



# RackStacker™

Automatic Rack Stacking System  
for 3-5 Gallon Bottles

- Improves Productivity
- Eliminates Heavy Lifting
- Maximizes Bottle Life
- Delivers Attractive ROI
- Designed and Assembled in Lincoln, Nebraska

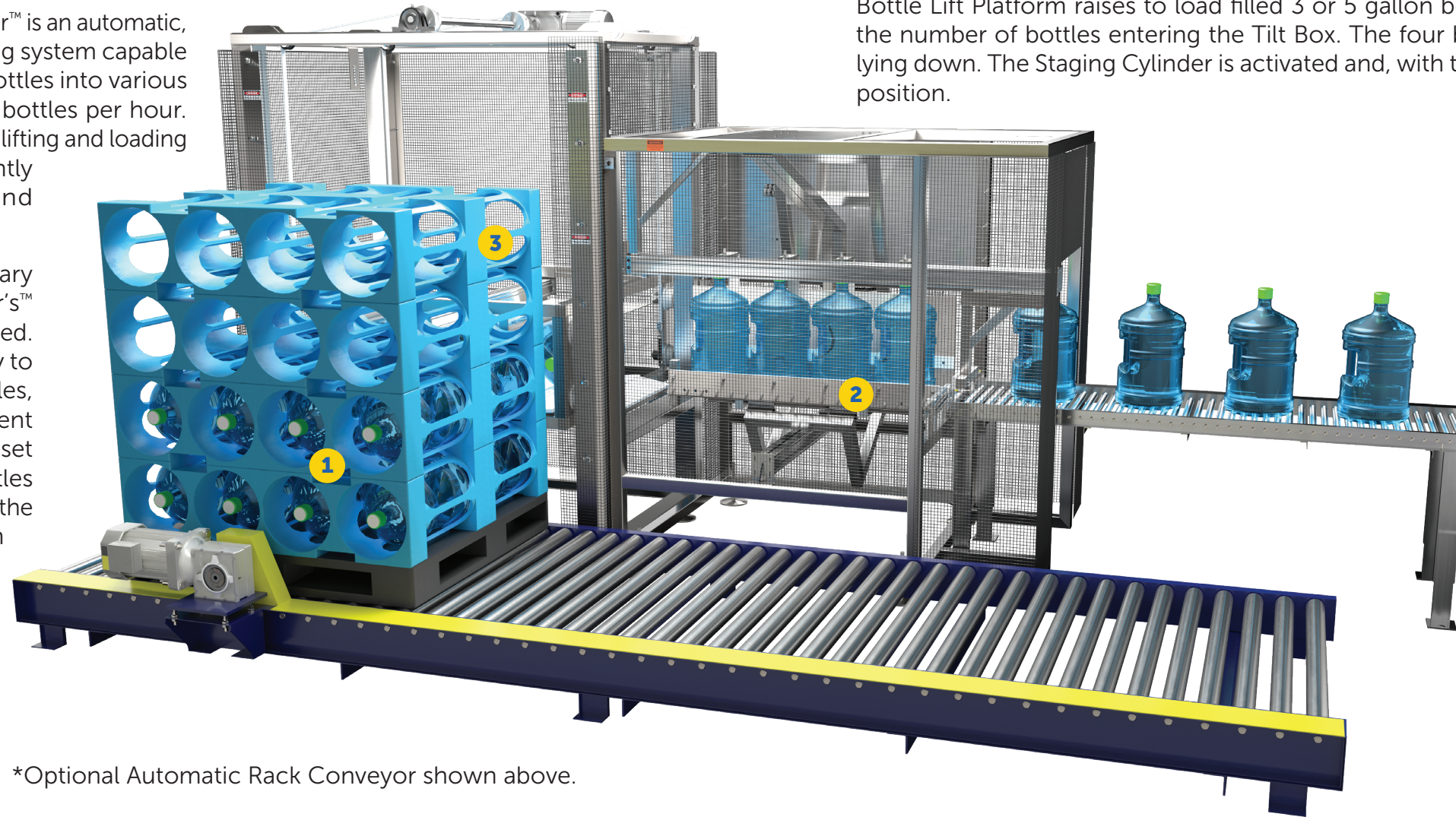
## The Challenge: Potential Work Comp Claims and Labor Health

One of the most labor-intensive and potentially harmful jobs in a bottled water plant is manually lifting filled 5 gallon bottles into bottle racks. Racks are often used in the Home & Office Delivery Business to load into delivery vehicles. Bottles weigh 40 lbs, and bottles must be lifted into the upper rack, which may exceed 68". These physical stresses on the operator lead to potential worker's compensation claims and long-term operator injury and health issues.

