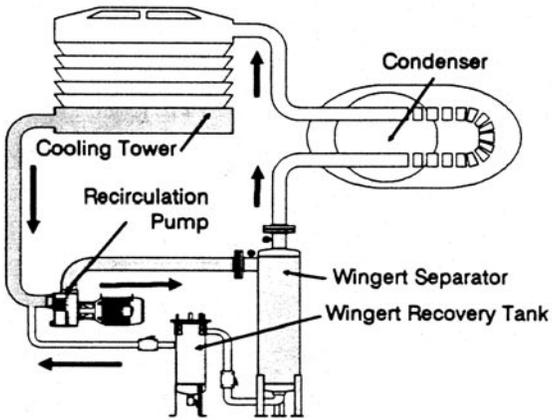


EFFECTIVE APPLICATIONS FOR WINGERT SEPARATORS

A Wingert Separator can improve and extend the life of any system by removing loose scale, saving water treatment chemicals and enhancing the overall efficiency of a cooling loop or heating loop system. Here are a few applications where our separators can be used effectively-

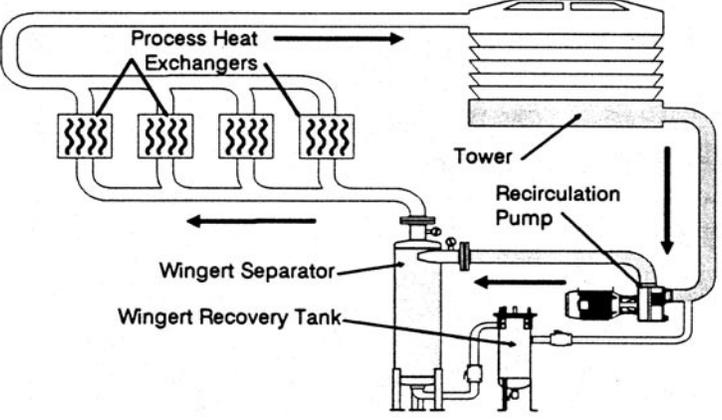
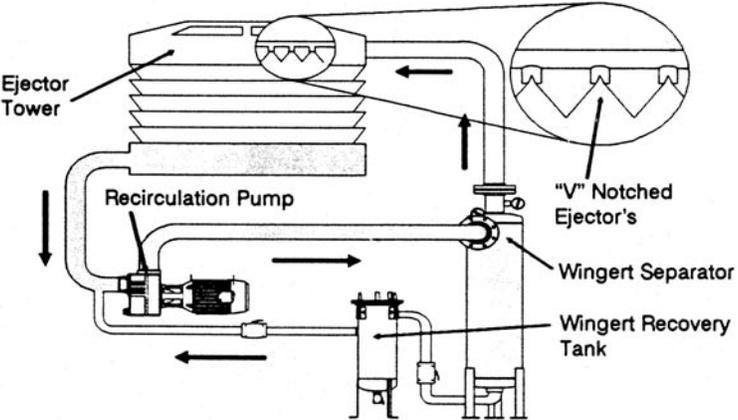


Condenser Circulation Systems

The full-stream installation of a Wingert Separator, in the recirculating line from the cooling tower to the condenser, will provide excellent removal of solids that might otherwise foul the condenser heat exchanger surfaces. Maintaining a clean condenser is the primary function of a separator installed in this location. A secondary benefit from the removal of solids in the condenser recirculation system, is the increased efficiency of the chemical water treatment, and the less frequent need to clean the cooling tower. This is one of the most common applications for a Wingert Separator and/or Separator System.

Direct Cooling System

In addition to condenser recirculation systems, cooling tower water is used for direct cooling in a variety of process and comfort cooling systems. These systems include compressor cooling, injection molding machines, air handling units, chiller coolant, heat exchangers, engine jackets and many others. Dirt and solids introduced through the cooling tower can cause major fouling problems in these units. A direct full-stream installation of a Wingert Separator can efficiently and economically remove these troublesome solids.

Evaporative Condensers & Ejector Towers

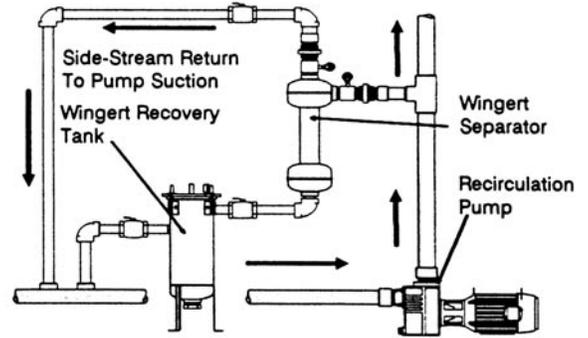
Evaporative condensers and ejector towers usually include either a spray nozzle or "V" notched weir method for evenly distributing cooling water. Plugging of these nozzles or weirs is a common occurrence, with a resulting drop in efficiency and an increase in cleaning labor.

