

# Curl Flow II Slicer

# **Operating and Training Manual**

#### **MANUFACTURED BY**

Moffat Pty Ltd 620 Old Gympie Road Narangba 4504 Queensland Australia

(07) 3888 3035 Fax: (07) 3888 4237

#### **WORLD-WIDE BRANCHES**

#### **UNITED KINGDOM**

Blue Seal 67 Gravelly Industrial Park Erdington Birmingham B24 8TQU

(121) 327 5575 Fax: (121) 327 9711

#### **UNITED STATES**

Moffat Inc 3765 Champion Blvd Winston-Salem North Carolina 27115 (336) 661 0257

(336) 661 9546 Fax:

#### CANADA

Serve Canada 22 Ashwarren Road Downview Ontario M3J1Z5 Toll Free:800 263 1455 (416) 631 0601 Ph: (416) 631 0315 Fax info@servecanada.com www.servecanada.com

#### **NEW ZEALAND**

www.moffat.com

Christchurch **Auckland** Moffat Limited Moffat Limited PO Box 10-001 4 Waipuna Road 16 Osborne Street Mt Wellington Christchurch Auckland

(03) 389 1007 Ph: (09) 574 3150 Fax: (03) 389 1276 Fax: (09) 574 3159

#### **AUSTRALIA**

### Victoria New South Wales

Moffat Pty Limited Moffat Pty Limited 740 Springvale Road 3/142 James Ruse Drive, Rose Hill Mulgrave, Melbourne PO Box 913, Smithfield

Victoria 3171 Sydney, N.S.W. 2142 Ph: (02) 8833 4111 Fax: (02) 8833 4133 (03) 9518 3888 Ph: Fax: (03) 9518 3838

## **Western Australia**

Queensland Moffat Pty Limited Moffat Pty Limited 67 Howe Street 30 Prosperity Place Osborne Park Geebung, Brisbane WA 6017 Queensland 4034

Ph: (08) 9202 6820 Ph: (07) 3630 8600 (08) 9202 6836 Fax: Fax: (07) 3630 8623

The reproduction or copying of any part of this manual by any means whatsoever is strictly forbidden unless authorized previously in writing by the manufacturer.

In line with policy to continually develop and improve its products, Moffat Ltd. reserves the right to change the specifications and design without prior notice.

## **Contents List**

Introduction	4
Safety Precautions	5
The Electrical Power Supply	6
User Liability	
Working Safely	
Before you Start the Curl Flow II Slicer  The Key safety Features Are	8
Names of Parts	9
Hazard Risk Analysis	10
Safety Operating Procedure	12
Standard Operations Checklist	13
Operations Overview	15
Daily Cleaning Procedure	17
Guide Sheets for Staff Training  Operations Competency Checklist  Cleaning Competency Checklist	18
Fault Finding	21

## Introduction

This manual contains all the necessary information for the **installation**, **operation**, **cleaning** and **maintenance** of the machine. The purpose of this manual is to allow the user to take all measures and set up all the human and material resources needed for safe and long-lasting use of the machine.

This manual should be available for all staff and maintenance personnel authorized to use the machine.

Do not attempt to use this machine in any other way that is not in compliance with the instructions supplied.

## **Firstly**

Please read the instruction book carefully and follow the directions given. The time taken will be well spent.

#### Secondly

If you are unsure of any aspect of the installation instructions or performance of this equipment, contact your Moffat dealer promptly. In many cases a phone call could answer your question.

#### **WARNING:**

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS APPLIANCE.

#### **WARNING:**

GREAT CARE MUST BE TAKEN BY THE OPERATOR TO USE THE EQUIPMENT SAFELY.

- THE APPLIANCE MUST NOT BE LEFT 'ON' UNATTENDED.
- IT IS RECOMMENDED THAT A REGULAR INSPECTION IS MADE BY A COMPETENT SERVICEMAN TO ENSURE CORRECT AND SAFE OPERATION OF YOUR APPLIANCE IS MAINTAINED.

