



INSPIRING SAISC STEEL AWARDS 2022

South African steel construction sector triumphs over adversity of recent years

1 Benguela General Treatment Plant.

Innovation, ingenuity and a sense of community within the steel construction industry were showcased on the evening of 13 October, when participants across the local steel value chain gathered to attend the highlight of the annual steel industry calendar – the 2022 Steel Awards, presented by the Southern African Institute for Steel Construction (SAISC) and held at Emperor's Palace, Gauteng.

This event, which demonstrates excellence in the use of steel in construction, was the first in-person Steel Awards held since 2019, prior to the Covid-19 pandemic. The 2022 Awards very effectively highlighted how the local steel sector has triumphed over adversity in the past two years; as well as showcasing a typically South African 'can-do' approach to the challenges endured during this time.

The annual SAISC Steel Awards provide an opportunity for stakeholders across the industry – including engineers, fabricators, designers, architects, processors, merchants and fabricators – to present their work and be honoured for their outstanding achievements. The evening – known in the steel sector as the 'Oscars of the steel industry' – was an elegant gala-style gathering with a 'red carpet' feel and a growth-related theme this year of 'green shoots'.

Local ingenuity and commendable perseverance

SAISC CEO Amanuel Gebremeskel explains: "Even before the global pandemic, South Africa's steel industry had gone through a period of severe challenges. The 'green shoots' theme is an acknowledgement of the importance of continuing to navigate through troubled times. It is also a tribute to our

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much-loved former CEO, the late Paolo Trincherio, who did so much for South Africa's steel industry.

He was a passionate proponent of the concept of promoting growth throughout the steel sector – or 'green shoots' as he put it – and that one must keep on moving forward and pushing through, even when times are tough. I know he would have been so proud of this year's entries, which are even more noteworthy because they were completed during this very difficult pandemic era."

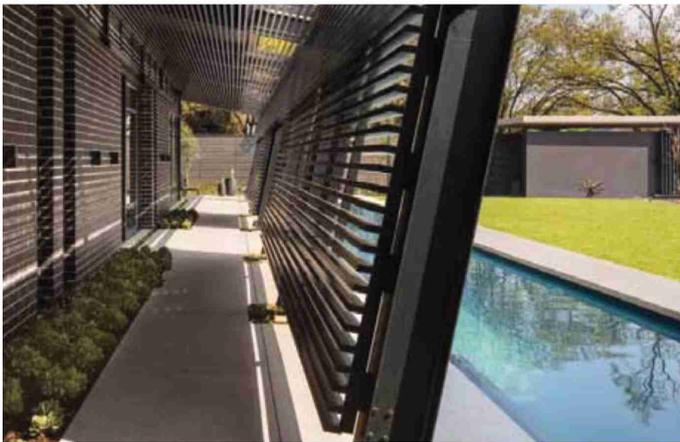
Gebremeskel explains that many steel construction projects globally were stalled during the Covid pandemic, and yet members of the South African steel industry managed to drive projects through to completion.

"A number of high-quality, truly excellent projects have been showcased at this year's annual Steel Awards, and I believe this is a testimony to our character as a nation - as well as the value which the SAISC brings to the local steel construction industry. The SAISC is one of only 6 steel institutes around the world, and has a long history as a 'steel sector sage': a custodian of technical knowledge, an educational resource and a trusted authority."

Mining category 'gem' shines as Overall Awards Winner

"While there is tremendous merit across all of our entrants, as well as all our category winners," enthuses Gebremeskel, "the SAISC Annual Awards judges were unanimous in their praise of our overall winner – which was also the winner of the Mining Category – the Benguela General Treatment Plant mining facility, aboard the 'Benguela Gem', the world's most advanced diamond recovery vessel. The Benguela Gem is owned by Debmarine Namibia, a 50/50 joint venture between De Beers Group and the government of the Republic of Namibia."

The Benguela Gem is the product of international collaboration: designed in Norway and Poland, built in Romania and fitted out by De Beers Marine South



2 House Vingos.

Africa. Diamond recovery by Debmarine Namibia takes place at 90 to 150 metres below sea level. The exceptional design, fabrication and installation of the 3000 ton diamond treatment plant on the vessel was carried out ahead of schedule by local engineers and fabricators in the midst of Covid-19 pandemic restrictions.

Gebremeskel advises: "This project stood out in a number of different ways, and presented a first in the history of the Steel Awards: it operates off-shore, and is floating rather than being stationary and anchored – a truly distinctive applicant within the Awards categories. As a sea-faring structure, it is furthermore subject to unusual engineering loads from a naval engineering perspective.

The vessel, built for De Beers Marine operations, is unique in Africa, being able to carry out the entire under-sea diamond dredging and treatment process.

From the vessel arriving at the end of September 2021 with an empty deck, it sailed again in December 2021 with a fully operational mine onboard.

This project was an exceptional showcase of the use and applications of steel featuring South African design, fabrication and construction for an international client."

2 The treatment plant was nominated by designers PBA Projects and completed in collaboration with De Beers Marine and 3C Metal Belmet, Namibia and local fabricators Steel Services and Allied Industries.

Additional award categories showcase steel sector diversity

This year's awards introduced more categories, and consequently an increased number of winning entries, than in recent years. SAISC Marketing and Management Consultant Denise Sherman explains: "The reasoning behind this was to honour a broader spectrum of Awards entrants. We wanted to cater to all possible role-players within the steel construction industry's varied landscape."

