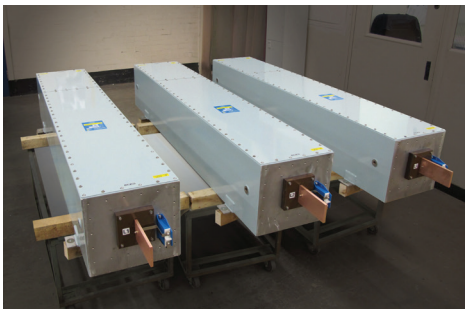
MPE
Quality, Reliability, Performance

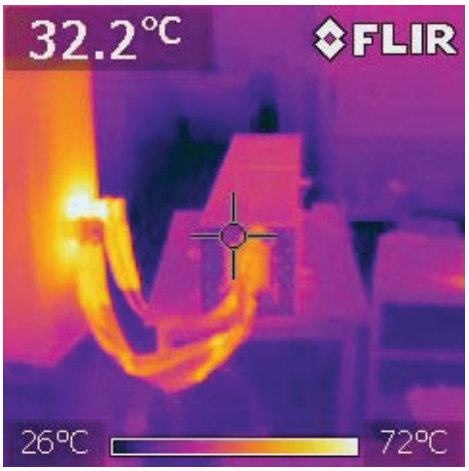
Company Bulletin

for EMC, EMP & TEMPEST Protection

Issue 13



A consignment of MPE's 1200A filters prior to shipment



MPE conducted intensive 24-hour temperature rise tests

Keeping it cool with MPE HEMP filters

Following a very rigorous and extensive design proving exercise, MPE was awarded the contract to supply a quantity of its unique 1200A HEMP filters for installation on a critical defence application in Virginia, USA. The contract award was made via MPE's distributor in the USA, Technical Sales Solutions (TSS).

Whilst HEMP protection in accordance with MIL-STD-188-125 was a prerequisite, site specifics and issues previously encountered within the application meant that equipment performance under operational load and at operational temperature was of equal importance. Of particular concern were the heat rise and heat dissipation performance of any HEMP filters to be installed.

Following numerous visits to site by MPE and TSS, MPE was asked to provide both documented laboratory and site test analysis for a number of key parameters including the harmonic and temperature performance of its 1200A HEMP filters. MPE therefore conducted an extensive period of testing in order to provide all the information requested.

Specifically, MPE conducted a 24-hour temperature rise test, including current overload tests in accordance with UL1283 and the Army Corp of Engineers specification. Since MPE's 1200A HEMP filters have been installed at operational sites for many years, in addition to this laboratory testing MPE was also able to provide a wealth of data on the same filters in current service.

MPE supplied the entire order for its 1200A filters, along with several smaller current filters, to the Department of Defense facility in Virginia within 12 weeks of receiving the contract award. Following supply, installation was carried out during 2016 by Directed Energy Technologies (DeTech) based at Sumerduck, Virginia.

The methodical and extensive design proving activity, coupled with MPE's well-established 1200A HEMP filter design, ensured a seamless and swift installation process, with all filters now having been in operation in this critical application for some time. Subsequently MPE has also supplied its 1200A HEMP filters for other Department of Defense applications in the USA.

You can download from here your personal copy of MPE's 1200A HEMP filter catalogue.

tss
Technical Sales Solutions