#### **CAUTION:**

#### This appliance is;

- For professional use and is to be used by qualified persons only.
- Only authorised service persons are allowed to carry out installation, and servicing operations.
- Components having adjustments protected (e.g. paint sealed) by the manufacturer should not be adjusted by the user/operator.

## Safety precautions

To ensure maximum safety and optimum performance from this machine it is essential that you or any other operator of the machine read and understand the contents of this manual before the machine is ever started. Pay particular attention to the SAFETY INSTRUCTIONS highlighted by these symbols.

These safety alert symbols mean CAUTION, WARNING or STOP/DANGER - a personal safety instruction. Failure to comply with the instruction may result in personal injury or death.

#### WARNING: ELECTRICITY CAN KILL

Test and tag electrical cables to workplace safety standards.



**CAUTION**Serious injury possible



**WARNING**Electric shock



STOP DANGER

# **User instructions and precautions**

The manufacturer declines all responsibility for any injury to persons or animals or damage to objects resulting from the failure to observe any of the previous or following information and instructions on the use or maintenance of the machine:

- Do not use the equipment for any purposes and / or loads different to those stated by the manufacturer;
- Every day, check the safety devices and general state of the equipment;
- Every day clean the equipment thoroughly;
- Take all the necessary precautions and safety measures when loading, adjusting, changing parts or carrying out repair or maintenance work on the machine, to make sure that the machine or any parts of it are not accidentally started up by other persons;
- Do not tamper with the guards and safety devices on the machine;
- Do not remove the guards and safety devices on the machine unless actually necessary for work
  purposes and without adopting the measures designed to reduce the risk to the minimum possible, as
  described fully and frequently in this manual;
- Put back all the guards and safety devices as soon as the reason for their temporary removal no longer exists;
- All operators must comply with applicable workplace safety procedures.

#### **Definitions**

According to this manual, the following definitions are used:

- 1. "Danger area" any area inside or near a machine which might be dangerous for a bystander.
- 2. "Bystander" any person entirely or partly situated in a danger area.
- **3. "Operator"** the person or persons installing, running, adjusting, cleaning, repairing, transporting or performing maintenance work on a machine.

# The electric power supply

The bakery must be fitted with an electrical system complying with current electrical regulations, in particular the earth connection system and electrical control board must be protected against overload currents and short circuiting. The rated power of the machine is shown on the machine plate. Electrical plant must be properly installed throughout, maintained and regularly inspected by trained electricians issuing certificates of compliance for all jobs carried out, guaranteeing compliance with current Australian legislation and Standards.

## **User liability**

#### **Working Safety**

The machine must be used only by personnel suitably trained for the purpose and who have been trained in the contents of this publication.

To ensure safe work, comply with the following instructions:

- Install the machine in compliance with workplace safe work requirements.
- Install the machine in an area away from personnel not authorised to operate it and especially out of the reach of minors.
- Use the machine with great care and never be distracted.
- Do not wear loose fitting clothing or clothing with wide and open sleeves.
- Do not let anyone approach the machine during use.
- Do not remove, cover or modify the identification plates placed on the machine body.
- Work on the products permitted and not on other types.
- Do not use the machine as a working top and do not place any objects on it that are not required for normal working operations.
- Do not use the machine with temporary electrical connections or non-insulated cables.
- Periodically check the state of the power cable and the cable clamp on the machine body. If defective replace immediately by qualified personnel.
- Stop the machine immediately there is defective or abnormal operation, a breakage is suspected, there are incorrect movements or unusual noises.
- Before cleaning or carrying out maintenance, disconnect the machine from the electricity mains.
- Use protective working gloves for cleaning and maintenance.
- For all extraordinary maintenance consult the manufacturer or qualified or authorised personnel.
- Do not aim high-pressure jets of water at the machine.
- When sharp accessories are manipulated, use cut-resistant gloves.
- Never insert hands or other objects into the product inlet or outlet.

#### Summary safety notes for owners/operators of this machine

Always operate within the limits of use of the machine.

Always carry out constant and diligent maintenance.

Have the machine used by a single trained person.

Avoid distractions while operating the machine.

