



MPE
Quality, Reliability, Performance

Company Bulletin

for EMC, EMP & TEMPEST Protection

Issue 17



The main test chamber with turntable



Point-of-entry (POE) door to the control room



MPE power line filters of different amperages

Test chamber for South Korean military

MPE has manufactured – and supplied through its Gold territory distribution partner Eretec – a suite of 16 filters for an EMC test chamber located in the Seoul area of South Korea that is dedicated to the testing of warplanes and ground weapons systems. 45 metres in length, this is one of the largest test chambers MPE has ever equipped with filters.

Comprising both power line and control line types, the MPE filters ranged from 16A through to very large 800A units. The application called for standard as well as extended performance models in order to ensure high values of attenuation at low testing frequencies.

Designed, installed and commissioned by Eretec, work on the test chamber commenced on June 24th 2016 and was conducted over an 18-month period. The chamber is compliant with MIL-STD-464C “Electromagnetic Environmental Effects – Requirements for Systems” and IEEE Standard 299-2006 “Standard Method for Measuring the Effectiveness of Electromagnetic Shielding Enclosures”.

The chamber floor space boasts an imposing concrete pit, not to mention the large door, turntable and lift pit areas. The main chamber is equipped with hoist, turntable and state-of-the-art exhaust extraction. A separate heating, ventilation and air conditioning (HVAC) room is also available for any requirements where HVAC systems or equipment need to be tested.

The overall configuration comprises one main anechoic test chamber and two side chambers for container type testing. There are three further rooms around the outside of the chamber – control room, RF amplifier room and sensor measurement room.

Dimensionally, the main chamber is 45m long, 23m wide at its widest, and almost 14m high. The side chambers add a further 360m² to this footprint. The turntable area alone occupies an impressive 121m².

www.eretec.com

Gold Partner

