

Spun concrete electrification poles offer greater longevity and reduce vandalism

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There are estimates that over R22bn in revenue has been lost due to illegal electricity connections, with over R7bn lost in Gauteng alone. It is not just the loss of revenue that is of concern to suppliers of power or municipalities; there are safety issues as well. Illegal electricity connections are a major cause of electrical fires and electrocutions, in addition to the impact on traffic and medical facility management due to more frequent loadshedding.



In order to install electricity-carrying equipment that significantly reduces vandalism while offering an increased lifespan, Lyon and Partners Consultants for the Sicelo Informal Settlement, near Vereeniging, turned to Rocla for the supply of precast concrete spun electrification poles due to their design and manufacturing expertise, which would not only safeguard the power installations but also the Sicelo community.

Rocla sales consultant Kevin West said, "The implementation of electricity supply to Sicelo was a project that needed a customised electrification concrete pole solution. Our technical team met with the consultants and the engineers for the Sicelo Informal Settlement project and undertook the manufacture and supply of their final design specifications required for this five-phase project."

"Our ability to customise, manufacture, and deliver over 105 concrete spun electrification poles within the required timeframes was a key factor in our successful partnership. We were manufacturing two poles per day for Phases One, Two, and Three. We are now in production for Phases Four and Five. A safe electricity supply to informal settlements is a priority. It uplifts the community, and we are proud partners with Lyon and Partners in the supply of infrastructure that will meet their objectives," commented West.

Rocla has manufactured and supplied 11 metre/160mmtip/8.5kN spun poles and 9 metre/160mmtip/8.5kN spun poles. The

company is currently manufacturing 9 metre and 11 metre spun poles for Phase Five of the project.

Transmission and distribution power lines in suburban and rural areas need poles that can withstand not only vandalism but also harsh environments and inclement weather in order to ensure the continuous supply of electricity. Rocla's spun concrete transmission and distribution poles are well suited to meet the stringent requirements of electrical distribution line construction.

The durability of precast concrete makes it a far superior and sustainable alternative to the other options that were presented. Wooden poles had previously been used but were prone to vandalism, fire, and termite attack, as well as being an easy target for illegal power installations.

The maintenance-free spun concrete poles are exceptionally strong through 360 degrees, whereas normal cast concrete poles have a major and minor load axis. The unique centrifugal manufacturing process gives a uniform, densely compacted concrete along the whole length of the pole. This gives the Rocla spun concrete pole superior strength properties not found in cast concrete poles.

Spun concrete transmission and distribution poles offer a cost-effective solution due to their small service requirements, simple and economical funding methods, and quicker installation turnaround time. They offer a durable, long-term solution with minimal maintenance. Rocla spun concrete pole systems are Eskom-approved and have been tested at Eskom's Rosherville Testing Station.

"Rocla offers a variety of pole lengths in single, jointed, and double pole solutions, and Rocla's engineering technical team offers technical assistance in the design and customisation of spun concrete pole solutions to meet specific customer sizing requirements as well as design and manufacture products for non-standard applications," said West.

"We have supplied spun concrete electrical distribution poles to wind farms in the Northern Cape. Rocla concrete poles erected many years ago are still standing and structurally sound, such as the Rocla poles erected in Harrismith over 30 years ago for Eskom. We are therefore very confident in the efficacy of our product to deliver a cost-efficient and sturdy solution for electrical supply applications," concluded West.

The Rocla spun concrete poles offer a lifespan of over 50 years. Rocla manufactures a range of concrete pole solutions for electrification, reticulation, telecom masts, lighting, security monitoring, and stadium use. Rocla is part of the IS Group, which also includes Technicrete.

Further information is available from: <u>Kevin.West@isgroup.co.za</u> (Cell: 083 468 5920)

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