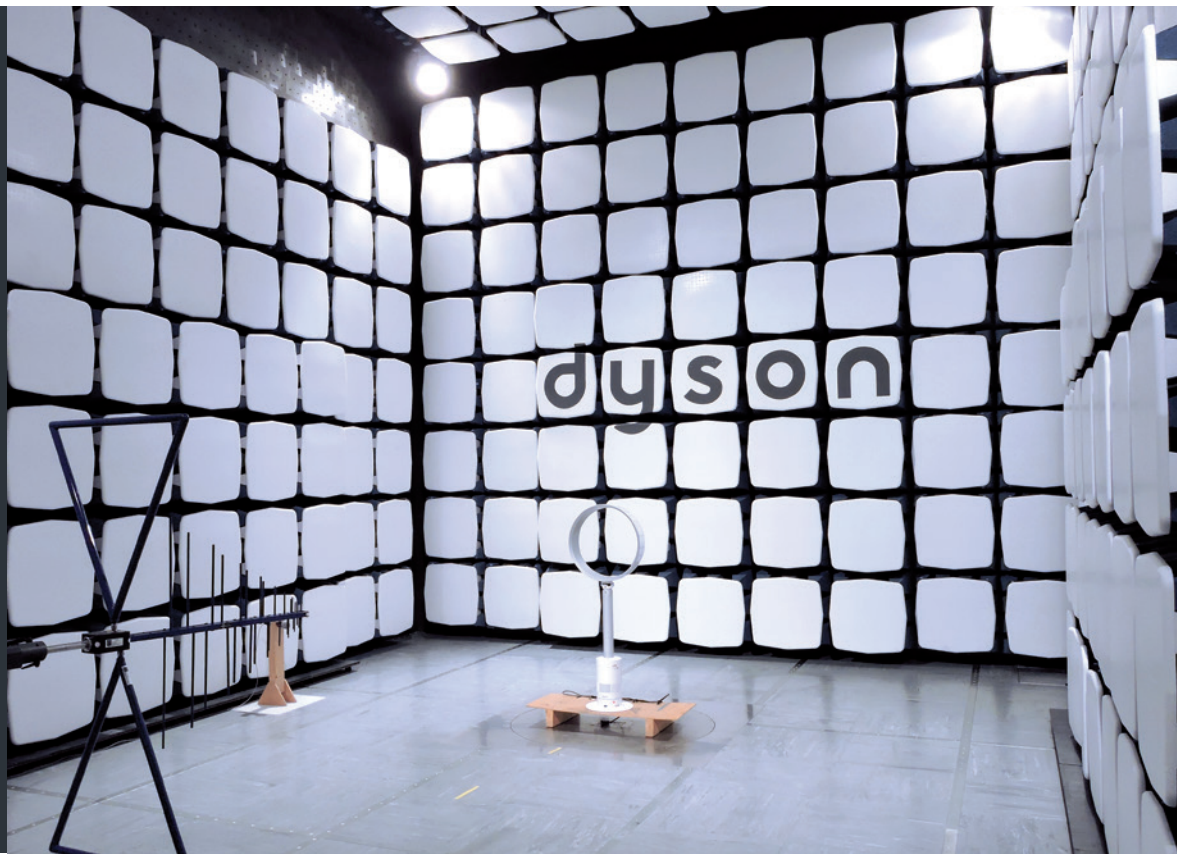
Dyson Ltd, Wiltshire, UK

EMC assessment of home and commercial appliances

MVG are our preferred supplier. They tailor the quote perfectly to fit our needs and are great in terms of provision and price.

Fabio Scalon
Principal Engineer, Dyson Ltd.



Efficient, on-site EMC testing to fully compliant levels

The challenge:

As the demands for accurate assessment of products increase, so has product complexity. Dyson are at the forefront of industry development. Their research and development testing facility in Wiltshire, UK is perhaps one of the world's best kept secrets. Dyson want to keep it that way, to ensure that they protect their developments and their patents. But, they also have to meet the challenge of meeting increased industry standards for testing compliance.

Today's industry is highly competitive. The secrecy in their knowledge and developments has been a crucial element in Dyson's success to date. But how do they achieve this?

Our solution:

Originally commissioned in 2006, the 3 metre semi-anechoic EMC Chamber (SAC) at Dyson required upgrading to meet the changing industry standards and frequency ranges.

"We carry out EMC assessment of our home and commercial products during development, such as Dyson vacuum cleaners or hand dryers for example," says Fabio Scalon, Principal Engineer at Dyson Ltd. "Our tests are all completed in house in our SAC which helps us to maintain confidentiality and keep product developments on-site rather than shipping to outside test facilities. This also gives us the capability to test to the standards specified by the industry, namely CISPR, IEC and FCC."

The existing chamber was evaluated by MVG-EMC and upgraded to refit new "Hyperloss" hybrid absorber matched to the existing ferrite tiles. Fabio explains, "With changes in the complexity of our products, we now have a need to also test for Electro Magnetic Fields (EMF) up to 2.7GHz. The upgraded chamber will allow us to do this, therefore expanding both the capability and the performance of the chamber."

THE BENEFITS:

The benefits of having an on-site test facility at Dyson are:

- The capability to test to full compliance on-site.
- It maintains confidentiality during development.
- With prototype testing we can test, check, modify and re-test within minutes.
- Quick validation as we can check and verify compliance when needed.
- Time saving, as we have no delays from using an outside test centre.
- Cost saving, as our test chamber runs 8 hours per day, imagine the costs for outsourcing.

Preferred supplier:

Fabio explains the reasons behind the supplier selection for this project:

"When we looked at which supplier to select for the chamber upgrade we reviewed all leading suppliers for chambers, and MVG-EMC was the preferred supplier based on both price and performance with excellent after sales service. It is critical for Dyson to have facilities which are cutting edge and MVG-EMC are leaders in the chamber design to meet/exceed the standards we need to comply with. Their design optimised the performance to the very highest compliance levels and was proven by 3rd party accredited test results. MVG-EMC are able to provide the local support in the UK which was also a great benefit to have that local expertise available. MVG-EMC installation of a similar facility in our South East Asia site has also been a success and provide Dyson with global EMC test capability"

Next steps:

Dyson's success is world renowned and the company are already looking at their next steps, says Fabio, "As our development facility grows, we will be looking to increase our testing capability with MVG-EMC always being our first choice for any future EMC Testing requirements."

Product information:

A selection of standard sized chambers for a variety of Electromagnetic Compatibility testing requirements. Whether for emissions, immunity, compliance or pre-compliance testing, MVG-EMC chambers are customizable and module based to meet your specifications.