

Stainless steel could save millions in municipal water losses

While South Africa is experiencing Stage 2 and 3 water restrictions following its worst drought in decades, a spotlight is falling on the use of stainless steel in water distribution and service pipes in South Africa to reduce leakages and maintenance costs and preserve our already strained water resources into the long-term future.

The importance of tightening up South Africa's water supply infrastructure comes into sharp focus when one considers statistics cited in a Timeslive.co.za report, which reported that up to 40% of Johannesburg's water is unaccounted for, which cost the city R1.16-billion in the year ending June 30, 2015. Of that, about R851-million's worth of water was lost to leaks.

These high losses have been attributed, in part, to the use of inferior or inappropriate metals in pipe joints and other fittings being used by municipalities including flanges, tee-

pieces, reducers, bolts and nuts. The short lifespans of these components, compounded by high-pressure systems and high corrosion levels in South African soils, are further challenges for leak detection and repair.

Sassda's executive director, John Tarboton explains: "There is high value potential in using stainless steel material for service piping and all fittings (predominantly manufactured using grade 316 stainless steel) in the service delivery of municipal water that can potentially save millions currently lost in leakage and filtration costs, as well as helping to reduce the usage of water per capita.

"With the use of corrugated stainless steel piping, the need for joints in the system is reduced, allowing the corrugated stainless steel pipes to maintain their strength, improve workability and extend the piping systems' service life. There is a clear cost

savings case, both in the treatment of water that is lost through leakage, as well as with the water that municipalities are unable to bill for its distribution and use. Stainless steel is an optimal material in water system applications and while it comes at a price, it is an investment in the country's infrastructure that offers cost-savings benefits that will still be seen 100 years from now."

Tarboton concludes by saying: "We also have the ability and the technology available here in South Africa to manufacture the specified stainless steel pipes, something which could be a coup for the manufacturing industry in South Africa, both at an incubator level and as a commercial enterprise. If our municipalities are already investing so heavily in leakage repairs and replacement piping, it makes sense to replace outdated pipe systems with stainless steel." □