

Steel Awards showcase steel innovation

On October 10 at the Coca Cola Dome in Northriding, Gauteng; the D'Aria in Durbanville, Cape Town; and the Mount Edgecombe Country Club, KwaZulu-Natal, the Southern African Institute of Steel Construction (SAISC) showcased local steel construction and innovation at the SAISC 2019 Steel Awards.

A diversity often brings opportunities. South Africa's steel industry has been going through a period of severe challenges, affecting the entire supply chain and seeing the most serious contraction for many years in the sector. Despite the prevailing doom and gloom, however, the South African Institute of Steel Construction (SAISC) has remained true to its role of industry champion during this challenging time, focusing on innovation, positivity and creativity – particularly with regards to this year's Steel Awards.

This approach bore fruit, with the SAISC 2019 Steel Awards achieving record entries and sponsorship along with growing diversity of the entries received. This year the SAISC received 94 entries for the awards as opposed to 70 in 2018 and 59 in 2017. In addition, sponsorship of the Steel Awards has grown by remarkable 40% from 10 sponsors in 2018 to 14 this year.

This is according to Paolo Trincherio, CEO of the SAISC, who explains that the marked increase in sponsorship was largely due to a restructuring of the Awards sponsorship options, which made these more affordable and accessible to potential sponsors. "Another

important factor contributing to the increased entries and sponsorships in 2019, was the intensive and dynamic communications campaign undertaken to market the Awards – across all platforms from social media to online, print and broadcast media – which also significantly increased the overall visibility and traction of the Awards throughout industry," Trincherio adds.

"This year, we can say that a wide range of stakeholders in the greater built environment – from architects and engineers to riggers, welders and even university students – actively participated in the Steel Awards and have started to recognise the pivotal importance of steel. We are particularly pleased with the greater diversity of entries received this year," he remarks.

The aim of the Awards is to highlight the use of steel in the built environment. "The annual Steel Awards are intended to create a sense of inclusivity and community and to resonate with a wider audience including a wider representation of gender, generational and ethnic groups," explains SAISC Chairperson Nicolette Skjoldhammer.

This aim was brilliantly realised by the entry of the overall Steel Awards 2019 win-



The innovative design of the Durban Christian Centre lay in the geometry of the large roof arches, inclined in different planes, which provide support for the roof as well overcoming tight site access issues. Inset: A view of the complex structural detail of the steelwork for the Durban Christian Centre's roof.

ner and winner of the SAFAL Steel Innovation category, the Durban Christian Centre. The building was commissioned to replace an earlier church which had burnt down, and is in the shape of a large dome. Here, the innovation lay in the geometry of the roof arches, inclined in different planes, which provide support for the roof as well overcoming tight site access issues.

"The Durban Christian Centre is a very bold project. For the engineer to realise the form the architect envisioned must have been very complex," Skjoldhammer continues. The nominator and structural engineer was NJV Consulting; the architect, Elphick Proome Architects; and the steelwork contractor Impact Engineering.

"The members of the Durban Christian Centre project team epitomise all the aspects of diversity the SAISC is striving for within the steel industry, all working in harmony to achieve an amazingly creative and innovative outcome," she adds.

Other category winners are as follows:

- In the Mitek Industries South Africa Light Steel Framed Building category, the winner was the Protea Glen Secondary School, constructed for the Gauteng Department of Education. This was one of nine schools commissioned by the Department, the aim being to adjudicate various building systems and their advantages – and how these could create structures conducive to learning. The project capitalised on the key features of light steel frame building,

namely: speed, thermal efficiency, acoustics and flexibility of design. The architect on this project was Local Studio; the structural engineer, the Structural Workshop; the engineer Luleka Consulting Engineers; and the main contractor, Abacus Space Solutions.