The addition of a Wingert Separator prevents plugging of the nozzles and "V" notched weirs, and increases the efficiency of the entire system.

Side Stream

Perhaps the least expensive dirt removal is simply to install a Wingert Separator side-stream. This method involves diverting a portion of the system flow (minimum 10%) through the separator and, over time, is effective in cleaning the cooling loop. Keep in mind, however, that this will reduce system flow accordingly.

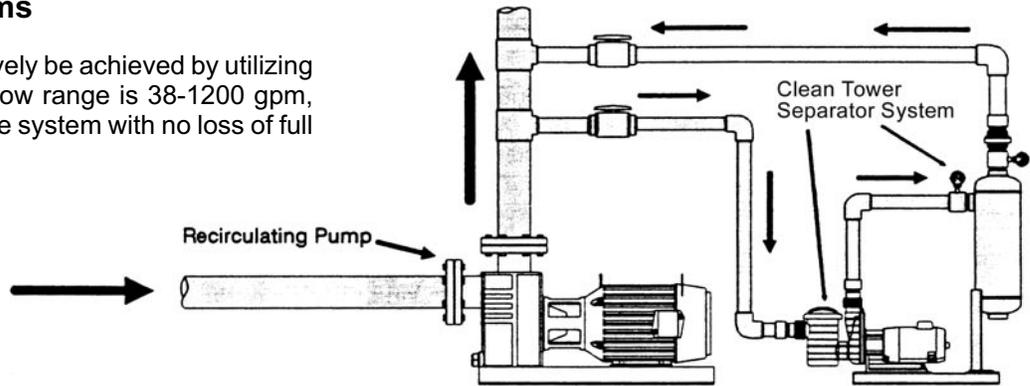
This economical, solids removal system provides surprising results when compared with its low cost and simplicity of installation. Any system should have at least this much protection.



Skid Mounted Systems

Side streaming can effectively be achieved by utilizing a Wingert CT System. Flow range is 38-1200 gpm, and is easily returned to the system with no loss of full stream flow.

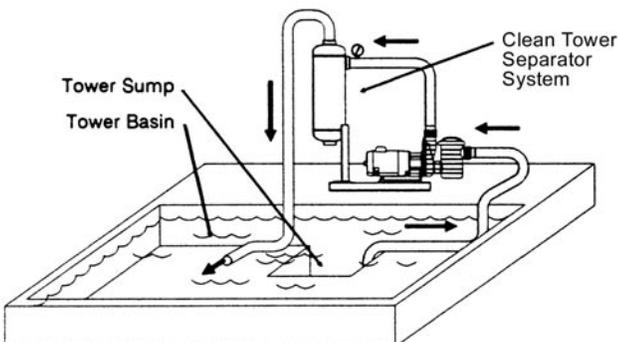
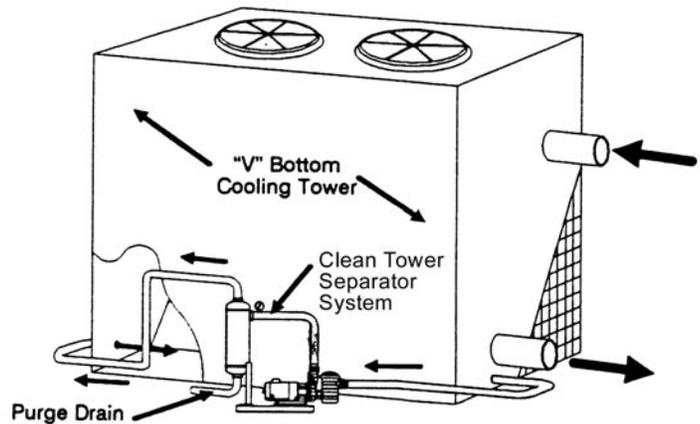
This is an easy and economical style of installation, because it is a self-contained system where no additional equipment is required.



"V" Bottom Cooling Towers

The "V" bottom tower is particularly well suited for a Wingert CT System. Complete with its own control panel, pre-strainer, pump, separator and solids recovery vessel, the Wingert CT System continuously circulates tower water through the separator. After removing the solids, cleansed water is returned to the system to flush more solids from the "V" bottom tower. This system is easy to install and simple to work with.

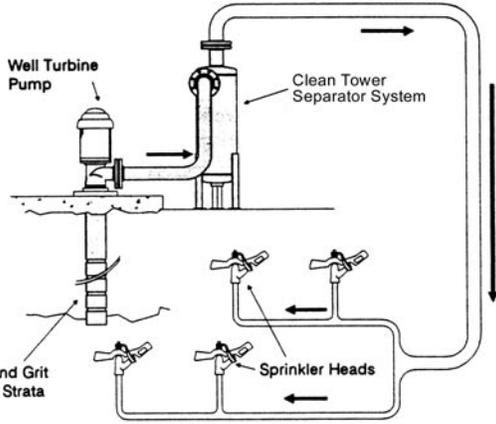
A Wingert CT System is a very good answer for this "V" bottom tower application.



