to continue its growth strategy for many years to come.

So, as we now move into our 99th anniversary year, MPE's capabilities, revenues and team continue to expand and thrive, and the future for MPE's centenary year and beyond is both assured and incredibly healthy.

David Seabury





Steve Cunningham

Spotlight on Steve Cunningham

Effective from February 2024, MPE's longstanding employee Steve Cunningham has been appointed to the newly created position of Production Manager.

During the past year the company has witnessed a 175% growth in ceramic filter sales and 50% increase in feedthrough capacitor sales. With revenues set to continue to grow over the next 12 months, Steve's new role is in direct response to this upsurge in demand for MPE's high-performance filter and capacitor solutions, whilst reinforcing MPE's expansion and improvement activities that are currently well under way.

As Production Manager, Steve is now responsible for all critical Manufacturing processes and teams, including fabrication, capacitor and inductor winding, along with assembly functions, with paint spray, test and finishing included.

Having joined MPE in 2011 as a Manufacturing Supervisor, Steve's role has markedly expanded. Today it includes responsibility for the Manufacturing processes above totalling 33 people, as well as the recruitment and training of new manufacturing apprentices and operatives. This timely promotion will continue Steve's direct relationship with Manufacturing Director Marcus Wright, as he continues to report to him.

Time spent away from work sees Steve and his wife in their campervan, travelling the length and breadth of the UK and discovering the hidden gems of small-town Britain. For example, the spectacular Ingleton Waterfalls Trail, at Carnforth in the Yorkshire Dales National Park, is a favourite spot to which they repeatedly return.

In 2018 the two of them walked the Yorkshire Three Peaks Challenge of Pen-y-Ghent, Wharfedale and Ingleborough in less than 10 hours. Previously Steve had scaled Ben Nevis, Snowdon and Scafell Pike in an actual climbing time of 14 hours.

In his younger days, Steve played non-league soccer in the St Helens & District Football Combination and Liverpool County Football Combination and secured coaching badges from the Football Association. He has been a lifetime supporter, too, of Liverpool FC.

What is more, since the Covid pandemic, Steve has been running the "Do Drop Inn". This is an innovative pub which he proudly constructed in his back garden for family and friends, complete with keg beer and beer pumps!



MPE Manufacturing Director Marcus Wright in discussion with Production Manager Steve Cunningham to optimise the sequence of processes for a new project



The new feedthrough assembly area within Manufacturing



The Do Drop Inn pop-up pub in Steve's garden



St Paul's Cathedral in the City of London



MPE Directors John Hughes and Marcus Wright inside St Paul's Cathedral at the MakeUK National Awards



The MPE team pictured at the 2023 MakeUK North West Regional Awards



An array of the MakeUK North-West Regional Awards: MPE was the 2023 Regional winner in two categories – Business Growth & Strategy and Innovation, Runner-Up for Developing Future Talent

MPE shines at National Manufacturing Awards

At the MakeUK awards in the five-star Lowry Hotel, Salford, on November 7th, MPE was the 2023 North-West Regional winner in two categories – Business Growth & Strategy and Innovation. The North West remains one of the largest manufacturing hubs in the UK, with almost 15,000 manufacturing businesses across the region and 350,000 directly employed.

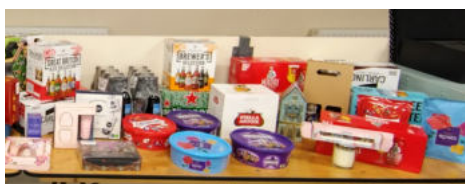
Accordingly MPE went on to represent North West manufacturing in both categories at the MakeUK National Awards. That presentation was held in the iconic setting of St Paul's Cathedral in the City of London on January 25th.

MakeUK, formerly the Engineering Employers' Federation (EEF), represents 20,000 manufacturers in the United Kingdom and provides businesses with advice, guidance and support across all the fields important to their operations, whilst also representing the manufacturing community at a Governmental level.

