Specifications

Norland 500

Height:	70″ (188 cm)
Width:	38″ (97 cm)
Depth:	23″ (59 cm)
Weight (empty):	763 lb (344 kg)
Shipping Specifications:	
Height:	39″ (99 cm)
Width:	74″ (188 cm)
Depth:	46″ (117 cm)
Weight (shipping):	863 lb (389 kg)
Waste Water per Day:	1000 gal. (3800 L)
Kw/H of Electricity:	0.6 per gal. (0.16 per L)
Minimum Electrical Service Required:	90 amps
Phase:	1 or 3

Norland 120

Height:	66″ (168 cm)
Width:	29.5″ (75 cm)
Depth:	13″ (33 cm)
Weight (empty):	320 lb (145 kg)
Shipping Specifications:	
Height:	24″ (61 cm)
Width:	70″ (178 cm)
Depth:	34″ (86 cm)
Weight (shipping):	420 lb (191 kg)
Waste Water per Day:	480 gal. (1824 L)
Kw/H of Electricity:	0.89 per gal. (0.23 per L)
Minimum Electrical Service Required:	30 amps
Phase:	1

Norland 75

Height:	56″ (142 cm)
Width:	20″ (51 cm)
Depth:	12″ (30 cm)
Weight (empty):	240 lb (109 kg)
Shipping Specifications:	
Height:	16″ (41 cm)
Width:	62″ (157 cm)
Depth:	24″ (61 cm)
Weight (shipping):	320 lb (145 kg)
Waste Water per Day:	450 gal. (1710 L)
Kw/H of Electricity:	1.65 per gal. (0.43 per L)
Minimum Electrical Service Required:	30 amps
Phase:	1

Note: Norland reserves the right to change specifications without prior notification. All specifications are approximate (± 10%).

Norland Int'l. Inc. also manufactures the Norland VC6000, VC3000, VC1500 and VC800 Vapor Compression distillation systems.

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For the Sparkling Taste of Fresh, Clean Water.

Norland 500, Norland 120, and Norland 75

Your Complete Source

Norland Int'l. Inc.

Distillation Basics

Water purification by the distillation method is a natural process that occurs daily in nature. The challenge is in designing and manufacturing an effective, efficient system that can duplicate nature's distillation process and provide high-quality, distilled water at the lowest possible cost.

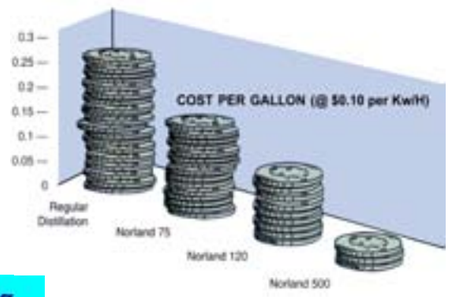
In distillation, water is heated in a boiling chamber to create steam vapor. This steam vapor is then condensed by cooling, and returns as pure distilled water, leaving impurities behind.

The typical distillation system uses only one boiling chamber, so the heat required for the vaporization/condensation cycle can be used only once. More heat must be generated for the next gallon of water to be distilled.

Norland's Multiple-Effect Distillation Method

"Multiple-effect" gets its name from the fact that more than one boiling chamber or "effect" is used to produce distilled water. With multiple-effect technology, the heat energy contained in the steam generated in the first boiling chamber is reused to boil more water in subsequent boiling chambers. This recycling of energy provides the energy saving feature of multiple-effect distillation.

Norland mutiple-effect distillation systems use more than one boiling chamber ("effect") in the distillation process. For example, the Norland 500 with six boiling chambers, distills six gallons of water for the approximate cost of distilling one gallon of water in a typical chamber system. Similarly, the Norland 120 uses four boiling chambers, so it's four times more efficient than a single-chamber system. In short, the more chambers used, the more efficient the system.



Norland 500

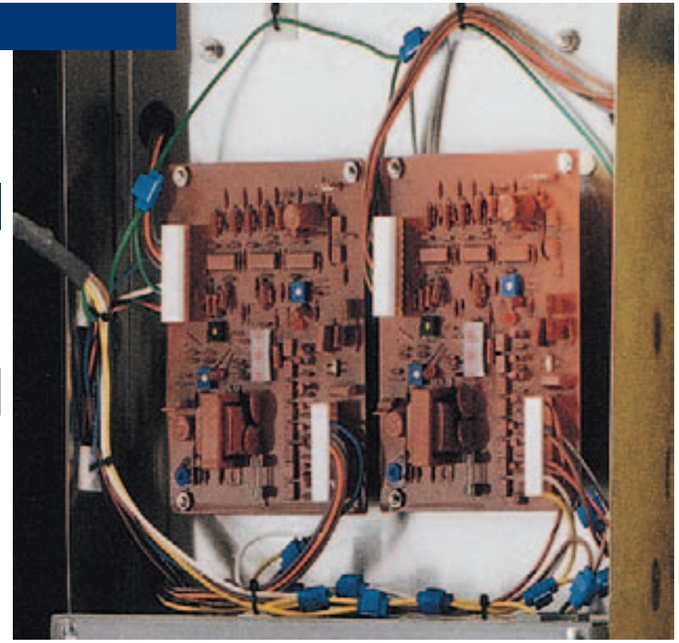
Six boiling chambers produce a gallon of distilled water at one-sixth the cost of using a traditional single-chamber system.

Norland 120

Four boiling chambers produce a gallon of distilled water at one-fourth the cost of using a traditional single-chamber system.

Norland 75

Two boiling chambers produce a gallon of distilled water at half the cost of using a traditional single-chamber system.



Norland Multiple-Effect Distillation System Features:

- Effectively produces water with purity of less than 2 ppm TDS.
- Economical and efficient. Multiple-effect process cuts operating costs by one-half (Norland 75) to one-sixth (Norland 500).
- Durable and dependable. No moving parts, such as floats, motors or compressors to wear out. Constructed primarily of type 304 and 316 stainless steel.
- Easy to install: only one electrical and three water connections are required.
- Easy to operate, with built-in fail-safe controls. If feed water flow is interrupted, the low-water shutdown will stop system operation until proper amount of feed water is again available. Electrical surge protection is also standard equipment.
- Self-cleaning, if system is operated on water containing less than 1.0 ppm of hardness and chlorine. If more, a dual alternating tank water softener and commercial activated carbon prefilter are required.
- Easy to monitor, with see-through panel for instant checking of system operation at a glance. Sight glasses and indicator lamps make each system even easier to use.
- Multiple-stage volatile gas venting provides maximum water purity.

Features and benefits of the Norland 500, Norland 120 and Norland 75

1. Removable exterior panels allow full access to internal components for quick, easy servicing. Norland systems are built with virtually no moving parts to malfunction or wear out.
2. Individual sight glasses for each effect (boiling chamber) in your system permits monitoring at a glance.
3. Electronic control panel is easily accessed for servicing. Solid-state circuitry controls operation of the complete system.
4. When operated properly, Norland systems do not require cleaning. If cleaning is required, the lid of tubing bundles can be removed easily with simple hand tools, unlike plate-type heat exchangers.