## The manufacturer declines all direct and indirect liability deriving from:

- Use by untrained personnel.
- Non-observance of the instructions contained in this booklet.
- Unauthorised modifications and/or repairs carried out on the machine.
- The use of accessories and parts that are not genuine.
- Exceptional events.

# Before you start the CURL FLOW II SLICER

Before starting, undertake a General Safety check

- Area clean and free from obstructions, e.g. nothing placed on top of the machine such as a dough knife, etc.
- Operator not wearing loose fitting clothing.

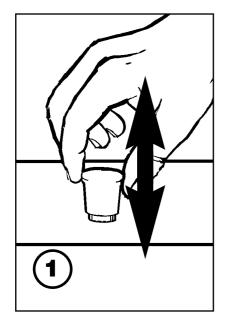
**WARNING**: Make sure the machine is switched **off** during cleaning, maintenance and lubrication When using the machine, never place hands near working areas.

Mechanical or electrical repairs must only be done by qualified service technicians.

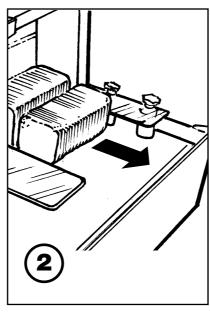
**Only one person may operate the machine at any time**. Any bystanders must keep well away from the machine.

## The key safety and hygiene features are:

- **1** Emergency stop button (Red mushroom safety switch).
- 2 Pusher will push the last loaf through the blades.
- 3 WARNING: Use Emergency Stop only in an emergency



**1** Mushroom shaped stop switch is located on the top of the machine.



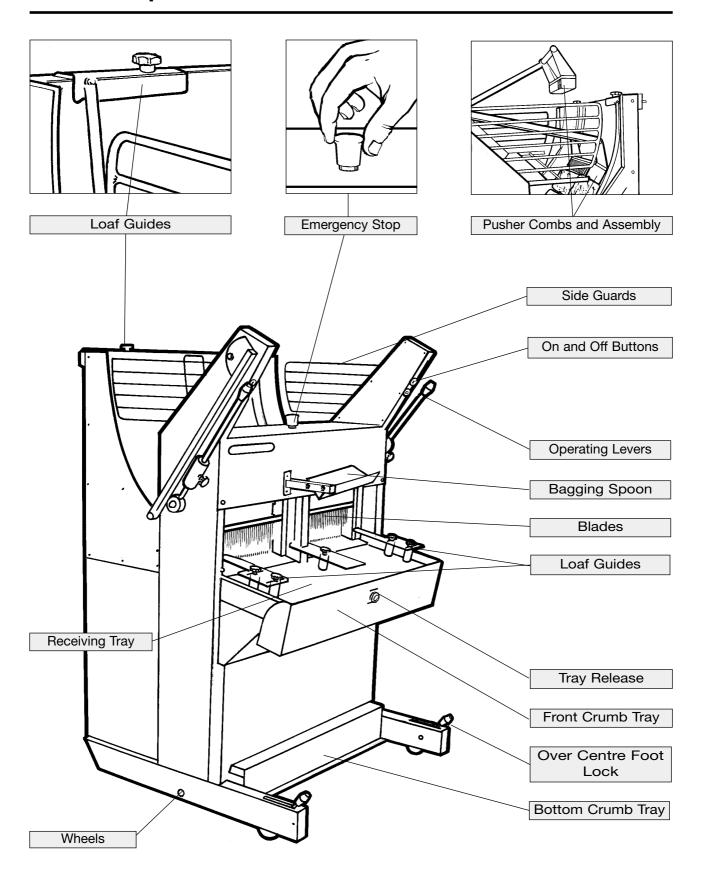
**2** Pusher will push the last loaf through the blades.





**3** Use Stop Button to stop the machine under normal conditions and Emergency Stop only in an emergency.

# Names of parts



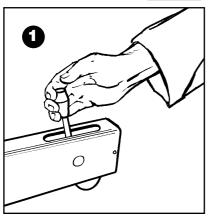
## **Hazard Risk Analysis**

## Installation

1 The over-centre foot lock at front of the machine should be used to lock the machine in position. Use black knob to rotate lever towards front of machine.