The Steel Awards category winners are as follows:

Automotive

Ford Package E – As part of a R3-billion investment by vehicle manufacturer Ford, an automotive assembly plant was erected in Rosslyn, Pretoria as part of the company's high-volume export programme. The project used extensive steel supplies and comprised a 12 400m² warehouse, 14.6m in height. The project was completed ahead of schedule, despite the Covid-19 pandemic and related supply challenges.

Agri-Industrial

Woodridge Packhouse – This project presents an interesting form, clever use of natural light and a design which allows for natural ventilation – therefore saving on energy costs.

Mining

Benguela Gem Treatment Plant – This project not only won the Mining category but the 2022 Steel Awards overall.

Residential

House Vingos – The innovative use of steel – combined with all the other elements of construction – delivers a statement piece of architecture and a warm, welcoming family home.

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Sports Facilities

KES Aquatic Centre – While retaining the heritage component of the previous swimming pool complex, the roof structure is of particular interest: an apex running diagonally across the structure, requiring meticulous attention to ensure leakproof sealing.

Sculptural / Architectural

Eastgate Solar Trees – In addition to their aesthetically-pleasing design and how this cleverly reflects a renewable energy focus, the access to the site during the construction phase was challenging, making for a complicated and challenging installation process.

Light Steel Frame (LSF) Building

Jubilee Hospital – At the height of the Covid-19 pandemic, the innovative use of light steel framing in this field hospital in

Hammanskraal, north of Pretoria, allowed for the addition of a significant number of hospital beds to increase existing capacity, using this speedy construction methodology.

Metal Cladding and Roofing

KES Aquatic Centre – This project won both the Metal Cladding and Roofing, and the Sports Facilities categories.

Tubular Steel

Babanango Travellers Camp – This innovative tourist accommodation is situated within the Babanango game reserve in northern KwaZulu-Natal. A number of interesting technical details included reconciling complex issues regarding the use of different materials of construction and geometrical factors, to achieve the project's architectural objective: roofing reflecting shapes used in traditional African shields.

Community Enrichment

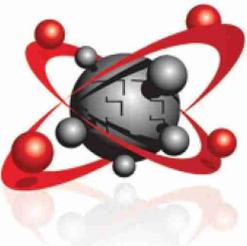
Gary Kirsten Sports Centre Khayelitsha – Featuring ease of construction and sustainable materials, this structure also has the capacity to extend if need be.

Regional Awards

- Best Project Gauteng – *House Vingos*
- Best Project Western Cape – *Benguela Gem Treatment Plant*
- Best Project Eastern Cape – *Woodridge Packhouse*
- Best Project Limpopo – *Freshmark Polokwane*
- Best Project KwaZulu-Natal – *Babanango Travellers Camp*
- Best Export Project – *New Biox Plant in Zimbabwe*

Best Project Limpopo: The project, carried out for the Freshmark distribution centre in Polokwane, made use of particularly innovative cladding: atypical of a warehouse building, and technically challenging to achieve. The result was aesthetically pleasing, with a design element of curved bullnoses from roof to cladding.

Best Export Project: Biological oxidation ('Biox') is a technology that ensures the optimal processing of high sulphur gold



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3 Ford Package E.

ore, thereby increasing the achievable gold recovery. This technically challenging structural framing project entailed detailing, fabricating and constructing a gold processing Biox plant. The primary objective thereof was to provide access to the various areas of the Biox plant – and to its piping support system.

Focus on in-person networking

Sherman adds that the 2022 Steel Awards were extremely well-attended. “In fact, this was one of the largest Awards held at a single event in recent years,” she enthuses.

“In contrast to our Awards of 2020 – which of necessity took place purely online – and our Awards of 2019, which were held across 3 venues simultaneously – namely Johannesburg, Cape Town and Durban – the 2022 Steel Awards were planned from inception to take place at a single venue. This was to highlight the event’s in-person networking opportunities – and emphasise the value that the constructive use of steel brings to communities and lives.”

Grateful thanks to sponsors

“The SAISC is extremely grateful to its sponsors, who have made the event possible through their generous sponsorships. We would like to thank Safal Steel, Bolt and Engineering, BSi Steel, ProRoof, NJR Steel, Macsteel, Safintra South Africa, Global Roofing Solutions, Unica Iron and Steel, ASTPM, and Stewarts

3 & Lloyds,” says Gebremeskel.

“In addition, I would like to thank all the other role-players involved in putting these awards together, including the judges; Denise Sherman, our Marketing and Management Consultant; the members of the board; and all our members from outside Gauteng who have travelled to attend the Awards at their own expense. All those who have volunteered so much of their time to ensure the success of Steel Awards 2022 are indeed greatly appreciated!”

“It is wonderful for the SAISC to have been able to host the Steel Awards in-person once again, and to see the spirit of triumph over adversity soaring high – like the steel structures of so many of our notable entries – throughout the local steel and construction industries.

I believe the Institute – together with our valued Steel Awards entrants, sponsors, members and partners – has proven once again how much can be achieved across the local steel value chain when all players persevere for the continued success and sustainability of the steel industry,” he concludes.

About the South African Institute of Steel Construction (SAISC)

Founded in 1956, the South African Institute of Steel Construction (SAISC) represents all facets of the steel construction industry – as well as those with an interest in the use of steel in all sectors of business and society as a whole. The mission of the SAISC is also to promote the holistic vigour and prosperity of the people and companies in South Africa that provide steel-related products or services to the construction and related industries.

SAISC members include the steel mills, merchants and value-added processors and service centres, steelwork contractors, companies that provide services (such as fabrication, galvanising or painting); or products such as fasteners, paint and a variety of other products, client bodies, architects, specifiers, consulting engineers, project managers, quantity surveyors, engineering procurement and contract management contractors and assorted others.