

	Standard Operating Procedure		SOP Number B-618	Revision 0
	Inline Rotary Chuck Capper		Effective Date 09/21/23	Page Page 1 of 4
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1.0 Purpose

The purpose of this procedure is to define the process of setup, operation, and cleaning for the inline rotary chuck capper.

2.0 Scope

This procedure applies to the inline rotary chuck cappers in operation at Ion Nutritional Labs.

3.0 Responsibility

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

4.0 Definitions

N/A

5.0 References

- 5.1 B-111, SOP, Cleaning of Manufacturing/Production Areas and Equipment
- 5.2 B-105, SOP, Preparation of Cleaning and Sanitizing Chemicals for Production

6.0 Procedure

- 6.1 Setup
 - 6.1.1 Ensure that the machine is clean and cleared of all previously used materials.
 - 6.1.2 Install the Cap Disc Starwheel.

- 6.1.3 Install the Cap Disc Guide and connect any/all air lines to their intended connection(s) at the Air Panel.
- 6.1.4 Install the infeed and outfeed segments of the Capper Backguide.
- 6.1.5 Install the Backguide Belt and connect the Backguide air line to its intended connection on the machine.
- 6.1.6 Install both segments of the Capper Starwheel.
- 6.1.7 Install all six of the Capping Chucks.
- 6.1.8 Install the Centerguide.
- 6.1.9 Install both segments of the Discharge Starwheel.
- 6.1.10 Install both segments of the Feedscrew Backguide.
- 6.1.11 Install both segments of the Infeed Starwheel.
- 6.1.12 Install the Feedscrew.
- 6.1.13 Install the Front and Rear Discharge Conveyor Guides.
- 6.1.14 Install the Infeed Guide.
- 6.1.15 Attach the Lower Cap Chute to the Upper Cap Chute.
 - 6.1.15.1 DO NOT attach the bottom end of the lower cap chute to the cap disc guide until the capper turret height adjustment is made. Doing so at this point WILL CAUSE DAMAGE to the machine.

6.1.16 Fill hopper with caps.

6.2 Startup

- 6.2.1 Power on the capper but do not start it.
- 6.2.2 Ensure that any/all air lines are connected to their intended connections on the machine.
- 6.2.3 Power on the cap elevator.
- 6.2.4 Switch the capper into Setup Mode.

- 6.2.5 Select the correct recipe from the “Products” screen.
- 6.2.6 Make sure that the lower cap chute is detached from the cap disc plate.
- 6.2.7 Adjust the capper turret height to the recipe setpoint height.
- 6.2.8 Connect the lower cap chute to the cap disc plate.

6.3 Operation

- 6.3.1 Switch the capper to Run Mode.
- 6.3.2 Start the capper.
- 6.3.3 Keep hopper full of caps at all times.
- 6.3.4 Monitor bottles coming into the capper and confirm they are not under or over-filled, are properly oriented, undamaged, etc.
- 6.3.5 Monitor the capper as bottles are processed, making sure they are being capped correctly, properly guided through the machine, and appropriately rejected.
- 6.3.6 Monitor bottles coming out of the capper, making sure there are no uncapped bottles and that they are properly oriented on the conveyor.
- 6.3.7 Report any machine wear or damage to immediate Supervisor and/or Maintenance personnel.

6.4 Cleaning & Disassembly

- 6.4.1 Prepare cleaning agents as outlined in SOP B-105 Preparation of Cleaning and Sanitizing Chemicals for Production.
- 6.4.2 Follow SOP B-111 Cleaning of Manufacturing/Production Areas and Equipment to ensure proper cleaning and sanitization are performed for this type of equipment and that these activities are properly documented.
- 6.4.3 The following disassembly steps are required prior to cleaning:
 - 6.4.3.1 Clear any outstanding alarms.
 - 6.4.3.2 Disconnect the Lower Cap Chute from the Cap Disc Guide.

- 6.4.3.3 Raise the Capper Turret to maximum height.
 - 6.4.3.4 Remove the Infeed Guide.
 - 6.4.3.5 Remove the Feedscrew Backguide.
 - 6.4.3.6 Remove the Feedscrew.
 - 6.4.3.7 Remove the Infeed Starwheel.
 - 6.4.3.8 Remove the Front and Rear Discharge Conveyor Guides.
 - 6.4.3.9 Remove the Discharge Starwheel.
 - 6.4.3.10 Disconnect the Backguide air line and remove the Backguide Belt.
 - 6.4.3.11 Remove both segments of the Capper Backguide.
 - 6.4.3.12 Remove both segments of the Capper Starwheel.
 - 6.4.3.13 Remove all six of the Capping Chucks.
 - 6.4.3.14 Remove both segments of the Centerguide.
 - 6.4.3.15 Disconnect air lines from the Air Panel and remove the Cap Disc Guide.
 - 6.4.3.16 Remove the Cap Disc Starwheel.
- 6.4.4 Inspect the equipment to ensure that there is no remaining product prior to reassembly.

7.0 Revision History

Revision	Date	Description of Changes	CCR #	By
0	09/14/23	New procedure.	N/A	A. Gatev