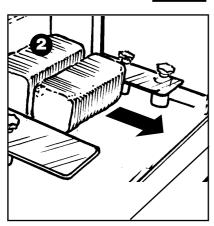
5HH9BH=CB. VYk UfY cZ dchYbh]U`d]bW!dc]bhgUfci bX `cW]b[ "Yj Yf" 'Cb`mi gY V`UW \_bcV hc Yb[ U[ Y Zcch`cW\_"Yj Yf"





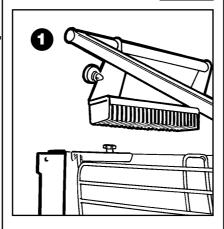
The safety guard microswitch should be checked for correct operation.





## Machine in use

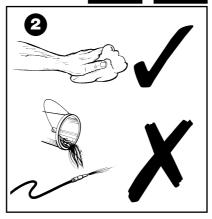
1 Check smooth operation of Pusher Assembly and that assembly contacts microswitch. (ON in the UP position and OFF in the DOWN postion).



& Cleaning of machine should only be carried out with a brush and damp cloth.
Buckets of water or a hose should not be used.

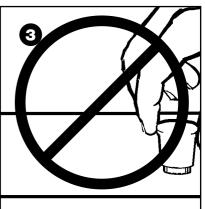






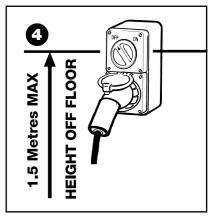
**3** Microswitches should never be removed or tampered with in any way.





- **4** Electrical isolation switch should be fully accessible to the operator.
  - 1.5 metres above the floor is a recommended height.





## **Hazard Risk Analysis**

- **5** Hands or arms should not be placed behind the side guards whilst machine is in operation.
- 8 Hands should never be placed in the blade area when the machine is operating.
- 11 The machine must be connected to the correct designated power outlet.













6 Safety guards should not be removed.

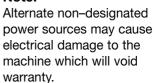


**9** Cleaning of the machine should not take place whilst it is in operation.



12



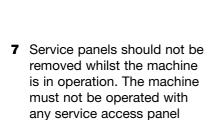




10 Thermal overloads within the **CURL-FLOW II SLICER** electrical circuitry should not be tampered with, or changed from original manufacturer's setting.



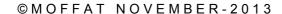




removed.







## **Safe Operating Procedure**

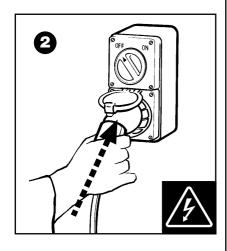
1 Check that the machine is clear of all objects and that all switches are off.

#### **WARNING:**

The operator should never tamper with or make repairs to this machine.

All maintenance other than approved cleaning operations are to be carried out by trained technicians **only**.

**2** Check or place the electrical cord in the appropriate socket and turn power **on.** 



**3** To check machine operation without product, pull out the emergency switch, pull pusher handle slightly downwards and press Start Button.

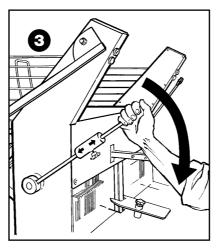
The machine should start.

Release handle upwards—the machine must stop operating immediately.

If not, do not use the machine; call supervisor and advise.



