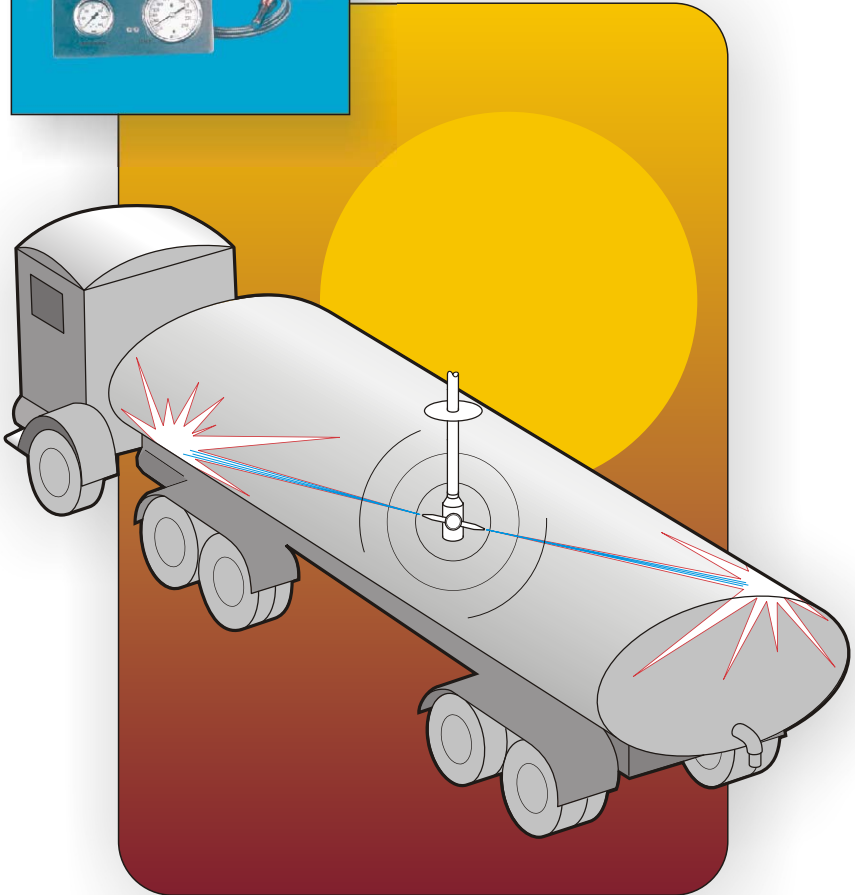
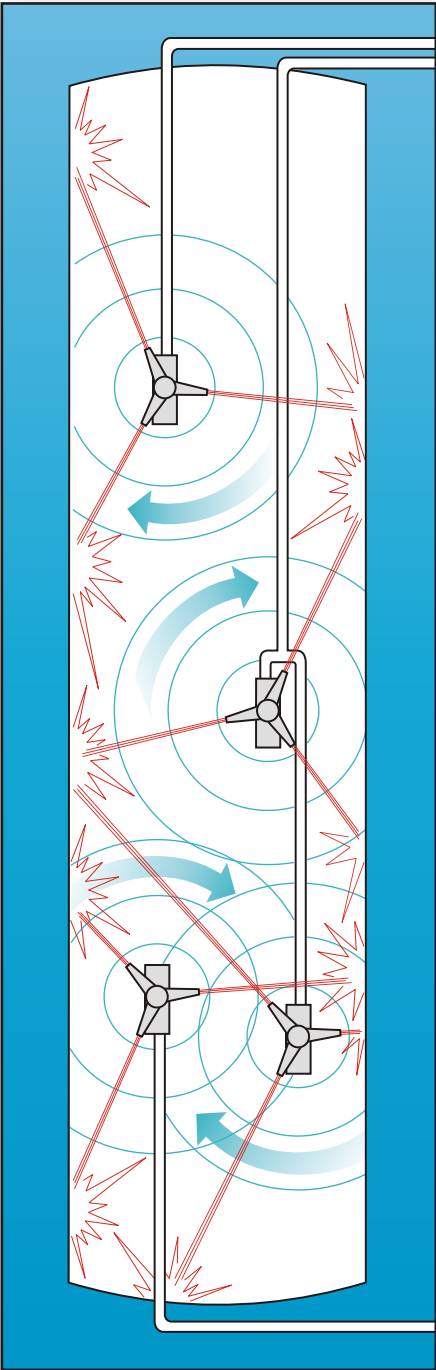