MPE received the Business Growth and Strategy award for the North West, in recognition of its phenomenal growth. Since 2021, MPE revenues have increased by 108% and export revenues have grown to £6.0M, representing a 161% increase since 2018. During 2023 MPE exported to 28 different territories, and export sales accounted for 69% of MPE's overall business.

MPE was presented with the MakeUK North West Innovation Award, in recognition of its development of new filters at pace, for the US Department of Defence. Prior to 2018 the United States accounted for just 2% of MPE's market share but, as a result of product development and market targeting, the United States is now MPE's biggest export market as a customer of the Department of Defence and also the Department for Homeland Security.

Marcus Wright, Manufacturing Director of MPE, remarked: "Being able to participate in the MakeUK National Awards was a phenomenal achievement. It has been a busy Awards season for us at MPE, and we are honoured to have received so much recognition over the past year. We can feel proud of the hard work and commitment by all who form part of MPE and work on their behalf. These Awards show that MPE is a shining light in the manufacturing industry of the United Kingdom – and that our worldwide reach is recognised and valued."



The Christmas raffle prizes



Members of the MPE team joining in the fun of the occasion



Marcus Wright presents a bouquet to Mary Hampson, retiring from the company after three decades of service

MPE Christmas raffle for local charities

On Thursday 14th December, a week before Christmas shutdown, MPE employees staged their annual charity Christmas raffle at Hammond Road. This charity raffle has now been held for 20 years.

Raffle tickets are sold throughout the company, and 20% of proceeds from weekly competitions held all through the year, such as spot-the-ball, also contribute to the prize fund. Further to this, many employees donate gifts to be used as prizes. The top cash prize is then provided by MPE management along with a Christmas buffet for all employees.

More than 80 prizes were won this year, raising £850 to be divided equally between two local charities in conjunction with funds from the Easter 2023 company raffle. Historically the two chosen charities have provided professional care to relatives of MPE employees.

The Claire House Children's Hospice is a Merseyside-based charity which opened its doors in 1998. It aims to support and deliver hospice care for serious and terminally ill children and teenagers, providing physical and emotional support for families and enabling youngsters to live their lives to the fullest. The Claire House charity has two sites, a full hospice on the Wirral and a second site in West Derby, Liverpool, offering day care, complementary therapies, clinics, play and music sessions, and counselling.

The Liverpool CHICS (Children's Cancer Support Group) is a charity for children living with cancer. It offers practical advice and information, parent and teenager support groups and signposting to local events, day trips and activities. It is based at Alder Hey Children's Hospital in Liverpool, which is ranked among the top 15 paediatric hospitals in the world.

While this was a fun event, it was a bittersweet moment as MPE said goodbye to Mary Hampson. Mary has retired after nearly 30 years of working as a production operator. Manufacturing Director Marcus Wright made a short presentation thanking Mary for her service and dedication and wishing her a very happy retirement on behalf of everyone at the company.





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Annual awards honour top performing distributors

In December 2023 MPE conducted its annual review of territory distributor performance, with one particular distributor, Radiotechnika Marketing in Poland, receiving the Platinum award. This is only the second time since the launch of the Certified Partner Awards in 2016 that MPE has awarded Platinum status to one of its distributors.

Now in its eighth successful year, MPE's Partner Program is firmly established as an effective tool for measuring distributor performance against set criteria. The Program provides a clear view of the expectations MPE has of its Partners and, in return, the significant benefits and support provided by MPE Partner status. The Program is a tiered structure with four distinct levels – Bronze, Silver, Gold and Platinum. This scheme sets achievable individual goals for each Partner, whilst allowing MPE to apply a uniform approach to the assessment of new and existing Partners across all territories.

The parameters for measuring company performance are based not purely on the yardstick of physical orders, but more broadly on proactive sales and marketing activities linked in with the dynamic development of new customers and as yet untapped market sectors, showing future promise of progression to the next tier.

Since introducing the Partner Program in 2016, sales revenues via MPE's family of international distributors have continued to grow significantly, with distribution sales now accounting for more than 50% of MPE's overall revenues. Vitally, more and more information is being supplied on future national projects and market developments, enabling MPE to target the most appropriate sectors and territories with its expertise and resources.

