



**FLO-TEK<sup>®</sup>**

*Flow better with us*

**IRRIGATION** *Products*



## Company Profile

**Flo-Tek the leading manufacturer and supplier of plastic Pipes, Tanks, Fittings and Irrigation products, since 1998.**

Radical Investments (Pty) Ltd, trading as Flo-Tek Pipes & Irrigation was established in Botswana in 1998 manufacturing PVC pipes. In July 2003 and June 2004 Flo-Tek commenced manufacturing rotational moulded products and HDPE pipes, respectively.

The company was established in South Africa in 2005 and an HDPE pipe factory was started in Clayville in August 2007. Flo-Tek South Africa has since opened subsidiary companies in Dundee, Port Elizabeth, Nelspruit and Klerksdorp. Flo-Tek also has an established operations in Angola and Namibia.

Within our South African and Botswana operations, we have trained staff who bring a wealth of knowledge and experience.

Flo-Tek ensures the best quality of products and the highest delivery standards.

[www.flotekafrika.com](http://www.flotekafrika.com)

Flo-Tek's core business is the manufacturing and distribution of PVC-U and PVC-M Pressure Pipes & Fittings, HDPE Pipes & Fittings, Sewer Pipes & Fittings, Irrigation and Rotomoulded products. We also produce Borehole Casings, Screens and PVC Cable Ducts.

Our ISO 9001 certified factories in Botswana and South Africa enable us to manufacture our pipes and tanks as well as to distribute across the SADC region. Our factories have fully equipped laboratories which ensure Flo-Tek manufactures to SANS, BOBS ISO and SAPPMA specifications.

### Broad-Based Black Economic Empowerment (BBBEE)

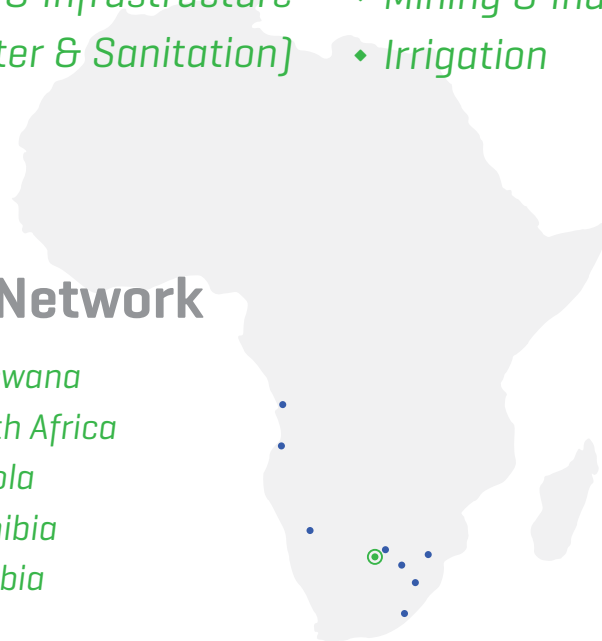
Flo-Tek South Africa is a BEE compliant company. The principles of broad-based BEE, through stakeholder empowerment, have also been integrated into how we do business, and how we can assist and support our clients in how they do their business. The empowerment of women and the development of skills at lower levels of the organization to facilitate career and personal growth opportunities are the particular areas that will continue to receive attention and focus within our business.

### Sectors Served

- ♦ *Civil & Infrastructure [Water & Sanitation]*
- ♦ *Mining & Industrial*
- ♦ *Irrigation*

### Our Network

- *Botswana*
- *South Africa*
- *Angola*
- *Namibia*
- *Zambia*



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# OVERVIEW

Since inception in 1998, Flo-Tek has evolved to become one of the leading and respected brands in the manufacturing of PVC & HDPE Pipes and Fittings, Rotomoulded Products and Irrigation Products in Southern Africa.

Flo-Tek has been ardently innovating, diversifying and strengthening the Irrigation department over a number of years and is now the leading one stop solution provider of irrigation services and products in the country.

Flo-Tek offers an extensive range of Centre Pivots, Drip irrigation Lines, Sprinklers, Pumps & other necessary equipment & materials to equip any farm of small or large scale with Irrigation Products. By joining hands with Netafim and Inyoni who are our Product & Technical Partners, we have intensified our Irrigation operations in Botswana.

Apart from offering our extensive product line in the field of Irrigation, we also provide Surveying and in-house Design Facilities.

*With the help of our trained Irrigation experts, we offer professional advice to individuals seeking assistance in setting up farms.*

With a constant growing potential in Africa for Agriculture, Flo-Tek has equipped itself to provide its customers an entire range of its services and products.





# PIPES & FITTINGS

Flo-Tek manufactures a wide range of PVC & HDPE pipes and fittings that are used in various irrigation applications.

Pipe and fittings are necessary in water connections for different irrigation equipment. We manufacture and supply quality pipes in a range of sizes [diameters] suited to connect both low and high-pressure applications, underground and above-ground. Our array of fittings also make it easy to take water from the very source to the various areas where it is needed in the farm.



