



Innovation: designing for a sustainable future

Consumer product testing.

Narrator

Independent testing is a well established way of measuring new designs against the competition.

At Intertek's ETL Semco Labs in Milton Keynes, they test a wide range of commercial and consumer products. They use both scientific testing and market research methods. It is important that scientific tests are consistent and give repeatable results.

Jane Lee

When we're devising test methods to test consumer products, we want to try and replicate the way a consumer uses a product. So that might involve designing rigs to replicate that situation.

Examples are things like for suitcases, where we designed a test rig so we're testing the durability.

And other examples where we're testing backpacks and rucksacks: we have a test rig which replicates somebody running or walking along.

Jane Lee

For the dishwasher testing we have to import spinach from Germany and have to specify what eggs we are using and use particular porridge. Again, this is to ensure that all the results are consistent and repeatable.

Narrator

The lab contains several controlled environment rooms where appliances can be tested under specific sets of conditions.

Variables like temperature, water flow and humidity can be precisely controlled.

Narrator

Scientific research is good for testing performance, but the lab also specialises in testing consumer experience and perception of products.

To carry out this qualitative research the lab has built up panels of users. The largest consists of a thousand people, who may be asked to carry out tests at home or in the lab.

Jane Lee

Our largest panel are everyday householders that come in and use the products here. But we also have a particular panel with people with disabilities and poor sight. We recently did some work looking at a system for getting in and out of taxis for people with, with disabilities.

So we can cover all types of users, but we also have them in for focus groups.

At the moment, the key aspect is ease of use and whether they like a product. But going forward, we've actually been talking about alternative technologies for domestic households and how that would be received. So it's certainly becoming a more important issue to consider the wider aspects.

Narrator

In recent years, sustainability has emerged as an aspect of the work carried out by independent companies like Intertek.

Jane Lee

Sustainability is becoming a more and more important aspect. Whether that be energy efficiency or the other aspects of waste and nasty components in products. As consumers become more educated, they will want to know about more of these issues. And also some of our clients: manufacturers and retailers, it's becoming more important as well to show that they've got a sustainability agenda.

Narrator

Intertek is involved in the government-funded UK Market Transformation Programme. The aim is to reduce the use of energy and resources associated with domestic appliances and commercial products.

Jane Lee

When we're carrying out the Market Transformation Programme, we have to consider which appliances are the most efficient and identify the best practice. For things like domestic appliances, we can use the energy label standards to rank the product.

Narrator

Intertek work with stakeholders, manufacturers and retailers, consulting with them and advising on how to reduce energy and materials use.

But they also play a role in agenda setting, working with industry on codes of conducts and voluntary agreements to eliminate poor-performance products.

Jane Lee

And by identifying the best technologies we can try and promote those and encourage their use more.

So underlying all the information is reliable data, so we use that to generate models to show what the energy consumption is associated with those products: now and in the future. And in that way, we can set targets and see where we want to be in the future as well.