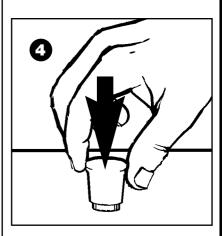




4 Test red safety cut-out operation by pushing the mushroom button in. (See below)





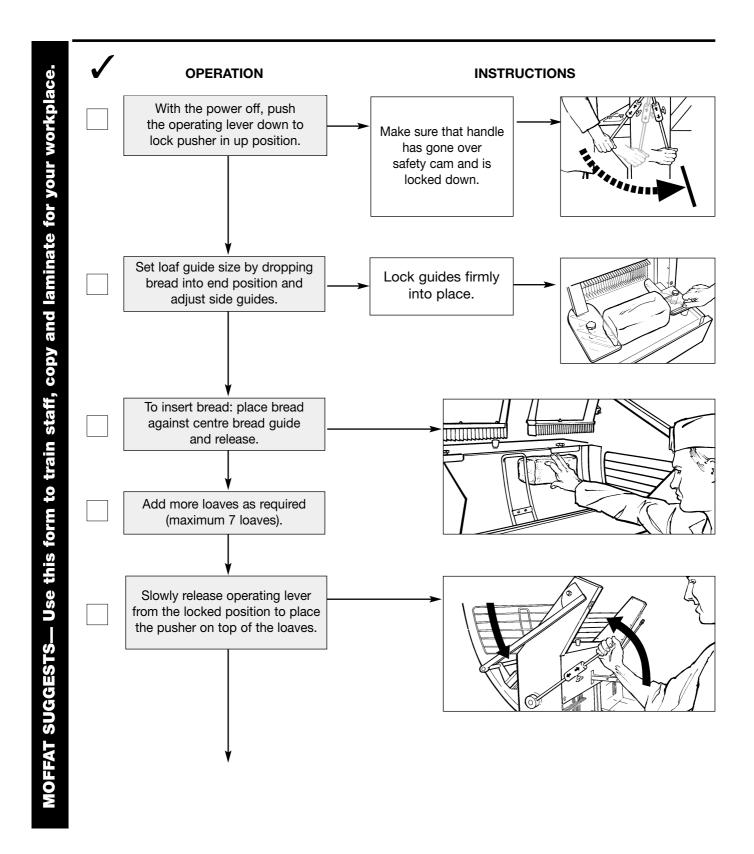


The machine must **stop** operating immediately. If not, do not use the machine; call supervisor and advise.

### Note:

Emergency stop overrides all operations. If not, call supervisor and advise.