## Norland's Solution: A Unique & Efficient Design

The Norland International RackStacker™ is an automatic, multi-function, bottled water racking system capable of stacking 3-5 gallon returnable bottles into various bottle racks, capable of up to 600 bottles per hour. The RackStacker™ eliminates manual lifting and loading of 3 and 5 gallon bottles, significantly improving employee safety and increasing production efficiency.

Designed and built with a proprietary alignment system, the RackStacker's™ accuracy and reliability are unmatched. This highly efficient machine is easy to use, compatible with most rack styles, and easily integrates into your current production line. The system can be set up to convey filled and capped bottles from your production line directly to the RackStacker™ for quick loading on delivery trucks or moved to short-term storage.



\*Optional Automatic Rack Conveyor shown above.

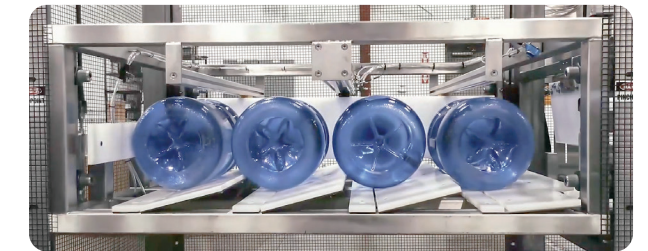
### 1 Bottle Feed Conveyor

An empty bottle rack is placed into position manually or by an Automatic Rack Conveyor.

\* Automatic Rack Loading System – Features a motorized conveyor that moves the empty rack into the correct position and removes the rack once filled. An optional Forklift Remote Start is available to maximize production.

### 2 Bottle Pre-Load Tilt

Bottle Lift Platform raises to load filled 3 or 5 gallon bottles. A pneumatic gate opens and controls the number of bottles entering the Tilt Box. The four bottles that enter the Tilt Box are tilted back, lying down. The Staging Cylinder is activated and, with the Push Bar, pushes the bottles to the correct position.



Spreader plates lift on one side below the bottles to ensure even spacing matching the rack openings.

### 3 Bottle Lift-Load

When the Bottle Lift Platform is in the correct position, the Rack Fill Cylinder and Push Bar initiate the operation, pushing bottles, bottom end first, into the correct row of the Bottle Rack.

The Rack Fill Cylinder and Push Bar return to the ready position, the Spreader Plate Cylinder returns the Spreader Plates to their flat position, and the Bottle Lift Platform returns to its ready-fill position to accept four new bottles.

## System Specifications

Power Requirements: 208 Volt, Single Phase, 60 Hz, 15 Amp Connected Load (11.5 Amp Average Load)

20 Amp service recommended. Must be installed to conform to local electrical codes.

Controls: Solid State, PLC Controlled

Air Pressure: 90 psi Minimum

Air Quantity: 14 SCFM (Average)

Air Line Connection: 1/4" FNPT

Air Line Hose Size: 1/4", 250 psi

Quality: Oil Free, Clean & Dry

Height: 87.50"

Length: 133.50" without In-Feed or Pallet Conveyors

Width: 64.50" with Guards



Tilt Box and Push Plate metal arms flip bottles into the correct position.

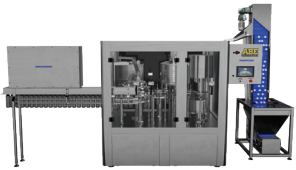


Norland's workforces excels in every aspect of welding, fabrication and assembly.





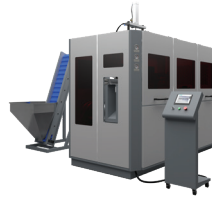
## DON'T MISS THE OTHER GREAT EQUIPMENT FROM NORLAND INTERNATIONAL!



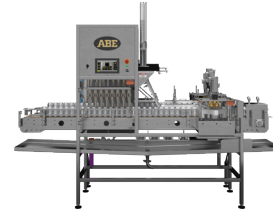
Small Bottles



3-5 Gallon Bottles



Blow Molding



Canning and Bottling



Labeling & More!

**30+ YEARS OF EXPERIENCE**

**130,000+ SQUARE FEET**

**130+ EMPLOYEES**



**NORLAND CAMPUS**

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