

# maratek

## solvent saver

Allen Bradley PLC  
Fractionation Tower  
Water/Solvent Separator  
Oil Cooling  
Explosion Proof

# SSC

### Solvent Saver - Continuous

5, 10, 15, 30, 50, and 100+ Gallons Per Hour

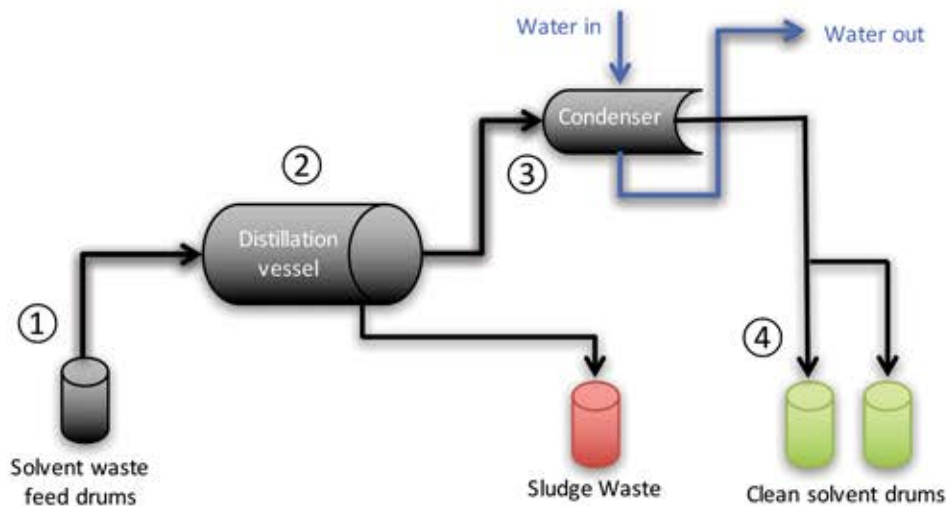


## Solvent Saver - Continuous

### Operating Principle

Maratek's Solvent Saver Continuous models separate solvents using the proven process of distillation, as shown through the numbered illustration below.

- 1 - The waste solvent is fed into the distillation vessel.
- 2 - The distillation vessel is fitted with a jacket of thermal oil that is heated by one or more electric heaters which brings the waste solvent to its boiling point.
- 3 - Pure solvent vapors are then channeled to an air cooled condenser, where it cools into its liquid form.
- 4 - The liquid is then directed to the clean solvent collection drums, where it can be re-used.



### Why use Maratek's Solvent Saver Systems?

- It is the **Safest** – Class I Div I Group D Explosion Proof
- It is the **Strongest** – Easy to Maintain High Quality 304 Stainless Steel Construction
- It is the **Smartest** – Highly Automated with TouchScreen PLC and Remote Access
- It is **Simple** to Operate Requiring Very Little Intervention
- Includes **Lifetime** free remote Service and Support



## Solver Saver - Continuous

The Solvent Saver Continuous model comes in six main sizes (SSC 5, 10, 15, 30, 50, 100+), which vary based on the anticipated solvent production rate in gallons per hour. For example, the SSC 30 processes up to 30 gallons of waste solvent over a time period of one hour. These rates are assigned according to the reference chemical, acetone, without any contaminants. SSC models do not use bags but include more automations than premium batch style units. Standard features are detailed below.

All units include a stainless steel condenser to return the solvent vapor to liquid form. The SSC-30 and larger sizes must be water cooled. Air cooling is standard for smaller sizes but can be changed to water without additional cost. Water cooled systems require a source of chilling water and water chillers can be provided by Maratek.

### The standard SSC models include:

Feature	Description
Touchpad PLC	The PLC is a remote box and controls all system safety features, settings and automations.
Safety Features and Temperature Controls	Using a variety of sensors and automations, all of our SSC units are able to run safely with minimal operator intervention.
Class I Div I Group D Explosion Proof	All systems are certified Class I Div I Group D explosion proof by MetLab.
304 Stainless Steel Construction	All system parts are made of 304 wetted stainless steel for long life, including the condenser.
Dual Automatic Filling	All SSC units include automatic filling from two containers. The PLC will automatically switch between the containers as they are pumped into the unit.
Dual Container Collection	Allows for the distillate to be collected by two containers to minimize operator intervention. As with dual container filling the systems will automatically switch between containers. Anti-spill sensors are included.
Sludge Discharge	All SSC units include automatic gravity sludge discharge.
Anti Spill Sensors	Sensors are placed into collection containers to prevent overflow.
Sight Glasses	All systems include two sight glasses into the boiling vessel.
220V or 440V	Systems can be built to use either 220V or 440V power. Other voltages may be possible.
Electric Heating with Thermal Oil	Using a thermal oil jacket, electric heaters quickly and evenly heat the boiling vessel. A steam jacket is available for some applications.

Please speak with us about which options are best suited for your application.

Option	Description
Oil Cooling	After processing the waste, the thermal oil is rapidly cooled to reduce the time required to cool the sludge.
Allen Bradley PLC	This option replaces the standard PLC with an Allen Bradley system. Suggested for customers who are looking to integrate the unit into their existing Allen Bradley network. A six inch screen is standard, other sizes available.
Purge Box	This option allows the PLC to be mounted to the system inside the explosion proof area instead of in a remote box.
Ethernet or Cellular Access PLC	The system PLC is accessible remotely through an ethernet or cellular data connection. Settings can be viewed and changed as if the touch screen was being used. With your permission Maratek can also access the unit for troubleshooting. Lifetime free remote support from Maratek is included with purchase.
Vacuum Assistance	Creates a vacuum in the boiling chamber to lower the temperature needed to boil high boiling point solvents.
Nitrocellulose Safety Features	Includes additional temperature sensors and a water quenching system for managing nitrocellulose wastes. *Requires Vacuum Assistance.
Internal Scraper	Rotating blades keep the edges and bottom of the boiling vessel free of build up to maximize heat transfer from the oil. The blades are designed to be easy to access, replace and maintain when needed.
Water/Solvent Separator	If the waste also contains water, this option will automatically separate the water from solvent after distillation.
Maintenance Platform	A platform to access the boiling vessel through access ports.
Automatic Sludge Pump Out	If gravity discharge is not sufficient or desired, an automatic sludge pump can be used.
Fractionation Tower	If the waste contains multiple solvents dissolved into each other, a fractionation tower will separate them at high purity.
25%+ Energy Savings Package	Significantly reduces energy used for heating and cooling the solvent.