

SAMSCO RUNDRY EVAPORATOR

(A "ZLD" SYSTEM)

Reduce wastewater to dry powder (or oily sludge).

Environmental experts agree... evaporation offers industry the simplest and most effective long-term approach to wastewater disposal cost reduction. Since the late 1980's, SAMSCO EVAPORATORS have been a proven solution to most wastewater disposal problems. Their design provides consistent operation, minimal clean-out, high efficiency, and low maintenance.

The RUNDRY...

- Disposes of water as it concentrates residual chemistry—in a single step
- Allows "boil-to-dry" operation
- Eliminates wastewater hauling—and accountability—forever
- Forms last stage in low-cost evaporation process system
- Concentrates 1st stage evaporator residue to powder/sludge for process cost of \$0.05–0.15/gal
- Handles multiple wastes (and varying chemistries) simultaneously
- Has large lids for easy interior access
Lift-out sludge trays available

The RUNDRY ZLD SYSTEM safely processes industry's wastewater to landfill sludge ...

A Double Boiler System: A pair of tanks boil the wastewater double-boiler style, i.e., the boiling wastewater sits in a tank immersed in a larger tank filled with heat transfer oil. Process chemistry variables encountered as waste concentrates result in a residue of powder or sludge; thus minimizing residue requiring disposal and achieving Zero Liquid (Water) Discharge (ZLD).

Oil-immersed Tank Heat-Exchanger: The oil-surrounded inner tank becomes a thermostatically-controlled heat exchanger that allows solids to settle—harmlessly—on the tank floor for easy residue removal. This design actually encourages the accumulation of sludge build-up on the evaporator's inner floor while it provides a controlled evaporation rate and minimized maintenance issues.

Simple Air-Handling System: Removing combustion gases (on the gas-fired Series G20 and G35) the RUNDRY keeps combustion products completely isolated from room ambient (no operator exposure) and safely contained in the fire tube style oil heater, until they are vented to atmosphere.

Safe Evaporator Control: The SAMSCO SAFETY SYSTEM consists of a heat exchanger immersed in the oil surrounding the inner tank. This heat exchanger is an electric element or a gas-heated fire tube designed to maintain the oil at a safe operating temperature. A thermostat monitors this, providing instantaneous feedback on the critical operating status of the heat transfer oil. Thus, the waste-evaporating heat exchanger (the inner tank of the "double boiler") is maintained at a safe temperature throughout the RunDry's operating cycle.

Redundant Control: A second thermostat controls the evaporator's oil temperature and shuts the system down if temperature rises unacceptably.

SAMSCO CORPORATION
18 Cote Avenue • Goffstown, NH 03045
Tel 603 668 7111 • Fax 603 647 0537
info@Samsco.com • www.Samsco.com

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THE SAMSCO RUNDRIY ZLD SYSTEM

The SAMSCO **RUNDRIY** wastewater evaporation system is a low-investment, wastewater minimization system that achieves “ZLD” from your wastewater disposal process: no measurable water is left at the end of the process, thus, Zero Liquid Discharge.

Features of the RUNDRIY SYSTEM

- **Double Boiler Tank Design**—allows virtually all water to evaporate (run-to-dry) without damage caused by hot spots inherent in other designs.
- **Smooth Interior Tank Walls**—for easy post-evaporation clean up.
- **Large Heat-Transfer Surface**—heat is distributed across bottom and all four sides, maximizing energy efficiency.
- **Design Segregates Heating Elements from Wastewater**—heating elements are immersed in thermal fluid, preventing possible heater contact with wastewater, unlike open, drum-heater designs.
- **Stainless Exterior**—for corrosion protection in harsh environments.
- **Self-leveling Feet**—simplifies installation anywhere the tank fits.
- **Easily accessed tank interior**—large lid (with optional lift out tray) provides easy access for sludge removal.
- **Redundant Safety Controls**—provide two, fail-safe high temperature shut-offs if temperature rises unacceptably.
- **Auto-Fill (optional)**—automatically fills tank with wastewater for uninterrupted operation and reduced manpower requirements.
- **Two Year Warranty**—the best in the industry. SAMSCO evaluates all wastewater streams to determine correct material of construction.



Model	Evaporation Rate (Max)	Heat Source	Tank Capacity	Dry Weight (w/oil)	Dimensions*	Material Of Construction (Others Available)
E2	2 gph	Electric	16 Gal	500 lbs	22" W x 25" D x 28" H	316L SS (Chloride Resistant Option)
E5	5 gph	Electric	60 Gal	725 lbs	48" W x 37" D x 40" H	316L SS (Chloride Resistant Option)
E7	7 gph	Electric	60 Gal	745 lbs	48" W x 37" D x 40" H	316L SS (Chloride Resistant Option)
G20	20 gph	Natural Gas or LP	225 Gal	1800 lbs	100" W x 48" D x 52" H	316L SS (Chloride Resistant Option)
G35	35 gph	Natural Gas or LP	225 Gal	2400 lbs	112" W x 48" D x 52" H	316L SS (Chloride Resistant Option)

*Height dimension does not include 24" blower assembly