



European EMC Products Capabilities for Electromagnetic Pulse Protection (EMPP) & Blast Protection within Military Facilities

Introduction

European EMC Products Ltd have been involved with the design, manufacture and installation of a range of systems specially tailored to protect against modern weapon systems. We are familiar with the security, financial and economic requirements of modern construction projects.

Quality

European EMC Products are registered to BS EN ISO 9000:2008, certificate No. FS 38901. License scope: The design, assembly, servicing and testing of RF Shielded structures and equipment including EMI shielding and thermal management materials; Gas tight doors; and specialised mobile electromagnetic pulse protected (EMPP) containers.

1. Electromagnetic Pulse Protection (EMPP)

The purpose of EMP Protection is to prevent the electromagnetic pulses from high level nuclear weapons disrupting and destroying electronic equipment.

European EMC Products can offer the following Products & Services:

EMPP Design

Full EMPP design, complete with all drawings covering:

- Wall, floor and ceiling sheet layout
- Method of fixing RF sheets
- Layout showing doors and penetration panels
- Pipe penetrations for diesel, water and gases
- Ventilation grills for air conditioning
- Electrical power and telephone filters

EMPP Specialist Components

- RF Shielded Doors
- RF Shielded Ventilation Grills for Air Conditioning
- RF Shielded Pipe Sleeves
- EMP Electrical Filters

EMPP Testing

Shielding Effectiveness Testing of EMPP Facilities to:

Mil Std 285, IEEE 299 and Mil Std 188-125

Pulse injection testing of EMPP filters to all NATO military standards

SELDS (Shielding Effectiveness Leak Detection System) Testing

- Design and installation of SELDS
- SELDS equipment

Earthing

Design of EMP earthing systems.

2. Blast Protection

The purpose of blast protection is to provide security from the direct and rebounded effects of direct explosive weapons.

European EMC Products can offer the following:**Blast Protection Design**

- Emergency procedures in the event of bomb or other threats.
- Explosives hazard evaluation.
- Blast loads from planned and accidental explosions.
- Explosion-resistant structural analysis and design.
- Structural dynamics and vibration, including inelastic response.
- Conventional weapons effects.
- Terminal ballistics.
- Fragmentation and fragment impact effects.
- Blast and impact testing.
- Development of programme or test plans.

Blast Protection Specialist Products

- Explosion Protection Valves
- Overpressure Protection Valves
- Gas Tight Shut Off Valves
- Blast Protection and Gas Tight Doors
- Wall Sleeves

3. EEP Experience with EMPP and Blast projects

Listed below is a selection of some recent projects we have worked on:

- RAF North Luffenham UK (Communications Centre)
- RAF Uxbridge UK (Communications Centre)
- Imphal Barracks UK (Communications Centre)
- RNAD (Royal Naval Ammunition Depot) Gosport UK
- NATO facilities Italy
- Norwegian Defence Command, 30 plus sites
- Communications Bunker Abu Dhabi
- EMPP facility for Polish MOD
- USAF RAF Fylingdales UK
- USN Newquay UK
- USAF Doha Qatar