

The Pot-pulator User Manual

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1 Introduction

Welcome to the user manual for the Pot-pulator - a machine designed to assist Sheridan Nurseries in populating their trays with pots, in preparation for planting with soil and seeds. The Pot-pulator is used to automate this process to reduce the need for manual labour, improving efficiency and productivity in the nursery. This manual will provide guidance on the continuous operation of the Pot-pulator, providing the information needed to effectively utilize this powerful tool.

2 Getting started

2.1 Operation Steps

When using the Pot-pulator, start by fulling the machine with trays in the tray dropper section, and empty pots in the pot dropper section. The tray dropper can hold 30 trays, while the pot dropper can hold up to 300 pots, requiring re-fills every 15 minutes. Within this time, the machine requires no further action from the user once the on button has been pressed. Under normal operation, the Pot-pulator will follow the steps below:

1. Fill the machine with empty pots and trays
2. Press the "on" button
3. Tray dropper will dispense trays one at a time
4. A tray will drop onto the conveyer belt and move to the next section
5. Conveyer positions the tray to prepare for pot dropping
6. Conveyer stops and drops 2 pots at a time into the tray
7. Conveyer continues to move to the next available slots in the tray, until the entire tray is filled with pots (10 pots)
8. The verification subsystem will determine if all the pots have been placed correctly in the tray, outputting an LED when a pot is missing or out of place.

Throughout the operation of the device, the user interface will display the current status of the machine. To learn more about the user interface and how to navigate it, please refer to the "User Interface" section of this manual.

2.2 Safety and Precautions

When refilling pots and trays, ensure that the machine is turned off. Once they have been loaded into the system, the user can then turn on the machine for operation.

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5.1 What happens if trays get stuck?

If the trays get stuck, turn off the machine and remove them from the stack, and refill them normally. Once they are in place, turn the machine on to run as normal.

5.2 What happens if pots get stuck?

If the pots get stuck, turn off the machine and remove them from the stack, and refill them normally. Once they are in place, turn the machine on to run as normal.

5.3 How many trays can the tray dropper hold?

The tray dropper can hold up to 30 trays, but it will need to be refilled every 15 minutes.

5.4 How many pots can the pot dropper hold?

The pot dropper can hold up to 300 pots, but it will need to be refilled every 15 minutes.

5.5 How does the Pot-pulator verify that all the pots have been placed correctly in the tray?

The verification subsystem will determine if all the pots have been placed correctly in the tray, outputting an LED when a pot is missing or out of place.

5.6 How do I refill the Pot-pulator with trays and pots?

When refilling pots and trays, ensure that the machine is turned off. Once they have been loaded into the system, the user can then turn on the machine for operation.

5.7 How can I navigate the user interface of the Pot-pulator?

The user interface will display the current status of the machine. To learn more about the user interface and how to navigate it, please refer to the "User Interface" section of the manual.

6 Appendix

Glossary of terms Additional resources (e.g., tutorials, forums) Legal information and disclaimers