Flat Bottom Towers

Flat bottom towers can also be kept clean with a Wingert CT System. Simply plumb the Wingert CT System suction to pull from the tower basin sump. Dirt, scale and other particulate are picked up and separated out as the cleansed water is returned to the tower basin.

This is also an excellent application for basin eductors. These eductors help to keep solids suspended and away from the building suction system, thus preventing them from entering the building system.



Irrigation

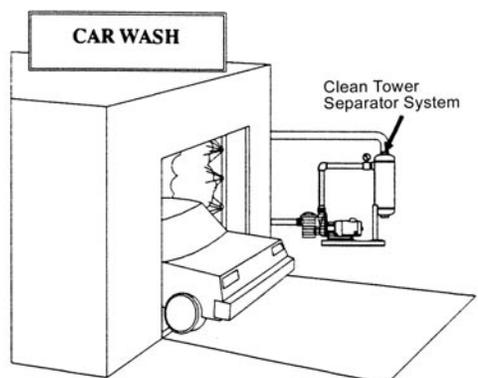
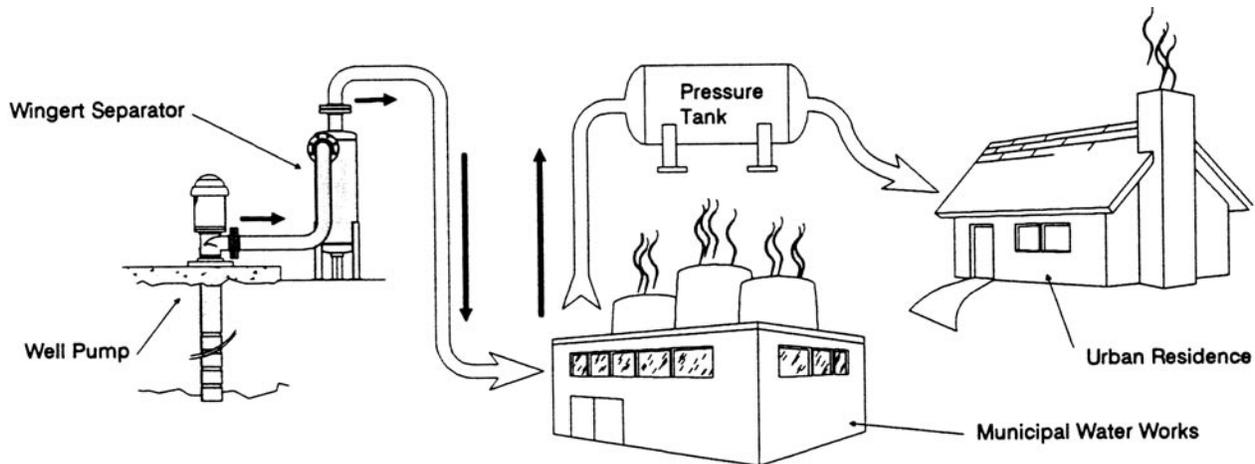
Particulate matter in irrigation waters frequently cause serious abrasion of nozzles and plugging of orifice drip system emitters, misters, tape systems, etc. Wingert Separators provide a simple solution to the removal of these solids, particularly where sand, grit or pipe scale must be removed.

Where the application also requires the removal of very light floating particulate matter the Wingert Separator serves well as a pre-treatment for fine filters. This will significantly reduce the load and the cost associated with the backwash cycle.

Water Utilities

Many water wells produce clear and particle-free water. However, as the demand for water increases, water tables are dropping and the new wells are being drilled in lower quality strata. Sand and other particulate are appearing in the well water with increasing persistence. These solids are almost always heavier than water in nature, and provide an outstanding application for removal by a separator.

Wingert Separators have sterling references in the field, and their simplicity of design and lack of required maintenance is greatly appreciated. They protect flow-metering instrumentation from excessive wear, keep damaging solids from clogging household appliances, and prevent sediment build-up in hot water heaters and pressure tanks.



Industrial

Industrial and municipal uses for separators cover a wide range of applications. Due to the sharp increase in water costs and the related sewage charges, the reclamation and re-use of wastewater has become extremely important. Car wash systems, citrus drench systems, waste and sewage water reclamation and plant process water recovery are just a few of these applications for separators.

In addition, the time-proven application of systems for coolant oil chip removal, as well as the need to remove solids from plastic injection machine cooling systems, provide two more examples of industrial applications for Wingert Separators.