



### Going Underground for Seaward's PAT

Investment in advanced Seaward PAT (portable appliance testing) kits is helping London Underground comply with important electrical safety requirements.

London Underground, one of the world's major underground passenger railway networks, operates 11 train lines which handle in excess of five million passenger journeys a day, and manages 270 stations and 250 miles of track covering Greater London and parts of Hertfordshire, Buckinghamshire and Essex.

Responsibility for compliance testing falls mainly to the maintenance department based at the Acton works maintenance facility in West London. There, electrical works controller Shaun Littleton oversees a team of 10 engineers, who regularly check the in-service safety of tens of thousands of items at 500 sites across the network as part of an extensive asset management and maintenance programme.

These include thousands of electrical appliances such as kettles, dishwashers, microwaves and ovens along with hundreds of power tools, desk lights, water heating systems, electrical fires, first aid equipment such as defibrillators and dozens of laptops, printers and other items of office equipment.



This broad responsibility requires a demanding approach to safety management that links test schedules with appliance identification systems and maintaining comprehensive test records for all items tested. To achieve this, London Underground has been a long-term user of Seaward PAT testing equipment, currently using 12 hand-held [Apollo 600+ PAT testers](#) with [PATGuard 3](#) testing software.

These lightweight, versatile and compact testers together with [Seaward Elite test and tag printers](#), can be conveniently carried by engineers in backpacks as they travel from site to site using the tube network to carry out dozens of daily safety checks.

The [Apollo 600+](#) incorporates all the recommended safety tests for portable electrical appliances in line with the IET 5th Edition Code of Practice. These include point-to-point testing of fixed equipment such as microwaves and the testing of extension leads, power cords and RCDs.

The tester's battery powered test capability also makes it suitable for successful testing at a range of locations, boasting practicality for organisations such as London Underground. In addition, by quickly scanning barcodes of individual appliances, previously tested equipment is recognised immediately, automatically setting the required test sequences for that item and speeding up the whole process of asset recognition and testing.

The incorporation of a large internal memory supports data handling needs, allowing the engineers to upload test records and transfer them directly to a central database on a weekly basis to his PC. The use of these features is completed with the production of important test certificates and test reports to demonstrate full compliance with in-house safety management protocols.

Shaun Littleton, who has been responsible for managing London Underground's PAT requirements for almost 15 years, also uses the Apollo 600+ to quickly test new electrically powered items coming into service, ensuring that they are safe to use and fit for purpose.





He said: “London Underground is 100% committed to safety; it’s of paramount importance to us. We therefore take our PAT compliance responsibilities extremely seriously, which is why we continue to invest in high performance, extremely capable portable appliance testers as part of our extensive equipment service and maintenance commitments.

“A very good tester, the Apollo is simple-to-use and capable of meeting the demands of a demanding workload and diverse testing regime. The engineers really appreciate its portability and capacity to integrate testing swiftly and seamlessly with asset identification. This enables them to carry out their responsibilities efficiently and allow them to contribute effectively to the overall running of a 24/7 network operation.”

The [Apollo 600+](#) and [PATGuard 3](#) test results management software forms part of a comprehensive range of Seaward PAT instruments, accessories and software that have been specifically designed to meet the needs of electrical safety duty holders in all workplaces.