MPE's latest annual review saw Milcon (Finland), SACA Europe and Tadiran Energy Solutions (Israel) attain Bronze Partner level, whilst three more – Accelonix (Netherlands), Euromip (France) and IMCA Elektronik (Turkey) – achieved Silver status. The two distributors delighted to advance to a Gold Partner ranking were Electrade in Germany and Kamik Installation in Sweden.

Nevertheless the stand-out performance was the progression of Poland's distributor Radiotechnika Marketing of Wroclaw from Bronze status to become a Platinum Partner. In addition to its revenues which increased significantly and exceeded set targets, Radiotechnika worked effectively towards and surpassed all other objectives and metrics laid down with MPE at the start of 2023. Radiotechnika has built a broad client base for MPE's products and a solid business forecast for the coming years.

Each of the nine Partners honoured in the annual Awards is able to display the Awards plaque at their company headquarters. The proud recipients are prominent, too, on the Distribution Partner pages of the MPE website www.mpe.co.uk/distributors

So, despite very challenging trading conditions throughout territories the world over, looking forward into 2024, MPE's vibrant network of distributors remains in excellent health.



The array of 2023 MPE Distributor Awards from Platinum to Bronze



John Jephcott presents the Silver Distributor Awards plaque for 2023 to Euromip SA on their recent tour of MPE. Left to right: Andreas Rudel – Sales Director, Jean-Philippe Louis – President, John Jephcott – MPE, Yann Baillergeau – Technical Manager.

Platinum Partner



The busy Radiotechnika stand at the MSPO 2023 international defence industry exhibition in Poland



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The Hotel Vianen, Utrecht



John Hughes delivers his illustrated lecture at EMC-ESD 2023



The Accelonix exhibition stand at the EMC-ESD event

MPE delivers for Accelonix in Utrecht

On 21st November the Dutch EMC-ESD Association held its annual EMC-ESD Event at the Hotel Vianen in Utrecht, the fourth time it had taken place.

Since the European Programme for Critical Infrastructure Protection (EPCIP) led to the EU's Critical Entities Resilience (CER) Directive, all EU member states are required to adopt and publish the measures necessary to comply with the Directive by 17th October 2024. So this was the background to an expert presentation by MPE at the EMC-ESD Event on the technology to protect against the threat to national infrastructures posed by ElectroMagnetic Pulse (EMP).

The Engineering Director of MPE, John Hughes, delivered this illustrated lecture at Utrecht in support of MPE's Dutch distributors Accelonix, based less than 100km to the south at Eindhoven. Its title was: "HEMP Protection Design to Address Global HEMP/ IEMI Market Requirements".

The presentation was to over 40 industry specialists and gave an overview of ElectroMagnetic Pulse (EMP), followed by an examination of the fundamental design principles of EMP filters and the market trends and drivers for EMP.

The presentation was extremely well received by the audience. John Hughes answered a series of informed questions on the specific parameters of the EMP pulses for which MPE design its solutions and on the materials best suited to the manufacture of inductor cores for EMP pulses, specifically how MPE selects these to prevent overheating in the course of normal operation.

In the main concourse, Matthijs Kronenburg and Luc de Bus of Accelonix were kept busy throughout the day with a steady stream of visitors to their exhibition stand, which displayed a broad selection of MPE power line filters, HEMP and IEMI filters, TEMPEST and control line filters, and feedthrough capacitors, alongside metrology equipment.

The download link is [here](#) to view the presentation on EMP by John Hughes on behalf of Accelonix at EMC-ESD 2023.

**EMC-ESD
Event 2023**





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Inside of the Armag modular A.R.C. vault shelter with its MPE Extended Performance TEMPEST power line filter installed on the back wall



External view of the Armag A.R.C. vault shelter



The Armag headquarters facility in Bardstown, Kentucky

Extended Performance filters for spy-proof shelters

In 2022 Armag Corporation of Bardstown, Kentucky, supplied multiple hardened modular shelters incorporating custom MPE Extended Performance TEMPEST power line filters for a major US Department of Defense (DoD) program.

