

Water Pipeline for Africa Pipe Industries

PPG's scale and capability ensures efficient project implementation

Case study



The Customer

Africa Pipe Industries: B17 and B18 Pipeline for Rand Water

The Location

Sasolburg, Free State, South Africa

The Challenge

To provide 'just in time' coating deliveries and solutions that meet international standards for (potable water) pipelines on a major 46 km-long water pipeline

The Solution

PPG SIGMALINE® 855 for the external coating and PPG SIGMALINE 523 for the internal lining

The Benefits

The global scale and supply capabilities of PPG as a key partner in the pipeline industry and products with proven performance

The Result

Efficient delivery and application met strict deadlines for a high-volume, time-critical project

The Customer

Sasolburg-based Africa Pipe Industries (API) is a manufacturer of helical welded pipes used in the water, and oil and gas industries. The collective experience of the API team exceeds 150 years and is heavily involved in the growing water infrastructure needs in South Africa. API is the only South African manufacturer with experience in sour service offshore gas pipe manufacturing and one of the few in the world to make this quality pipe on a single-step helical welded pipe mill.

Rand Water is the largest bulk water utility in Africa and is one of the largest in the world, providing bulk potable water to more than 11 million people in Gauteng, parts of Mpumalanga, the Free State and North West – an area that stretches over 18,000 km².

The Challenge

One of the key issues for API on its B17 and B18 Pipeline scheme for Rand Water was the need to have a coating company that could meet the strict production deadlines. The extensive water pipeline, measuring 2.1 m in diameter and 46 km in length, had to be laid in a few months – so it was no easy task.

API required a partner with the capability to provide just-in-time coating deliveries and solutions that met international standards for potable water pipelines.





The Solution

PPG is renowned for its technical expertise and also has the global capacity to supply coatings for the largest pipeline schemes across the world.

For this project, PPG supplied 400,000 liters of coatings over several months to match the hectic schedule. The products specified were the PPG SIGMALINE 855 coating for the externals and PPG SIGMALINE 523 coating for the internals.

The Benefits

On projects of this size with such an intensive construction program, customers need to feel confident that their coatings partner can offer high-quality products and also match the most demanding production timetable.

The global scale and supply capabilities of PPG are recognized throughout the pipeline industry. This meant that API could confidently plan and implement its activities, assured that PPG would deliver on time, every time.

In terms of product performance, the protective system offered the following benefits:

PPG SIGMALINE 855 polyurethane (External Coating)

- Excellent corrosion and water resistance
- Fast-curing times
- With the PPG SIGMALINE 855 Repair, field joints of the pipes could be done effortlessly after welding of pipes in the field installation process.
- Sufficient UV protection while awaiting exterior field installation on site
- Excellent abrasion- and impact resistance against minor damage that occurs whilst handling, transporting and installing the pipes
- Excellent adhesion
- High DFTs (1,500 microns) in a single coat

The PPG SIGMALINE 523 epoxy (Internal Lining)

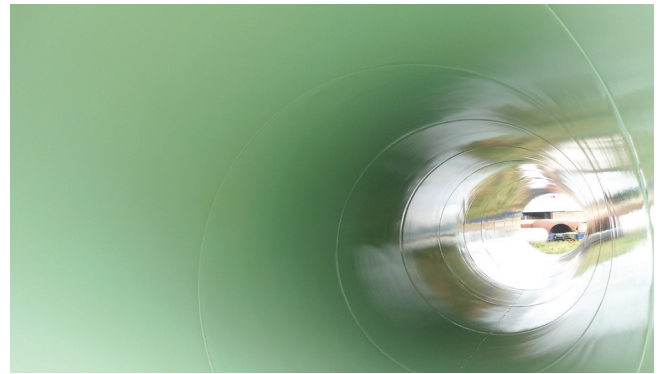
- Approved and certified lining for portable drinking water: BS 6920
- Resistant to bacterial growth
- Fast curing
- Can be applied to rotating pipes
- High DFTs (600 microns) in a single coat

The Result

The client benefited from PPG's established infrastructure and organizational excellence to support such a challenging, high-volume pipeline development.

In total, PPG supplied 400,000 liters, based on the crucial just-in-time delivery system, which left no margin of error. The project was handled smoothly and efficiently, with PPG demonstrating that it has the expertise, products and systems to handle pipelines of any size and complexity.

Experience, performance and reliability – all ensured when you choose PPG.



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