



HEMP Filter Bulletin



John Lindsay

Spotlight on John Lindsay

As one of MPE's Design Engineers, John Lindsay is responsible for the design and development of new and existing products at MPE. As part of the design process, he conducts component evaluations, builds and tests prototype circuits and develops and keeps up-to-date datasheets, bills-of-materials, test plans and specifications.

John uses PSpice modelling in the initial filter design stage to determine the component values needed to attain the performance stipulated by the customer or to comply with a technical requirement. Then various other tools such as AutoCAD are utilised to ensure that the often demanding size and weight constraints are fully met. Furthermore, since MPE manufactures its own feedthrough capacitors, John is called upon to simulate the wound dimensions of capacitors using custom software, in order to compute the outer dimension of the finished capacitor.

Following graduation from the University of Liverpool with a Master of Physics (MPhys) with Honours in 2009, John started working at MPE in 2011 as a Junior Design Engineer. He divided the majority of his time between new component testing and updating existing documentation. In particular he worked on new modular designs for 800A and 1200A HEMP and IEMI powerline filters.

After promotion to Design Engineer, John concentrated on designing variants of existing products for custom applications. He also spent time within Production writing standard operating procedures and assembly instructions, to ensure that the high quality and consistency of MPE filters are maintained at all times.

As regards vocational qualifications at MPE, with many of the company's designs being custom, raising challenges in Production, John led a six-man team, the second group from MPE to achieve their NVQ Level 2 in Business Improvement Techniques. This involved completing projects employing techniques such as Root Cause Analysis, Just-in-Time and 5S to improve quality and reduce waste.

John has been a member of the Institution of Engineering & Technology (IET) since 2013 and of the International Electrotechnical Commission (IEC) SC77C High Power Transient Phenomena subcommittee since 2016.

He lives with his partner at Crosby, Liverpool and loves to travel and try out new experiences. After graduating from University, he went backpacking around Australia, New Zealand and South-East Asia, where he tried his hand at scuba diving and bungee jumping.

John likes to watch all types of sport and, as an avid supporter of Everton FC, he is passionate about going to Goodison Park to watch his team. In his spare time he enjoys keepfit and is a keen reader of science fiction novels.