

	<b>Standard Operating Procedure</b>  <b>Bottle Unscrambler</b>		<b>SOP Number</b> <b>B-631</b>	<b>Revision</b> <b>4</b>
			<b>Effective Date</b> 02/28/23	<b>Page</b> <b>Page 1 of 3</b>
<b>Written by/ Date</b> <i>M. Busse 01/20/23</i>	<b>Reviewed by/ Date</b> <i>Janice Winkler 01/20/23</i>	<b>Approved by/ Date</b> <i>K. Sumner 01/24/23</i>		
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## 1.0 Purpose

The purpose of this procedure is to define the process for the setup, operation, assembly, disassembly, and cleaning of the Bottle Unscrambler.

## 2.0 Scope

This procedure applies to all of the bottle unscramblers in operation at Ion Labs, Inc.

## 3.0 Responsibility

- 3.1 It is the responsibility of Production (Packaging) Personnel to follow this procedure.
- 3.2 It is the responsibility of the Department Supervisor/Manager to implement this procedure and to ensure that the procedure is being followed.
- 3.3 It is the responsibility of Production and/or Maintenance & Engineering to keep this procedure aligned with current practices.

## 4.0 Definitions

None

## 5.0 References

- 5.1 B-111, SOP, Cleaning of Manufacturing/Production Areas and Equipment

## 6.0 Procedure

- 6.1 Assembly

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- 6.1.1 If applicable, determine the bowl plate required for the bottle.
- 6.1.2 Obtain the bowl plate from Tooling.
- 6.1.3 Install the bowl plate on the Bottle Unscrambler.

**6.2 Setup**

- 6.2.1 Adjust the following to match the dimensions of the bottle
  - 6.2.1.1 Bowl Sensor
  - 6.2.1.2 Wiper Height
  - 6.2.1.3 Discharge Belts
  - 6.2.1.4 Carrier belts and guides
- 6.2.2 Turn the machine main power on
- 6.2.3 Use bottles to test the setup and make any final adjustments to 6.2.1 for the setup to be complete.
- 6.2.4 Using the control panel, set the speed dials to operate the setup process and ensure that everything functions properly.

**6.3 Operation**

- 6.3.1 Machine power is on
- 6.3.2 Fill bottle hopper with empty bottles
- 6.3.3 Using the control panel, set desired speed of the operation process of placing bottles onto the production line
- 6.3.4 The protective panels must be closed for the machine to operate. The front panel has sensors to stop the machine in the event it opens.

6.4 Equipment Dismantling and Cleaning

6.4.1 If applicable, remove bowl plate.

6.4.2 Refer to SOP B-111 Cleaning of Manufacturing/Production Areas and Equipment to follow the cleaning process applicable to equipment type.

## 7.0 Revision History

Revision	Date	Description of Changes	CCR #	By
1	07/25/13	New	13-622	B. Mosall
2	10/02/15	Changed the SOP format, updated the SOP	15-0945	P. Zittere
3	09/12/19	Scheduled review: Removed obsolete definitions. Added reference to SOP B-111.	19-0655	K. Burris
4	01/20/23	Updated to include all bottle unscramblers. Updated logo and format. Updated responsibilities.	CC-22-0215	M. Busse