FIRE PROTECTION

NOVEMBER 2024

IN-DEPTH: 2023 Fire Statistics

2024 EMS CONFERENCE

Detecting solar installation fires

- FPASA Milestones with Peter Davey
- Fire Testing in SA
- CBD building fires
- FPASA Training Courses for 2025

Ignis Fire Testing unveils new SA testing facilities

Fire testing is at the heart of a fire-safe environment; yet minimal modern testing facilities exist in Africa to meet this demand. This is the reason behind the launch of the privately owned Ignis Fire Testing in Cape Town.

The company's expanded laboratory and workshop was officially launched in August in Blackheath and attended by numerous industry stakeholders.

This multi-million-rand investment is claimed to be the largest private fire testing facility in Africa and it includes a collaboration with Stellenbosch University's Fire Engineering Research Group (FireSUN).

To limit costly imports and boost innovation, all Ignis equipment, software and control systems have been created in-house, the company states in a press release.

Dirk Streicher, civil engineer and owner of the new 1,500m² facility, says fire testing is a neglected field in South Africa.

"We saw the gap in the market for local fire testing. Where do you go if you have to test products or materials to adhere to fire safety standards? There are few local options. Even internationally, the testing demand is bigger than the supply, leading to major backlogs. It is also very expensive for South Africans to test abroad."

According to Ignis, the country's limited capacity for fire testing raises safety concerns for all civilians.

Research and development

Ignis Fire Testing collaborates with Stellenbosch University's Fire Engineering Research Group, led by Prof. Richard Walls. It works closely with students and staff, granting access to its testing facilities for research purposes, supporting post-graduate degrees, and co-authoring papers that push the boundaries of fire safety engineering.

Walls praised the university's collaboration with the test facility. "Today is a very exciting day for fire engineering in the industry. Moving forward, testing is critical in our industry, but we also see how much there is to do. So this is the first step," Walls said at the opening.

"Fire Testing will be fundamental to promote sustainability; hence there will be a growing emphasis in the coming years. Major new challenges will arise in green energy, growing populations, poverty, taller buildings, bigger warehouses, ageing infrastructure, and ageing populations.

Carlo Kuhn (chemical engineer) demonstrating how a Single Burning Item test is conducted. Dirk Streicher, owner of Ignis Fire Testing, is next to him

Attendees at the launch watching a fire resistance test demonstration

"Fire engineering will be called to address the needs. Test lab capacity in South Africa needs to at least double in the next 10 years," he said.

Walls is positive about Ignis Fire Testing's role and convenient location. "With the University of Stellenbosch now producing students in Fire Engineering, it would not surprise me if we see the Cape become the centre of excellence. We have a base here to serve the African continent."

International praises

Dr Brian Meacham, Director of Risk and Regulatory Consulting of Crux Consulting LLC in Shrewsbury, USA, was one of the guest speakers.

Meacham is regarded as a global expert in Fire Engineering, having worked for the World Bank and the Asian Development Bank in policy development. He highlighted

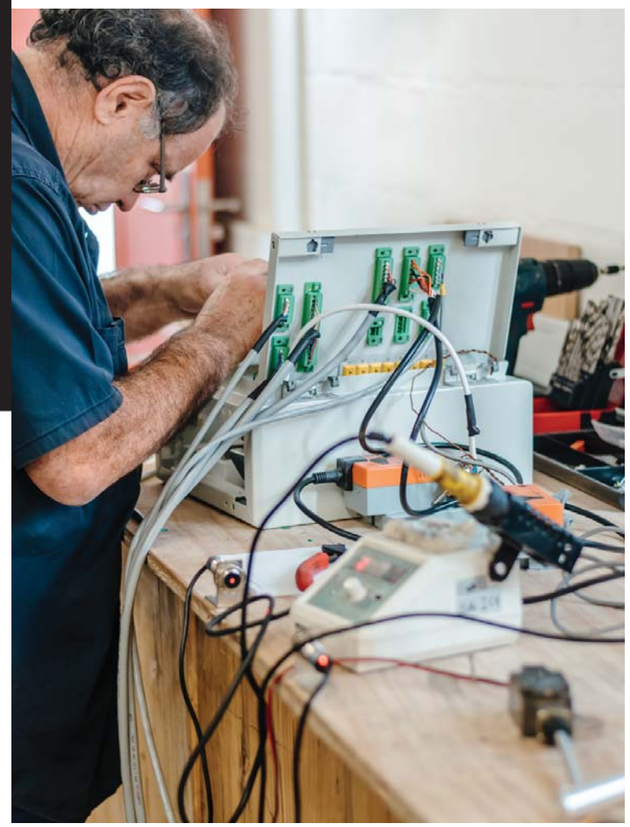
the importance of Ignis Fire Testing's laboratory to a fire-safe environment.

"It is interesting for me to be here and look at the fire test lab and celebrate the launch, because fire testing and fire data is the core of everything we do. You cannot build a safe building, safe automobile, safe aircraft, safe mine, safe anything without considering the materials' fire safety performance. It is at the core of every design.

"Everything starts with the data. We can't run engineering models without good data. If we're running engineering models without good data, it's not good engineering."

He said he was excited about Ignis Fire Testing and FireSUN joining forces. "I applaud the work that is being done, and I applaud the relationship with the university because it is a way to bring things together and make [an] important contribution to the future."

Meacham concluded by stressing the important role of Ignis Fire Testing. "I'm happy to be here and see what I consider a significant advancement globally for more fire testing. And to have it here … as a resource across the continent, is great."



Dirk Streicher at work in the laboratory

Available fire tests

The new Ignis facility offers an extensive range of fire safety tests, adhering to South African and international standards, including ISO codes.

Its capabilities include fire resistance tests, a set of reaction-to-fire classification tests, cone calorimetry confirmation testing, room corner and gas suppression tests, façade tests, and supplementary and auxiliary fire equipment (such as sprinklers) tests. The facility is equipped to assess various products, such as lithium-ion batteries and solar panels, and can adapt to special requirements beyond standard procedures.

Streicher emphasised that the facility has the capacity to expand as the demand grows.

All photos courtesy of Ignis Fire Testing.