## PVC Pressure Pipes & Fittings

We have a range of PVC Pipes and Fittings.

### SANS 966 Part 1 UPVC

Below-ground pressure applications for the conveyance of potable water in reticulation systems and for other applications in which continuous temperatures in excess of 25 °C are not encountered.

### SANS 966 Part 2 (MPVC)

Below-ground pressure applications for the conveyance of potable water in reticulation systems and for other applications in which continuous temperatures in excess of 25 °C are not encountered.

### SANS 1283 High Impact

Suitable for the conveyance of non-potable water at temperatures between 5 °C and 50 °C for underground use in mines.

### SANS 1452-2

For water supply and for buried and above ground drainage and sewerage under pressure.



Flo-Tek supplies a range of Cast Iron Valves which have corrosion protective coatings.

We also supply fabricated fittings suitable for irrigation. These fittings are fabricated from SABS approved 966-1 UPVC and 996-2 MPVC pipes.



## PVC Sewer & SWV Pipes & Fittings

### SANS 791

Underground non-pressure applications in the construction of sewers and drains where temperatures continuously in excess of 60 °C are not encountered.

### SANS 967

Above-ground non-pressure applications for the conveyance of soil and waste water where continuous temperatures in excess of 60 °C are not encountered.

### SANS 1601

Buried gravity drainage and sewerage pipe systems for the transportation of soil and waste discharge of domestic and industrial origin.



## HDPE Pipes & Fittings

Flo-Tek manufactures a range of HDPE products for various applications. Our products range from 20mm Diameter to 1000mm Diameter with a pressure class of 04 to 34 [Varies for different sizes].

### SANS 4427-1

We manufacture PE100 HDPE piping as per SANS 4427. We currently manufacture from 20mm-1000mm diameter pipes. We are also a proud member of SAPPMA.

### Fittings

We stock a wide range butt-weld, compression, electro-fusion and socket-weld fittings.



# CENTRE PIVOTS

Center-pivot irrigation or sometimes addressed to as Pivot Irrigation, also called water-wheel and circle irrigation, is a method of crop irrigation in which equipment rotates around a pivot and crops are watered with sprinklers.

A circular area centered on the pivot is irrigated, often creating a circular pattern in crops when viewed from above [sometimes referred to as crop circles]. Most center pivots were initially water-powered, and today they are mostly propelled by electric motors.



## Advantages

As a system of irrigation, only drip irrigation surpasses the centre pivot in minimising water loss. Furrow irrigation is the most wasteful in this regard. Compared with other sprinkler systems, centre pivot beats both the hand moved and big gun systems. The latter two suffer greater evaporation losses as the spray is usually directed in the air and is subject to more wind drift. Drop nozzles in the centre pivot system can be set close to ground level and below canopy level as the crop grows.

Water is applied so gently with the centre pivot that there is not the usual puddling or surface run-off associated with the hand moved or big gun systems.

Water coverage under the centre pivot is very uniform, much more so than with furrow irrigation or other sprinkler systems. Nozzles are so designed that they rarely get clogged although the system does not require the sophisticated filters demanded by drip irrigation.

The expected life of the centre pivot, 20 years, is however much greater than that of drip irrigation.

Centre pivot offers the possibility of “chemigation” - application of chemicals such as fertilizers and ripeners to the crop.

While several of the above features show an advantage towards drip irrigation, in the critical area of capital cost, centre pivot, despite its seeming complexity, is often appreciably cheaper.

## Applications

- Outdoor Fields
- Horticultural Irrigation

## Partners







# DRIP IRRIGATION

Drip irrigation is a method of controlled irrigation in which water is slowly delivered to the root system of multiple plants.

In this method water is either dripped onto the soil surface above the roots, or directly to the root zone. It is often a method chosen over surface irrigation because it helps to reduce water evaporation. Drip irrigation is delivered to plant roots through a series of pipes, tubes, and valves. These parts, controlled by emitters and pumps, allow water to be focused in a particular area.



## Advantages

- Fertilizer and nutrient loss is minimized due to localized application and reduced leaching.
- Water application efficiency is high if managed correctly.
- Field levelling is not necessary.
- Fields with irregular shapes are easily accommodated.
- Recycled non-potable water can be safely used.
- Moisture within the root zone can be maintained at field capacity.
- Soil type plays less important role in frequency of irrigation.
- Soil erosion is lessened.
- Weed growth is lessened.