- In the ArcelorMittal South Africa Architectural category, the winning entry was the Peech Hotel located in Melrose, Johannesburg. Meshworks, the architect on this project, and structural engineers EVH Consulting, were charged with extending the existing hotel onto a newly acquired adjacent property. Steel was used throughout the project to express a layered architecture of lightness, and as a tool in the integration of built form and landscape.
- In the Industrial category, the winner's trophy went to the Omnia Nitro Phosphate Plant constructed for the diversified chemicals group Omnia. The nominator, steelwork contractor and steel erector was SE Steel Fabrication Pty Ltd. With tight project deadlines and multiple challenges including working at a height of up to 46 m, this complex plant construction was achieved safely and on time.
- Winner in the Global Roofing Solutions Metal Cladding Category was a building named the 1054, designed and nominated by architects DMV Architecture, with the main contracting carried out by Jeremy Delport Construction. The contrast of the building's solid exterior with a light and airy interior succeeds in creating a welcoming and connecting space.
- In the SAISC Steel Awards Commercial Category, the building constructed for KTM Raceworx made innovative use of a steel frame system with cellular beams to support the floors and accommodate HVAC and other services. The nominator in this instance was Macsteel while the structural engineer and main contractors



The steel mesh of the wraparound balconies of the Peech Hotel – winner in the ArcelorMittal South Africa Architectural category – was used to create the articulate façades of an urban village, while also serving to integrate the building with its green surroundings.

were J and C Structural and Civil Design.

- The Association of Steel Tube and Pipe Manufacturers of South Africa's (ASTPM's) Tubular Category was won by the structure Fourways Mall Promotions Court. As part of the upgrade of the Fourways Mall, the new roof is essentially a tubular structure, which is lightweight and aesthetically very pleasing. The nominator and steelwork contractor was CADCON (Pty) Ltd, and the architects were Boogertman & Partners.
- In the Saffintra South Africa Factory and Warehouse category, top honours went to Chilleweni Cold Storage Solutions. Constructed in Gosforth Park Germiston, the building's fresh design approach has given rise to a visually appealing industrial, fit-for-purpose industrial building. The nominator was Global Roofing Solutions, the structural engineers were DG Consulting Engineers and the architect was Empowered Spaces Architects.
- The SAISC Steel Awards Bridges Category went to the CTICC Skybridge, which connects the Cape Town International Convention Centre with the CTICC East Expansion. This bridge allows the two buildings to function effectively as an integrated unit and epitomises the CTICC's main purpose of connecting people. The nominator was Anchor Steel Projects, while the architects of this graceful structure were Convention Architects. The steelwork contractor and steel erector was Anchor Steel Projects.

The SAISC is profoundly grateful to major sponsors Aveng Trident Steel, which sponsored the Durban and Cape Town events and was the national entertainment sponsor; and BSI Steel, which sponsored the Johannesburg

event. In addition, the SAISC would like to thank Cadex Systems SA for sponsoring the photo competition and Macsteel for the Digital Trailblazer sponsorship responsible for the Steel Awards App. "We are also indebted to NJR Steel, Stewarts and Lloyds, Pro Roof Steel and Tube for the sponsorship support of the Steel Awards," Trincherio continues.

"Aveng Trident Steel is proud to be associated with the SAISC annual Steel Awards. We are very pleased at the quality and innovation of the entries, and trust that this is the forerunner of an improved South African steel industry and overall economy," says Hercu Aucamp, managing director of Aveng Trident Steel.

Commenting on behalf of BSI Steel, Sales Executive Peter Smith says: "We are proud to be sponsoring this event and would like to thank the SAISC and all the role players involved for the hard work and time that they have invested – not only into the Steel Awards, but into the growth and development of the steel construction sector, too."

"In the light of the current economic pressures we face in South Africa, we are hugely encouraged by industry's response to, and involvement in, this year's Steel Awards – the sponsorship, the number of awards and the diversity of every aspect from the entries to the judging panel and sponsors," says Trincherio.

"South Africa needs a healthy and vibrant steel construction industry, and this year's highly successful Steel Awards event will do much to showcase not only the capabilities of steel as a material of construction, but also all the amazing people who work throughout the entire sector to promote the future sustainability of our industry," he concludes. □



The overall winner of the SAISC 2019 Steel Awards was NJV Consulting for its design of the Durban Christian Centre; the nominator and structural engineer was NJV Consulting; the architect, Elphick Proome Architects; and the steelwork contractor, Impact Engineering.