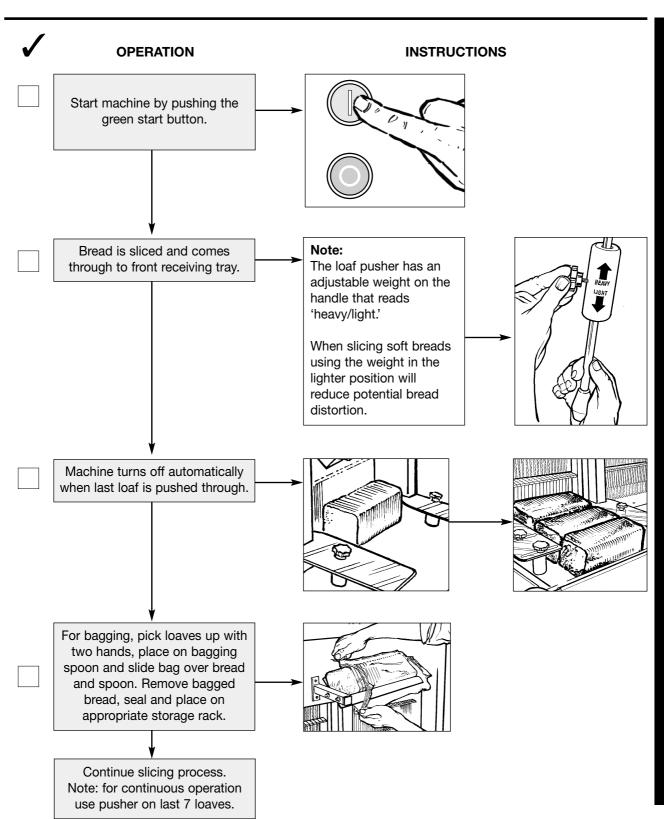
# **Standard Operations Checklist**



# MOFFAT SUGGESTS— Use this form to train staff, copy and laminate for your workplace.

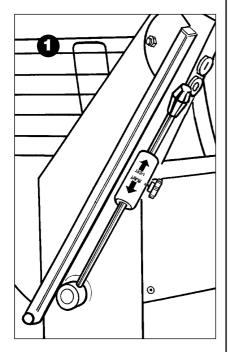
# CURL FLOW II SLICER

# **Standard Operations Checklist**

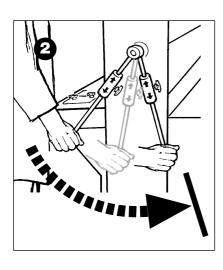


## **Operations Overview**

**1** With the power turned off, push operating lever down to lock pusher in up position.

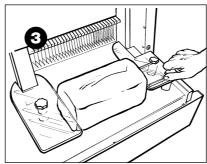


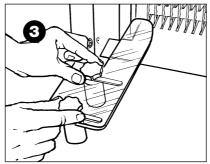
2 Make sure that handle has gone over safety cam, and is locked down.



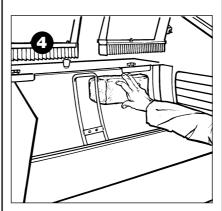
**3** Set loaf guide size by dropping bread into end position and adjust side guides.

Lock guides firmly into place.



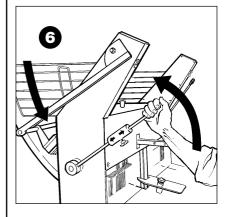


4 Insert loaves by placing bread in centre of bread guide, and release.

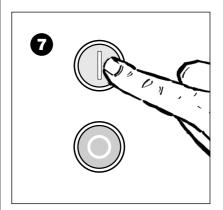


**5** Add more loaves as required (maximum 7 loaves).

6 Slowly release operating lever from the locked position to place the pusher on top of the loaves.

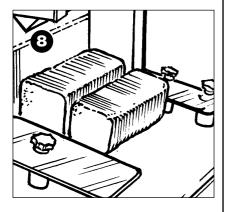


**7** Start machine by pushing the green start buttom.

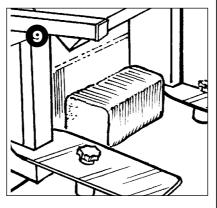


## **Operations Overview**

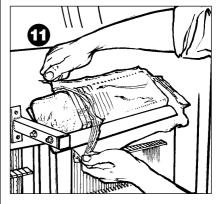
8 Bread is sliced and comes through to front receiving tray.



**9** Machine turns off automatically on single loaves.



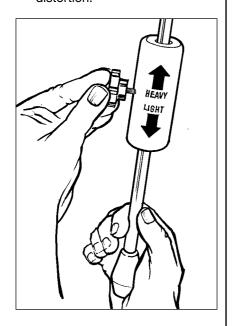
11 Slide bag over bread and spoon. Remove bagged bread, seal and place on appropriate storage rack.



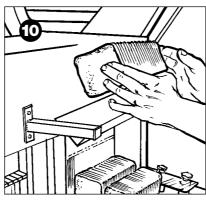
Note:

The loaf pusher has an adjustable weight on the handle that reads 'heavy/light.'

When slicing soft breads, using the weight in the lighter position will reduce potential bread distortion.



**10** For bagging, pick loaves up with two hands, and place on bagging spoon.

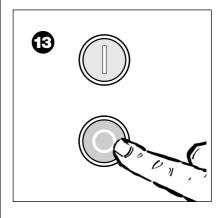


12 Continue the slicing process.

Note:

For continuous operation, use pusher on last few loaves.

**13** Stop machine by pushing the red stop buttom.

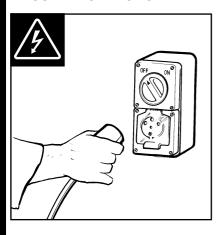


©MOFFAT NOVEMBER-2013

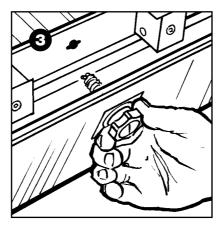
## **Daily Cleaning Procedure**

## **WARNING**

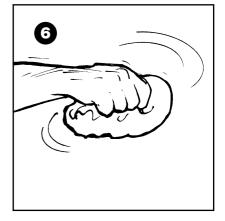
Electrically isolate the **CURL-FLOW 2 SLICER** 



3 Release catch on front crumb trav.



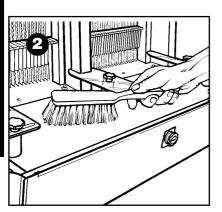
6 Clean all surfaces with a damp cloth.