16mm Dripline [Aries] 500m & Accessories  
16mm & 20mm Black Lines 100m



Disposable 16mm Streamline &  
16mm Supertyphon

**Dripper Spacing** — 0.2m / 0.3m / 0.4m / 0.5m / 0.6m / 0.75m / 1m



**Connectors and Accessories**



**Water Filter**  
20mm - 80mm



**Fertilizer tank**  
145L



**Rain Bird Controllers**  
Available in 4STN, 6STN, 8STN



**Air Valves**  
25mm & 50mm



**Valve Boxes**  
6" / 10" / 20"



**Solenoid Valves**  
25mm / 40mm / 50mm



**Panel Wire**  
0.5 & 1.5

**Partners**



**HDPE & LDPE Pipes**



**HDPE, Nylon and Full-Flow Fittings**

# SPRINKLERS

Based on the application, Flo-Tek offers an extensive range of sprinklers, micro-sprinklers and emitters for all crop types & for various applications. We procure our sprinklers from Netafim, a leading manufacturer and supplier of the best available Agricultural Products in Southern Africa.

Sprinkler irrigation is a method of providing rain-like irrigation to the crops. Water is distributed through a system of pipes usually by pumping. Spray heads at the outlets distribute the water over the entire soil surface & provide efficient coverage for small to large areas and are suitable for all types of crops. They can be adapted to nearly all irrigable soils since sprinklers are available with a variety of discharge capacities. However, sprinkler systems can easily clog with the presence of sediment or debris as a result of which, as a result of which regular monitoring & cleaning is required for efficient functioning and desired results.

One of the main advantages of the sprinkler irrigation technology is more efficient use of water for irrigation in agriculture. Sprinkler systems eliminate water conveyance channels, thereby reducing water loss.

*Water is also distributed more evenly across crops which aids in avoiding wastage.*



## Applications

- Drip Irrigation
- Orchard
- Green House Irrigation
- Centre Pivot Irrigation

## Partners



Inyoni Africa



# RAIN BIRD



**Sprinklers** — Radius 0.9 m - 18 m | Flow Rate 0.35 - 4.9 M<sup>3</sup>/Hr | Pressure 1.7 - 4.1 Bar



**Turf Value & Turf Key**  
20mm & 25mm



**Impact Sprinklers** — Available in Brass & Nylon | Sizes 15, 20 & 50mm  
Operating Pressure 1.7 - 4.1 Bar | Radius 8m - 30m  
Flow Rate 0.6 - 24 m<sup>3</sup>/Hr



**Coolnet & Spinnet [For Seedlings]**  
Single & 4 Nozzles



**Sprinkler Nozzles**  
4 Van - 18 Van



**Sprinkler Stand**  
20mm & 50mm



**Microjet Sprinklers**  
90D, 180D & 360D

# PUMPS

Flo-Tek offers a wide variety and range of automated pumps for a number of applications such as Domestic & Household Pumps for backup water systems, Irrigation & Solar Pumps for small to medium & large scale farming, Submersible Pumps for Boreholes & Wells. In addition to this, we also stock Heavy Duty Pumps for Mining Applications.

## Applications

- Domestic & Household
- Small & Large Scale Farming
- Borehole [Submersible]



## Solar Pumps

Flo-Tek has been efficiently progressing in introducing Innovative Technology one of which is Solar Irrigation. Flo-Tek is capable of supplying a full range of Solar Panels, Solar Pumps etc to equip any farm or Agricultural land with Solar Equipment.



# OTHER PRODUCTS

Flo-Tek offers a wide variety of other agricultural products.



Panel Reservoir



Reservoir Stand



Borehole Rope



Pump Cage



Gumpoles





Shade Net



Vegetable Crate



Booster Pumps



Water Pumps

# TANKS

Flo-Tek manufactures a wide range of rotomoulded products that very useful in farming. Our iconic tanks have been used across Southern Africa in various applications, especially in Irrigation for water harvesting and storage.

Water is a vital part of crop production, and often the water point is distance from where the irrigation is made. Unpredictable climatic conditions also make it vital to have a secondary source of water in modern crop production and horticulture and gardening.

## Types of Tanks

**Vertical Tanks**

**Horizontal Tanks**

**Multi-Utility Slim Tanks**

**Grey Water Systems**



## Vertical Tanks

Flo-Tek vertical storage tanks are used to storing water, fertilizers and chemicals (please ask for safety data sheet before storing any chemical). Flo-Tek tanks are ideal for most liquids and rainwater harvesting as well.





## Horizontal Tanks

Flo-Tek horizontal storage tanks are used to storing water, fertilizers and chemicals [please ask for safety data sheet before storing any chemical]. Flo-Tek tanks are ideal for most liquids. Flo-Tek horizontal tanks can be used to transport water [Medium & Heavy Duty Only].

## Multi-Utility Slim Tanks

Our Multi-Utility Tanks provide a great solution for space sensitive operations, especially in rainwater harvesting. They may also be connected in series at the same time which effectively increases the volume of water regardless of the application.



## Drums

We also have drums that may be used in smaller irrigation applications or household activities.



## Grey Water Systems

Our Grey Water system collects wastewater from household bathtubs, washing machines and showers, which may be used to irrigate gardens.





**OUR NETWORK**

**Botswana | South Africa | Angola | Namibia | Zambia**

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