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FILLING & CAPPING

## R-LINE ROBOTIC UNSCRAMBLER ORIENTORS FOR PLASTIC BOTTLES



### Flexible, high efficiency robotic plastic bottle unscrambler orientors

R-Line robotic unscrambler orientors are the latest innovation for automated bottle unscrambling, bottle orienting and puck insertion from Pace Packaging. R-Line is a new robotic bottle unscrambling and orienting system and it joins the Pace family of unscramblers and orientors which includes Omni-Line and Combo-Line systems.

R-Line robotic systems incorporate a linear multi-lane system that feeds up to eight rows of aligned containers on ribbed belts to two robotic cells. By supplying aligned containers to the two robot system, R-Line can deliver speeds up to 240 cpm. Current robotic systems can require up to six robots to reach this speed range.

Pace R-Line robotic unscrambling orienting systems are capable of unscrambling and orienting round, oval, contoured, square and rectangular PET, HDPE, PP, PS, and PVC bottles and inserting them into pucks for efficient filling, capping and conveying. R-Line systems are also capable of placing containers directly onto conveyors.

R-Line unscrambler orientors are ideal for containers that require puck-based container handling systems. R-Line unscrambler changeovers are recipe driven and their universal end-of-arm tools are designed for gentle, scuff and scratch free container handling.

#### FEATURES AND BENEFITS

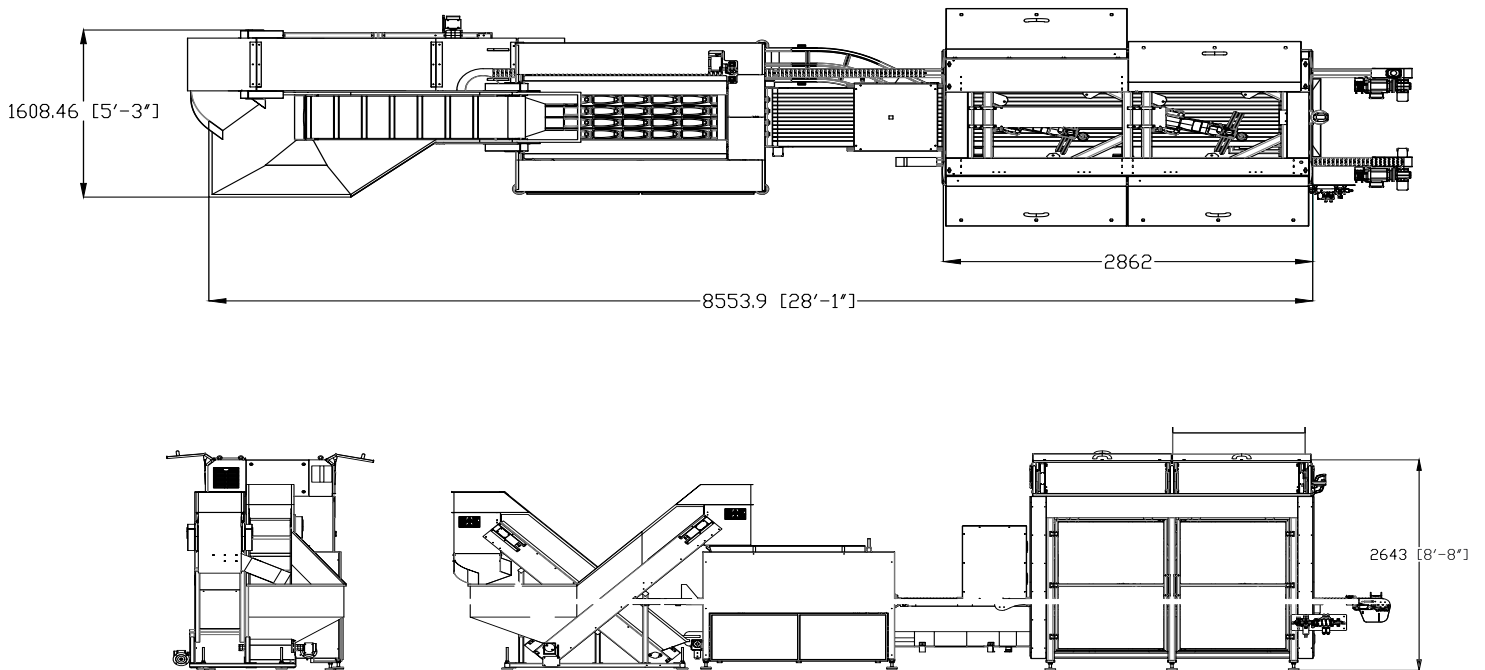
- **Two-robot configuration delivers speeds up to 240 cpm** – Innovative multi-lane container infeed system enables R-Line systems to do the work of up to six robots required by competitive systems
- **Virtually unlimited container compatibility** – R-Line unscrambler orientors can run a virtually unlimited variety of containers with and without handles from 8 fl. oz. (236mL) to 32 fl. oz. (946 mL)
- **Versatile operation** - System capable of inserting containers into pucks or placing them directly onto the conveyor
- **Universal end-of-arm tooling** – R-Line end-of arm tooling features a universal design that accommodates a virtually unlimited range of container styles, shapes and types
- **Fast, push button, recipe driven changeovers** – Container changeovers are completed via the HMI in two minutes or less; universal end-of-arm tooling does not need to be removed and replaced as part of the changeover process
- **Scuff & scratch-free container handling** – Bottle infeed system and universal end-of-arm tooling are designed to prevent and eliminate scuffs and scratches
- **Space efficient, linear technology and footprint** – Uses up to 30 % less floor space than competitive systems requiring three or more robots

## TYPICAL PRODUCT SPECIFICATIONS

<b>Speeds (Up To)</b>	240 cpm
<b>Container Materials</b>	HDPE & PET
<b>Container Sizes</b>	8 oz. (236mL) - 32 oz. (946 mL)
<b>Robot</b>	ABB
<b>Robot Movement</b>	6-Axis
<b>Power Supply</b>	480V / 3 phase / 60 Hz , 30 Amps
<b>Nominal Footprint Dimensions</b>	28'-1" x 8'-8" x 5'-3"

<b>Container Types</b>	Bottles with or without handles
<b>Container Shapes</b>	Rounds, Rectangles, Squares, Ovals  Off-center neck bottles, handle bottles, trigger spray bottles, symmetrical bottles with in-mold labels and center neck non-symmetrical bottles.
<b>Controls</b>	Allen-Bradley Siemens
<b>End-of-arm Tooling</b>	ProMach Performance Services
<b>Electrical Enclosure</b>	NEMA 12

## CONFIGURATION



## OPTIONS

- Bottle exit conveyors - Merge inline, exit right or exit left
- Puck loop conveyors
- Puck lane diverting systems
- Puck merge systems
- Custom puck designs
- Bottle laser coding
- Bottle inspection & rejection systems
- Recommended Spare Parts Kit