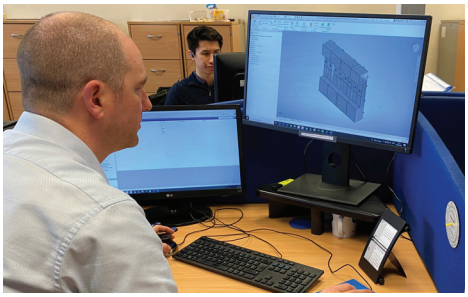
MPE 95TH ANNIVERSARY 1925-2020

Company Bulletin

for EMC, EMP, HEMP & TEMPEST Protection

Issue 27



3D mechanical design at MPE using an Autodesk Inventor solid modeller

Punch press operation at MPE on the high-performance LVD Strippit

Folding of metal filter enclosure

Installed MPE HEMP filters with custom fabricated mountings

Custom installation kits serve integrators well

As reported in the opening article of this Company Bulletin, demand for MPE's high-current filters has risen by some 210% over the past three years. Whilst applications range from 800A through to 4800A and include both three-phase and three-phase and neutral configurations, mechanically the filter elements used follow standard and well-established designs. Nevertheless, connection and termination requirements regularly present mechanical challenges unique to each project that MPE undertakes.

Given the many and varied site constraints existing in EMC and HEMP applications, common practice is for filter suppliers to provide only the filter elements themselves, leaving the integrator to handle all of the connection and termination requirements. In direct contrast to this, MPE offers a full system solution to clients, including all connecting plates, gaskets and termination enclosures in a single installation kit. This service significantly reduces risk and simplifies what can be very complex installations, so as to greatly ease the burden on installers and integrators.

Details of standard high-current filter installation kits can be found in MPE's HEMP power line filter catalogue. Whilst each kit comprises a range of components for maximum flexibility, each kit is procured against a single part code, to make the ordering process that much simpler.

However, with most installations having requirements specific to their site only, MPE also regularly designs and supplies custom installation kits for its clients. With both a 3D CAD design department and a comprehensive metal fabrication facility in-house at MPE, such designs can in most cases be realised within a few days.

Last year MPE delivered a wide variety of these custom installation kits to applications across Europe, the Far East and the USA. Mechanical customisations included not only changes to physical dimensions, but also custom aperture positions, custom gland plate sizes and custom mountings – not to mention mechanical strengthening to provide security and confidence in operating conditions susceptible to particular shock and vibration.

These engineering designs are produced by MPE's expert design team using their Autocad Inventor 3D package and are provided for scrutiny and sign-off by the client ahead of any order. The custom kits are subsequently manufactured entirely in-house within MPE's fabrication facility.

As part of the company strategy of continuous improvement and its dedicated support of the integration process, MPE is currently completing numerous custom installation kit designs and has lodged further custom designs with clients for sign-off ahead of manufacture during the first half of 2022. These custom solutions for the benefit of installers and integrators serve to underline MPE's position as the world's number one provider of high-current EMC and HEMP filters.

Information on MPE's standard high-current HEMP installation kits is included in this brochure for you to download:

https://www.mpe.co.uk/wp-content/uploads/2021/03/HEMP-Power-Line-Filters-Issue-14.pdf