Water is Life

During the week of 17-23 March, the Department of Water and Sanitation called on South Africans to join their National Water Week campaign to highlight the importance of sustainably managing the water resources in South Africa with practical tips to respect and preserve this resource.

This year, National Water Week coincided with International Water Day on the 22nd of March and the 20th anniversary of water delivery for social and economic development in Southern Africa.

Management of Water Infrastructure in South Africa

Over the past several years, South Africa has found itself in a position where ageing pipelines and improper maintenance of pipelines and water supply systems have led to businesses and municipalities having to pay thousands to ensure a basic level of water supply to their communities.

In a recent article written by Rianté Naidoo for infrastructurene.ws, it is stated that over R42 million was recently attributed on upgrading infrastructure at 64 water treatment facilities across South Africa. Upgrading infrastructure and ensuring proper maintenance on pipelines and water supply systems will lead to the formulation of better strategies for water efficiency and the conservation and reduced consumption of water.

Water service authorities in South Africa are not currently efficiently budgeting for future infrastructure management and as a result.

Preserving Water and Creating Sustainable Drinking Water Sources

In order for us to safely and efficiently preserve water and create sustainable drinking water sources throughout the country, we need to invest in the following:

- Proper maintenance of pipelines and the replacement of ageing pipeline infrastructures
- Corroded steel and asbestos cement pipeline infrastructure that was installed over 50 years ago need to be replaced with HDPE and PVC pipelines that prevent corrosion and offer a more sustainable water supply system not susceptible to corrosion that causes harmful bacteria to enter the water supply to cause potential health risks to communities
- Harvesting rainwater to make use of for household purposes instead of utilising tap water in an effort to better preserve drinking water
- Using the correct joining method to ensure strong connections are made to avoid water leaks in pipelines.
    - **Butt-welding**
      Butt fusion welding is one of the more common methods of joining pipes. Butt fusion welding is a thermo fusion process which involves the simultaneous heating of the ends of two components which are to be joined until a melt state is attained on each contact surface, thereby producing a permanent, economical and flow-efficient connection.


    - **Electrofusion**
      The electrofusion welding system is the jointing process of pipes and/or fittings of the same connection diameter, and is carried out by fusion of the contact surface through an electrical resistance inserted in the electrofusion fitting. Today it is considered the most developed and safe method for realising polyolefin jointing's. Thanks to its versatility, electrofusion can weld together pipes and/or fittings with different thickness and made with different PO and PVDF materials.


- **Socket Fusion**
  Socket fusion welding is a widely used technique for assembling plastic piping systems using injection moulded fittings. The process of socket fusion operates on two simple processes that is a heating phase and a cooling/welding phase.

How can Astore Keymak Help?

Astore Keymak is the leading supplier of thermoplastic pipe fitting, valves and pipeline accessories in all recognised materials as well as plastics welding equipment. Quality products are supplied to most industries including mining, manufacturing, chemical, irrigation and all industries utilising pressured piping systems.