

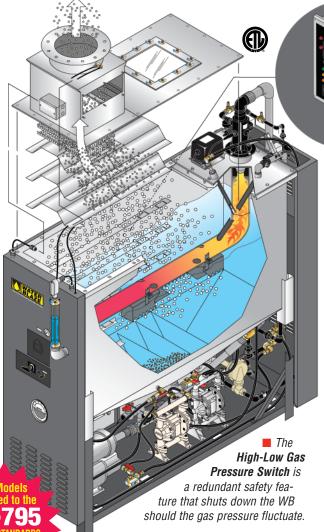
# Super Energy-Efficient Wastewater Evaporator with Patented Design Using Submerged Combustion Technology

- Evaporates up to 120 GPH
- Fueled by Natural Gas or Liquid Propane
- 100% Heat Exchanger **Efficiency**
- Safety Certified to UL-795

- The Access Port offers easy access and servicing the inside of the tank, plus it has a tempered glass view port for monitoring the system while in operation.
- High-quality, industrial Immersion Tube Jet Burner, fired by natural gas or propane, shoots flame down into sparger tube generating temperatures as high as 2000°F for highly effective reduction of VOCs.
- RF Capacitance Multipoint Liquid Level Assembly automatically controls the liquid capacity in the tank, monitoring and adjusting for high and low levels, ultimately shutting down the system when the wastewater has been evaporated; tempered glass tube with RF Capacitance switch is easily accessed for servicing and cleaning.
- Direct surface injection from the Foam Suppression System, delivered by compressed air, eliminates the effects of foaming. A stack pressure monitorina switch will shut down the Water Blaze in case of heavy entrainment.
- Quality regenerative Air Pump supplies air for the burner system.
- Heat-resistant, heavy-duty stainless steel **Sparger Tube** features unique air distribution system for uniform release of heated gasses directly into the water.
- Troubleshooting Indicator Lights make locating system failure quick and easy.
- Auto Purge quickly removes and easily disposes of sludge or concentrate from the evaporator tank.

■ Stainless Steel Steam Demister screens are effective in removing water droplets in the steam to reduce entrainment of constituents in the exhaust.

■ Three stainless steel Micro-Bubble Shrouds split large steam bubbles into millions of micro-bubbles, dramatically increasing the surface area for transmitting heat thus enhancing evaporation effectiveness.



■ The **Low Air Pressure Switch** is yet another redundant safety feature that shuts down the Water Blaze should the air pressure fluctuate.

Nema 4 rated plastic Electrical Control Box protects electrical components from water and vapor damage.

Auto-fill and autopurge **Air Diaphraum Pumps** are resistant to fluctuations in pH; solenoid valve automatically controls flows.

- Wastewater concentration level is monitored by an Hour Counter; once the projected concentration level has been achieved, the auto-purge feature is activated.
- UL-certified, solid-state Veri-Flame Monitor regulates start-up sequence of gas-fired burner providing flame sensor protection before, during and after an operating cycle.
- Soft-start and fast-closing **Electro**-Hydraulic Gas Valve opens and closes the main gas valve at the precise moment for smooth operation.
- Top quality **Ignition System** features electrically fired burner for reliable ignition and a low-flame burner for smooth transition between start up and full flame.

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# Super Energy-Efficient Wastewater Evaporator with Patented Design Using Submerged Combustion Technology

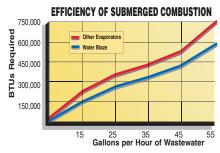
# WHY CHOOSE LANDA'S WR

The WB series has two patents and is the first evaporator of its size to use the extra-high efficient submerged combustion technology. There are two models capable of handling wastestreams at a rate of up to 60 and 120 gallons per hour (GPH).

Featuring top-of-the-line immersion tube jet burner components, with a solid-state flame control monitor. the WB is capable of creating temperatures of up to 2000°F, releasing hot flue gases directly into the water.

### Evaporates up to 120 GPH

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## How submerged combustion is superior to conventional evaporation



**Immersion Heating** 

Most evaporators use Immersion Heating, in which a heat exchanger is immersed in a tank of wastewater. While this method is effective, it is not energy efficient. In fact, as much as 30% of the heat escapes out the vent stack.

**Submerged Combustion** 

In Submerged Combustion the hot gasses are forced through a submerged tube and released directly into the water for up to 100% heat exchanger efficiency. All of the heat goes into the water—not up a

vent stack. Nor is the heat lost trying to get through the "insulation" of residual solids baked onto the tube or floor.

### pecifications

of up to 120 GPH

There are two WB

models, including the

handling waste streams

WB-120A at right for

MODEL WB-120A WB-50A **Evaporation Rate\*** 1-120 GPH 1-60 GPH 1,142,000 BTU 571,000 BTU **Fuel Usage** Natural or LP Gas, 1.5" NPT Natural or LP Gas, 1" NPT **Fuel Supply** 10 CFM @ 20-100 psi 10 CFM @ 20-100 psi **Compressed Air Vent Stack** 12" 10" **Tank Capacity** 170 gal. 76 gal. Tank Material\*\* 316L SS (12 ga) 316L SS (12 ga) Electrical 220V 1ph 30A 220V 1ph 20A Dimensions (L x W x H) 79" x 50" x 81" 73" x 31" x 80"

1930 lbs.

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\* Evaporation rates are calculated using water only. Your evaporation rate may be different depending on elevation and contaminants in your waste stream.

\*\* Standard allow 316L. Optional corrosion-resistant stainless steel alloys are Duplex 2205 and AL-6XN for resistance to higher chloride concentrations



Ship Weight

Distributed by:

### **OPTIONS:**

1195 lbs.

- Stainless Steel Tank Upgrades from 316L
- Wastewater Flame Injection System
- . Conversion Kits and Accessories
- Factory Conversion Kit
- · Foam Detection System
- Flue Pipe Rain Shield

See your LANDA Dealer for part numbers and pricing.

## Why evaporate?

Most wastewaters, which cost up to \$1.00 per gallon to have hauled off, are typically made up of 95% water and 5% contaminant. A wastewater evaporator reduces the 95% water content for as little as \$.03 to \$.08 per gallon. That means you only have to dispose of the 5%-minimizing your cost and liability.

NOTE: We are constantly improving and updating our products. Consequently, pictures, features and specifications in this brochure may differ slightly from current models. this equipment intended for indoor use only. Customer is responsible for any permits, compliance with codes, or other government requirements associated with the installation, use, or disposal of waste associated with this equipment. This product is protected under U.S.

Patent Nos. 5,381,742 and D357,056; Canadian Patent

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