# Tank Washing

S Y S T E M S

*by HelioJET*



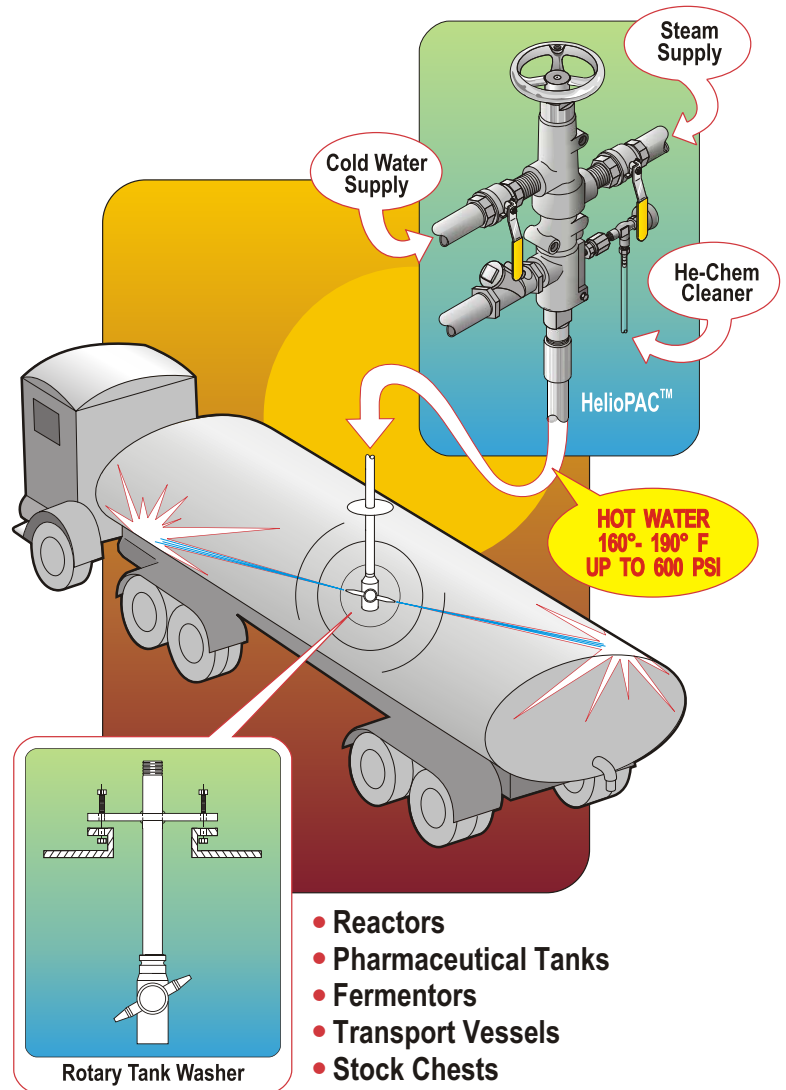
# HelioJET Interior Tank Washing Systems

## System Performance

High Pressure/Hot Water is created within the HelioPAC™ (pressure-amplifier-condenser), and is then piped directly to the Rotary Tank Washer. The spray that discharges from the Tank Washer impacts the inner walls of the tank. This creates a powerful scouring action that can remove tough deposits quickly.

Example: Supply the HelioPAC with 125 psi steam pressure and 60 psi cold water. Amazingly the HelioPAC will generate 300 psi @ 185°F, and do it with no moving parts. One small, compact unit that generates high pressure/hot water instantaneously. The HelioPAC eliminates mechanical pumps and conventional heat exchangers, and is available in capacities as high as 120 GPM.

The HelioPAC is a manually operated unit, but can also be automated for push button or remote operation. An automated HelioPAC is referred to as a "Fixed Flow System™" (see back of brochure).



## Trial System

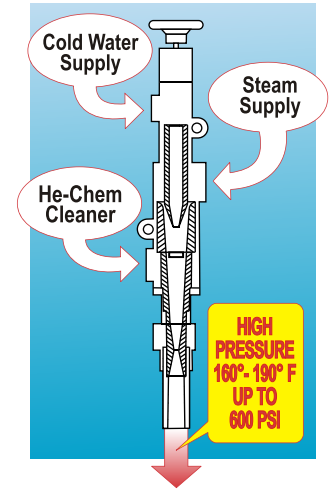
You can experience the benefits of a HelioJET "Tank Wash Starter Kit" for 30 days, risk free. Let us prove what this amazing system can do for you.

The "Tank Wash Starter Kit" is composed of the: HelioPAC™ (pressure-amplifier-condenser), Rotary Tank Washer, and Remote Gauge Panel. The gauge panel measures supply steam and water pressure as well as discharge temperature and pressure. He-Chem™ Chemical Cleaners are recommended as required.

Each Starter Kit is custom tailored to match your specific tank washing application. Whether you produce food products, chemicals, pharmaceuticals or paper, the HelioJET technical staff can recommend a starter kit for you.

## HelioPAC™ Technology

The HelioPAC utilizes existing steam and cold water supplies. As steam enters the HelioPAC, it is expanded to supersonic velocity and immediately condenses into a cold water stream. The steam's heat and momentum are then transferred to the water. The result is instantaneous pressurized hot water at more than 99% efficiency. For example: When using 125 psi steam pressure, and a cold water supply of 60 psi, the HelioPAC can deliver hot water at over 300 psi and 185°F. The HelioPAC does all this with no moving parts, making it the most efficient, low maintenance cleaning system of its kind. Another unique advantage of the HelioPAC is that during operation, it creates its own internal vacuum. This allows He-Chem™ specially formulated chemical cleaners to be metered in automatically. As the He-Chem™ Cleaner enters the HelioPAC, it encounters extreme heat and turbulence which thoroughly mixes and disperses it into the pressurized hot water. This action creates a super effective cleaning solution.



