

Benguela General Treatment Plant

OVERALL WINNER | MINING 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 Debmarmine 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 Africa. Diamond recovery by Debmarmine Namibia takes place at 90 to 150m below sea level. The exceptional design, fabrication and installation of the 3,000 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." 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.

