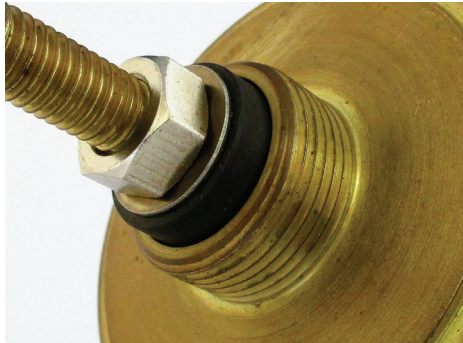




Company Bulletin

for EMC, EMP, HEMP & TEMPEST Protection

Issue 29



Ground-breaking varistor transient suppression technology pioneered by MPE: exceptional speed of operation is vital for safeguarding against incoming electromagnetic pulse threats



A batch of large high-current HEMP protection filters in final assembly at MPE



Array of EMP protection filters installed on an EMP shield

US trading relationship & varistor patent

In a move away from its previous model, August 2022 saw MPE commence direct trading relationships with its key clients in the USA. Alongside this, MPE was also granted patents in the USA for its novel varistor technologies.

As for other territories around the world, for many years MPE utilised an authorised distribution partner in the USA. This strategy proved successful – particularly in developing initial relationships, establishing a track record for the MPE brand and generating sales within the US defence industry. However, with sales into the USA having grown significantly and with the USA now often representing MPE's largest export territory, MPE again reviewed its USA strategy.

More than ten years on from first trading in the USA, MPE now maintains deep and established relationships with many clients in the USA. Different to many other export territories which it serves, almost all sales into the USA are project-related and require extensive design work and technical dialogue.

Therefore the new direct working relationships with clients ensure that lines of communication are clear, and MPE can be even more agile and responsive than its previous operating model allowed.

Importantly in conjunction with this strategic change, MPE has also been granted patents in the USA for its ground-breaking new varistor technologies. These USA patent grants follow on from the patents awarded to MPE for the same technologies in Europe and the UK in July 2019.

The family of patents granted in the USA (US 11,398,704 B2) relates to MPE's latest feedthrough varistor system, which has a thermally activated override. Speed is of the essence in safeguarding against incoming electromagnetic pulses. This new product not only dramatically increases switch-on speed by reducing circuit inductance, but also provides a safe and complete disconnection of the system from the circuit in the event of the varistor degrading.

These technologies can be used in EMP and directed energy protection devices. MPE is now completing all necessary research and development work, so as to fully introduce these breakthrough technologies into the EMP filter solutions it manufactures on a regular basis. This will ensure that the company remains a world leader for years to come in the critical area of varistor transient suppression technology for electromagnetic pulse.

Further information on MPE's EMP protection products compliant with Mil-Std-188-125 can be found at www.mpe.co.uk/category/hemp or by emailing MPE's technical team at sales@mpe.co.uk