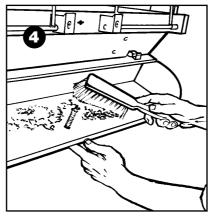
- Brush off all external surfaces. Use a bannister brush and work from top to bottom.



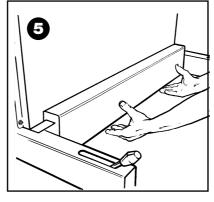
2 Brush crumbs into front crumb tray.



4 Sweep crumbs into bin. Close crumb tray and secure catch.



**5** Pull out bottom crumb tray, and empty crumbs into bin. Slide crumb tray fully in.



- 7 Re-examine all surfaces to evaluate whether cleaning has been effective.
- 8 Remove the lower rear panel (elastic strap at each side).

#### Note:

For safety reasons, the slicer will not operate whilst the panels are removed. Ensure panels are correctly fitted on completion of cleaning and maintenance.

Brush out any crumbs into the crumb tray. Empty the crumb tray. Refit and secure the rear panel.



©MOFFAT NOVEMBER-2013

# GUIDE SHEETS for Staff Training

Pages in the following section of this manual should be copied and used when training staff to operate the

#### **CURL-FLOW II SLICER.**

MOFFAT suggests that competency assessment check lists be completed and signed, and a copy kept in the personnel files for future reference.

# SUPERVISORS TO ENSURE

- competency check lists are copied and completed as part of the training of staff
- correct training of staff to the required competency expectations
- sign off the verification section of the competency check list
- place a copy of the completed and signed competency check list in personnel records as evidence of operator competence

# **Operations Competency Checklist**

Element Safe work procedures.				
/	Assessment Criteria			
	"Can the operator"  Identify the purpose and use of:			
	Identify:  • Machine related health and safety risks of this equipment?  • Emergency procedures to be used with this equipment?			
	Operate this equipment correctly in normal and emergency situations?			
	Identify:  • OH&S reporting procedures related to hazard reporting for this machine?			
Con	nments			
-	competency in the use of the CURL FLOW II SLICER, the assessor must be satisfied that erator has consistently applied the knowledge and skills in all of the above elements.			
	This form should be signed off only when the assessor is satisfied that the employee/trainee is competent to carry out all of the tasks described above.			
	Applicant's signature Date / /			
	Assessor's signature Date / /			

# **Cleaning Competency Checklist**

## **Element**

Implement essential hygiene and sanitation procedures.

#### **Assessment Criteria**

#### "Can the operator"

Maintain sound personal hygiene at all times when working with the CURL FLOW II SLICER?

Use appropriate protective and work clothing while working with the CURL FLOW II SLICER?

#### Identify:

- Product handling requirements during production process?
- Critical points in the process where contamination can be introduced?
- Why it is important to monitor hygiene and sanitation performance?
- The effect of poorly maintained equipment on the control of contamination and spoilage?
- Company policies and procedures regarding hygiene and sanitation?
- Actual and potential contamination and spoilage hazards?
- Solutions to rectify contamination and spoilage problems?

Use work practices and methods that reduce the risk of product contamination?

Remove contamination where appropriate in accordance with:

- Workplace hygiene and sanitation procedures?
- Procedures specific to the CURL FLOW II SLICER?