## Rotary Tank Washer

The Rotary Tank Washer travels on two axis at the same time while discharging powerful jet streams of high pressure hot water. After each rotation, the center line of impact moves slightly forward. As a result, the interior tank wall is thoroughly cleaned. A complete cleaning cycle typically lasts about 15 minutes. In some cases more than one cycle may be required to do the job.

## Four Gauge Panel Kit

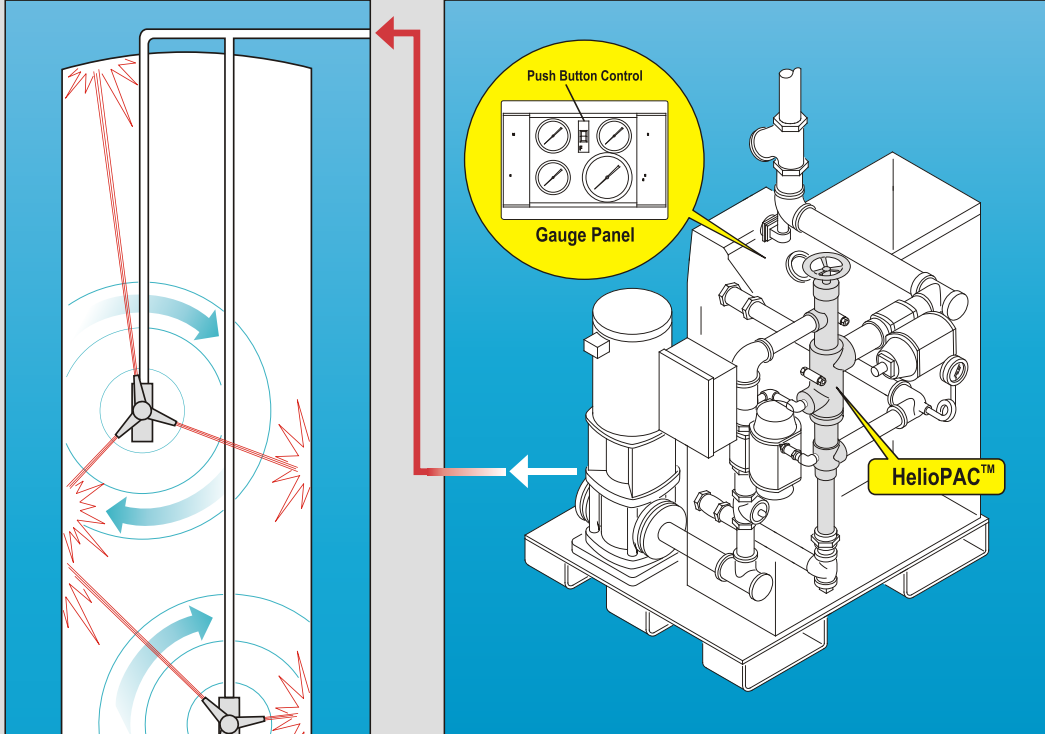
The HelioJET™ 4-Gauge Panel Kit is ideal for use with any HelioPAC™ (Pressure-Amplifier-Condenser). It measures Steam Supply Pressure, Water Supply Pressure, Discharge Pressure, and Temperature.



## He-Chem™ Proprietary Formulations

He-Chem Chemical Cleaners are specially formulated for use with the HelioJET Cleaning Program. All He-Chem products are biodegradable. Our staff will recommend a He-Chem product that is best suited for your application.

## The Fixed Flow System™



The diagram illustrates the Fixed Flow System. On the left, a vertical rotary tank washer is shown with two spray nozzles at different heights. Red lines represent the spray pattern, and blue arrows indicate the rotation of the tank. On the right, the HelioPAC™ control unit is shown, which includes a pump, a pressure amplifier, and a condenser. A yellow callout box highlights the 'Push Button Control' and 'Gauge Panel' on the unit. A red arrow points from the HelioPAC unit to the spray nozzles, indicating the flow of pressurized hot water.

The **Fixed Flow System** is an automated version of the HelioPAC™ (Pressure-Amplifier-Condenser). At the push of a button, the Fixed Flow System delivers pressurized hot water instantaneously. It is ideal for supplying rotary tank washers. Like any HelioPAC / HelioJET System it can also be used to supply other types of spray equipment such as shower headers for cleaning paper machine fabrics, steel strips, conveyor belts, etc. For details on this, and other products, please contact our technical sales department at 1-800-444-3546. We are always happy to assist you.

**HelioJET**  
CLEANING TECHNOLOGIES

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