Since 1969 Armag Corporation have manufactured and delivered thousands of such secure multipurpose modular units up to 5,000 sq ft floor area. They are utilised for wide-ranging defence, armoury, security and commercial applications across the USA and some 23 overseas territories.

Armag's flagship product is their spy-proof A.R.C. (Armored Rapid-Deployment Compartmented) vault, a Sensitive Compartmented Information Facility (SCIF) designed to meet or exceed ICD 705 and SAPF (Special Access Program Facility) specifications.

Material of construction of the A.R.C. vault is a continuously welded 1/4in steel that gives a significant level of TEMPEST, ballistic and forced entry protection. These highly versatile modular shelters are tailorable to a project's needs, offering external building space or an internal secure room within an existing building. The modular design facilitates rapid deployment and relocation, as well as reconfiguration for new missions.

For the project, MPE supplied custom 400A Extended Performance three-phase and neutral power line filters. These provide TEMPEST protection to NATO SDIP 29/1 and compliance to MIL-STD 461 & DEF STAN 59 411. With a proven record of excellence in safeguarding shielded rooms, IT hubs, datacentres and EMC test chambers, MPE's high-reliability Extended Performance filters were the clear choice for Armag's A.R.C. vaults, giving them optimum acoustic protection against espionage.

Then, above and beyond this, MPE's experienced design engineering team in Liverpool undertook all the customisation necessary to suit the particular operating conditions and constraints of these shelters. The filters needed, for example, to operate at 270/440V AC to maximise flexibility of operation in different locations.

So, following the successful completion of this contract, Armag and MPE are continuing to work together on several exciting new transportable shelter projects. For more information on Armag Corporation's A.R.C. vaults and their new patented modular shelter, email info@armagcorp.com or call +1 877 510 0087.

For details of MPE's world-leading TEMPEST filter products, check out <https://www.mpe.co.uk/category/tempest/> or send an email to MPE's expert technical team at sales@mpe.co.uk





1200A MPE HEMP filter



Shock testing of MPE HEMP filter in the Spiez Laboratory



Here the vertical axis (z) of the MPE filter is being tested at the Spiez Laboratory on their large VESPA servohydraulic vertical shock tester, which can handle test objects weighing up to 10t

Preventing shocks in Switzerland

MPE has manufactured and supplied a suite of high-performance HEMP filters for installation within a Government project in Switzerland. The application presented MPE with some very challenging mechanical requirements.

The project required that the filters supplied were not only fully compliant with the widely adopted HEMP standard Mil-Std-188-125-1&2, but were also proven as being able to withstand seismic shocks of up to 16G, in compliance with a specific Swiss mechanical shock standard.

Accordingly MPE completed an involved design process over a six-month timeframe. This resulted in the realisation of a suite of custom high-performance HEMP filters, ranging from 16A through to 4800A. Electrically, these filters were soundly based upon MPE's existing award-winning and well-proven HEMP filter designs but, in a first for MPE, were mechanically capable of withstanding shocks of up to 16G.

On completion of the detailed design work at MPE, a sample of each filter type was provided for PCI testing at Armasuisse, the Federal Office for Defence Procurement in Switzerland, followed by shock-testing at the Spiez Laboratory, a division of the Federal Office for Civil Protection (FOCP).

The filters tested included variants measuring almost two metres in length and weighing 300kg. Mechanically each filter was shock-tested in three axes (x, y, z) and in each direction, with six shocks applied therefore to each filter in total. Testing was undertaken over a two-month period, with the outcome being a comprehensive report confirming that all of the MPE custom filter variants were fully compliant.

With the testing successfully completed, a full complement of filters were supplied for installations within the project, and the filters have been in faultless operation for a period of five years. After the initial project, these specialised types of custom HEMP filter have been incorporated into several other, more recent projects in the Swiss market, with hundreds of units now supplied by MPE.

Information on MPE's innovative and world-leading ranges of HEMP filters can be found at www.mpe.co.uk/category/hemp, whilst, for details of the custom 16G HEMP filters supplied, email the expert MPE technical team at sales@mpe.co.uk or call +44 151 632 9100.



armasuisse