Comments					
To gain competency in the use of the CURL FLOW II the operator has consistently applied the knowledge					
This form should be signed off only when the assessor is satisfied that the employee/trainee is competent to carry out all of the tasks described above.					
Applicant's signature	Date / /				
Assessor's signature	Date / /				

# **Fault Finding**

Problem	Possible cause	Remedy
The CURL-FLOW II SLICER does not operate/start.	Not plugged in to socket at main switch.	Plug in and switch on.
	The main wall switch is "off".	Turn on.
	Fuse overload at the power board.	Contact supervisor.
	The machine overload has been activated.	Resets automatically (10 minutes).
	Emergency Stop button is still locked in OFF position.	Release by rotating and pulling.
	Green start button not pushed.	Push start button.
The CURL-FLOW II SLICER motor starts but the blades do not move.	Belt has broken or has come off.	Contact supervisor/Moffat Service Agent.
The CURL-FLOW II SLICER labours under load and distorts	Belts slipping.	Contact supervisor/Moffat Service Agent.
the bread slice.	Blades blunt.	Contact supervisor/Moffat Service Agent to change blades.
The CURL-FLOW II SLICER moves or rocks during operation.	Floor not level or the adjustable feet located incorrectly.	Re-adjust level and stabilise by means of adjustable feet.
The CURL-FLOW II SLICER does not stop.	Electrical/mechanical malfunction.	Switch off power at main switch. Isolate CURL-FLOW II SLICER by removing wall plug. Attach danger tag to machine. Contact Moffat Service Agent.
Tank loaves or Viennas may roll on blades and not come through slicer	Shape of bread not giving grip.	Apply more pressure to pusher handle.
(loaf bounce).	Blunt blades.	Change blades—call Moffat service agent.
Squashed or distorted product.	Blunt blades.	Change blades—call Moffat service agent.
	Product too hot.	Allow product to cool before slicing.

## **Risk Assessment**

The following risk assessment covers the reasonably foreseeable hazards to health and safety arising from the **CURL FLOW II** SLICER and from systems of work associated with this machine.

Hazard identified	Existing controls	Consequences Catastrophic Major injuries Moderate injuries Minor injuries Insignificant injuries	<b>Likelihood</b> Almost certain Likely Possible Unlikely Rare	Risk rating High unacceptable Significant Moderate Low
Cleaning the machine with buckets of water or hoses is extremely dangerous and may lead to electrocution. The machine must be cleaned with a damp cloth only.	Clear warning guidelines on machine. Safe work practices included in training manual.	Catastrophic	Rare	Significant
Microswitches on pushers should never be removed or tampered with, otherwise machine could continue working with arms near moving parts.	Safe work guidelines reinforce non-authorised tampering with the machine. Access to microswitches service item only.	Major injuries	Rare	Significant
Electrical isolation switch should be fully accessible to the operator. Recommend no more than 1.5 metres above the floor.	Dependent on store electrical policy.	Major injuries	Rare	Significant
Safety guards should not be removed.	Guards prevent access to moving parts.	Major injuries	Unlikely	Significant
Service panels should not be removed whilst the machine is in operation. The machine must not be operated with any service access panel removed.	Designed to be accessed by authorised service technicians only. Warning signs clearly evident.	Major injuries	Unlikely	Significant
Hands or arms should not be placed in blade area while machine is in operation.	Training checklist in manual reinforces this not to be done.	Major injuries	Unlikely	Significant
Cleaning of machine should not take place whilst it is in operation.	Correct cleaning procedure detailed in training procedure.	Major injuries	Unlikely	Significant

## **Risk Assessment**

The following risk assessment covers the reasonably foreseeable hazards to health and safety arising from the **CURL FLOW II** SLICER and from systems of work associated with this machine.

Hazard identified	Existing controls	Consequences Catastrophic Major injuries Moderate injuries Minor injuries Insignificant injuries	Likelihood Almost certain Likely Possible Unlikely Rare	Risk rating High unacceptable Significant Moderate Low
Finger could be caught between pusher arms and side guard while cleaning.	Correct operator training for cleaning process.	Moderate injuries	Unlikely	Moderate
Cutting finger when cleaning blade assembly.	As above.	Minor injuries	Unlikely	Low
The machine should never be connected to alternate power source other than which has been designed for that machine by the store designer.	External plug designed to Australian Standards for the appropriate power supply.	Major injuries	Rare	Significant

## **Risk rating**

Extreme risk; immediate action required.

High risk; senior management attention needed.

Moderate risk; management responsibility must be specified.

Low risk; manage by routine procedures.

Based on AS4360 1999 Risk Management.