## ENVIRONMENTAL RESPONSIBILITY

Recognizing our customers' needs and using the most advanced technologies to fully accommodate them is our highest priority. We pride ourselves in using products and systems that are not only reliable and effective, but also environmentally friendly - designed to utilize minimum space and consume minimal amount of energy.

Our water filtration is done solely by screen, media or Hydrocyclone. These methods protect the environment, since no chemicals are added to the water and their energy consumption is very low. In addition, efficient water filtering allows using non-potable water for agricultural needs, while keeping the water at high quality. Our water filtration technologies have a long lifetime, require minimal maintenance and consume low energy with zero pollution.

## CUSTOMERS

- **Drip irrigation** Required filtration degree of 130-80 microns

- **Micro-sprinklers** Required filtration degree of 300-130 microns

- **Sprinklers** Required filtration degree of 3500-200 microns

- **Center pivots** Required filtration degree of 3500-500 microns

## YAMIT – A GLOBAL WATER LEADER

**CREATIVE & INNOVATIVE PRODUCTS**
Although our products have proven performance and results, we at YAMIT never stop striving, for the past 29 years, to overflow with creative and innovative ideas and technologies that would provide the most cost effective and environmentally friendly solutions to our customers around the world, to the very last drop.

**CLEAN WATER AROUND THE WORLD**
In order to meet our costumers' needs wherever they are, YAMIT has multiple subsidiaries and representatives in more than 60 countries around the world, including the Netherlands, China, the Philippines, South Africa and Colombia, enabling us to give our customers the best service, quickly and efficiently.

**WATER SOLUTIONS, FROM A TO Z**
We believe high quality water can reach anywhere.
From providing pure, clean water to local communities and large cities to constructing and running complete purification plants for industries, the YAMIT Group of Companies is a recognized global leader in providing comprehensive filtration and water treatment solutions.

Our expertise goes beyond finding the ideal fit - Our vast knowledge, resources and capabilities enable us to create and implement entire water facilities of any scale, from A to Z. This includes research and development, design, manufacturing and customer support as well as project management, training and knowledge transfer.

# Agriculture & Landscape Brochure

# YAMIT
## FILTRATION

## CLEAN WATER – THE STARTING POINT OF HIGH QUALITY IRRIGATION

The most important pre-requisite for any irrigation system is clean water, ensuring clog-free pipelines and nozzles. Proper water filtration prevents dirt, debris, and sand from being sucked into the pumps (causing clogs and damage), thus allowing continuous irrigation and fertilization (fertigation).

Another known problem in irrigation systems is the clogging of low pressure diffusers (like emitters) - this might cause energy waste (due to increased demand for higher flow rate to offset the lost capacity), impede operations, and even impair product quality. Efficient filtration can prevent this problem completely.

## WHAT IS FILTRATION?

Filtration is a mechanical or physical process that separates solid particles from fluids. In water filtration particles suspended in the water are removed by some form of physical barrier, based purely on particle size - The porous material used for filtration has pores smaller than the particles. In agriculture and industry the particles that remain in the water are significantly smaller than the final diffuser.
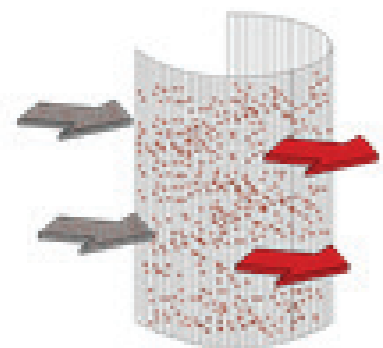
## OUR PRODUCTS

**Media Filters** - In these filters, water enters the filter via the inlet and spreads evenly on the media.
Solids and organic materials are trapped on the media surface. The clean water passes through the media and flows out via the nozzles.
The back flushing process is done by shutting the inlet of the filter and allowing the water to enter from the bottom, lifting the media and releasing the solids that exit the filter through the backflush manifold.
This process can be controlled automatically.
We offer filters from 16" to 60" as a single unit or as a full filtration system.
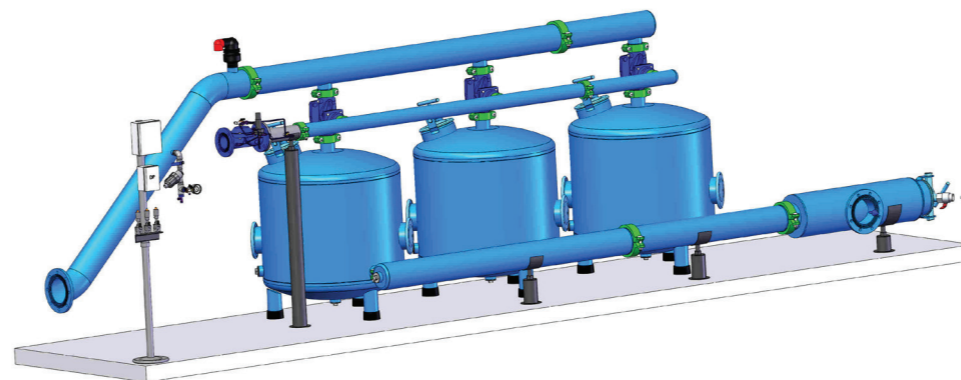
**Screen Filters** - In these filters water flow through the cylinder screen while solid particles are trapped by the screen. The filter is equipped with a coarse screen that protects the finer screen from stones and larger particles, which can be periodically cleaned manually. The flushing is done once the pressure differential (ΔP) in the filter reaches pre-determined value (up to 0.5 bar). During the flushing cycle, the flushing valve opens and the pressure from the hydraulic piston is released, causing water to flow outside through the flushing valve. Pressure in the flushing chamber and in the dirt collector is significantly lowered simultaneously, the dirt collector nozzles movement and rotation cleans the screen's entire internal surface. The flushing cycle takes 10 seconds. The flushing valve closes at the end of the cycle and the filter is clean.
During the whole process water supply is uninterrupted.
We offer Manual,
Semi-Automatic
or Fully Automatic
configurations
from 1.5" to 16"
(higher diameters on
request).
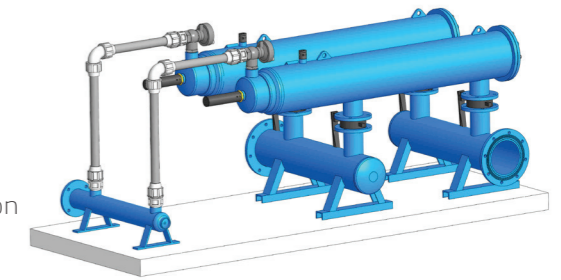
**Hydrocyclone** - Water enters the hydrocyclone via the tangential inlet which creates a spiral flow along the walls of the filter. The centrifugal force separates the waste and sand particles and pushes them towards the walls of the sand separator. Those particles gravitate downwards and into the sedimentation tank, while clean water moves upwards and exits through the top outlet.
In order for the sand separator to operate correctly, the lead loss must remain between 2-5m. The separation efficiency is not affected by the accumulation of dirt in the sedimentation tank,
which can be drained by
opening a flush valve for
a few seconds manually
or automatically by
timer.
We offer 3/4" to 8" as
single units or as full
systems.