
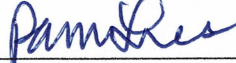
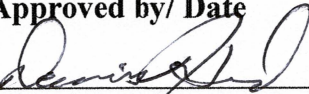
	Standard Operating Procedure Viking Masek ST560 8 Lane Stick Packaging Machine		SOP Number B-606	Revision 0
			Effective Date 01/12/22	Page 1 of 5
Written by/ Date  11/22/21	Reviewed by/ Date  12/14/21	Approved by/ Date  12-16-21		
Title: Product Development & Engineering Director	Title: Production Director	Title: VP of Quality & Regulatory Affairs		

1.0 Purpose

This procedure defines the process for the setup, operation, and cleaning of the Viking Masek ST560 8 Lane Stick Packaging machine, associated Intech INT698-IML1-70 check weigher, and Whisper Loader vacuum conveying system.

2.0 Scope

This procedure applies specifically to the Viking Masek ST560 8 Lane Stick Packaging Machine and associated support equipment in operation at Ion Labs.

3.0 Responsibility

- 3.1 It is the responsibility of Production personnel to follow the operation and cleaning sections of this procedure.
- 3.2 It is the responsibility of Maintenance personnel to follow the preparation, assembly, and setup sections of this procedure. Maintenance personnel is also responsible for maintaining the equipment in accordance with either manufacture recommended maintenance schedules or maintenance schedules derived from actual operational requirements.
- 3.3 It is the responsibility of Production supervisors to implement this procedure, to ensure that this procedure is being followed, and to ensure that production personnel are adequately trained in the operation of the equipment.
- 3.4 It is the responsibility of QC personnel to ensure that this procedure is being followed.

4.0 Definitions

- 4.1 **Auger** – rod with helical flutes which moves and meters the product
- 4.2 **Forming Tube** – wraps cut foil to create a stick-shape and conveys the product to the formed stick with the auger
- 4.3 **QC** – Quality Control

5.0 References

- 5.1 A-108, SOP, Good Manufacturing Practices and Personal Hygiene
- 5.2 B-103, SOP, Small parts Cleaning and General Sanitization
- 5.3 B-111, SOP, Cleaning of Manufacturing/Production Areas and Equipment
- 5.4 G-104, SOP, Lockout/Tagout Procedure
- 5.5 G-105, SOP, Lockout/Tagout Devices

6.0 Procedure

6.1 Machine Preparation and Assembly

Note: Machine setup and assembly shall only be executed by a qualified mechanic in the maintenance department

- 6.1.1 It should be noted that the machine is set for 30mm foil width and set up instructions for width adjustment, such as slitter setup, may be ignored. Foil width adjustment may only be conducted by adequately trained personnel and preferentially foil width should be fixed to an individual piece of equipment.
- 6.1.2 Always ensure the machine is locked out before assembly begins. The machine's primary electrical lockout point is the Eaton service disconnect on the back of the equipment. The machine's primary pneumatic lockout may be achieved by disconnecting all pressurized air service lines.

Note: This piece of equipment utilizes heat blocks which may remain at high temperature after the equipment is de-energized. Always allow adequate time for the heat blocks to cool before working on the equipment after the machine has been in operation

- 6.1.3 Ensure the forming tubes, augers, hopper agitators, and Whisper Loader pneumatic conveyor are set up in accordance with the manual(s) provided with the Viking Masek Machine Manual.
- 6.1.4 Mount the foil roll on the foil spindle and thread according to the provided threading diagram. Ensure the film is passing through the tracking sensor and the wenglor sensor is properly set up to see the "tick marks" on the foil.

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Note: There are two extraneous foil rollers (18 and 19) which are not utilized in the threading diagram. These rollers may be utilized if the specific foil's physical properties necessitate it.

6.1.5 Make initial machine adjustments for the length of stick, cutting wheels, and knife assembly. A counter wheel for length adjustment is present. If the intended stick length has previously been run it should have been recorded and that record may be referenced for initial setup. Further details on machine adjustments are available in the operation manual provided by Viking. Note that the use of a photo eye with "tick marks" requires the jaws be set 5-8mm longer than the length of the stick pack.

6.1.6 Connect the cleated side-discharge conveyor, check weigher HMI/Logic Control Module, and Check weigher.

6.1.7 Set and assemble the Whisper Loader vacuum conveyor atop the hopper as described in the instruction manual.

6.2 Machine Startup and Operation

6.2.1 Energize the equipment by throwing the power disconnect on the back of the equipment, connecting all pneumatic lines, and rotating the main powder switch to the "ON" position.

Note: The emergency stop of the cleated side discharge conveyor requires a key to unlock.

6.3 Cleaning

6.3.1 Minor Cleaning

6.3.1.1 Cycle the machine until no product remains in either the hopper or forming tubes. Empty stick packs may be generated.

6.3.1.2 De-energize the equipment by rotating the main powder switch to "OFF", throwing the disconnect on the back of the equipment, and disconnecting any pneumatic lines.

6.3.1.3 Allow sufficient time for the equipment's heating elements to cool.

Note: The heating elements are a point of hazardous stored energy.

6.3.1.4 Remove all product and paperwork from the previous batch.

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6.3.1.5 Vacuum residual product from accessible product contact surfaces of the equipment.

6.3.2 Major Cleaning

6.3.2.1 Cycle the machine until no product remains in either the hopper or forming tubes. Empty stick packs may be generated.

6.3.2.2 De-energize the machine per 6.3.1.1 and 6.3.1.2. Refer to and follow SOP G-104 Lockout/Tagout Procedure and SOP G-105 Lockout/Tagout Devices.

6.3.2.3 Dismount and disassemble the Whisper Loader vacuum conveyor and carefully place the parts, including the transport hose, on a provided transport cart.

6.3.2.4 Disassemble product augers and forming tubes. CAREFULLY place equipment pieces on provided “Crash Cart”. Damage to the augers and filling tubes may render the machine inoperable.

6.3.2.5 Disassemble the hopper, agitators, etc. and place the parts on a provided transport cart.

6.3.2.6 Remove the film from the equipment and stage for return to the label control area.

6.3.2.7 Transport parts from 6.3.2.3, 6.3.2.4, and 6.3.2.5 to the small parts cleaning area. Follow SOP B-103 Small Parts Cleaning and General Sanitation.

6.3.2.8 Vacuum any incidental powder from the surfaces of the machine.

6.3.2.9 Damp-cloth wipe-down is allowed, if necessary. If damp-cloth wipe down is necessary the electrical and communication connections for the cleated side discharge conveyor, check weigher control module, and check weigher must be unplugged, carefully cleaned, wrapped with an water resistant barrier, and the female connection ports closed and latch to prevent ingress of moisture.

Note: The HMI Touch-Screen may only be wiped down with a damp cloth. Avoid the use of detergents and sanitizers.

6.3.2.10 Wipe the equipment down with IPA.

Note: Do not wipe the touch screens with IPA.

6.3.2.11 Document cleaning in the cleaning logbook.

6.3.2.12 Contact QC inspector to verify equipment cleanliness and to check the cleaning logbook.

7.0 Revision History

Revision	Date	Description of Changes	CCR #	By
0	11/22/21	New procedure.	N/A	C. Fryman