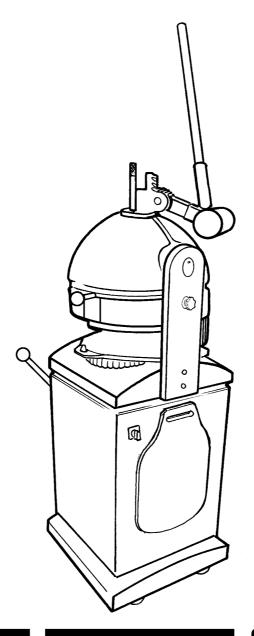
# Safe Operating Procedures

# TRAINING MANUAL



**Current February 2003** 

Contains 25 pages

MOFFAT

#### **CONTENTS**

- · About this instruction manual
- User liability
- Safety precautions
- Before you start
- Name of parts
- Hazard risk analysis
- Safe operating procedures
- Description of control panel
- Understanding the control panel
- · Working the machine
- Operations checklist
- Cleaning procedure
- Operations competency
- Daily cleaning competency
- Trouble shooting
- Risk assessment

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## **About this instruction manual**

This manual contains all the necessary information for the **use, cleaning** and **maintenance** of the machine. The purpose of this booklet 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 authorised 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.

#### Secondly

If you are unsure of any aspect of the instructions or performance of this equipment, contact your dealer promptly.

## 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, 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.



## 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 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. Ensure 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 necessary for maintenance purposes 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.



## Before you start the AUTOMATIC ROBOT

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.

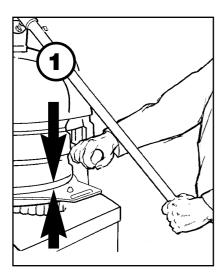
**WARNING**: Make sure the machine is switched **off** during cleaning, maintenance and lubrication When using the machine, never place hands near working areas.

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

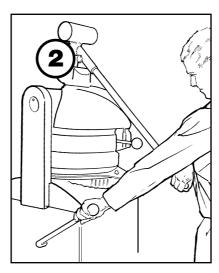
Only one person may operate the machine at any time. Any bystanders must keep well away from the machine.

## The key safety and hygiene features are:

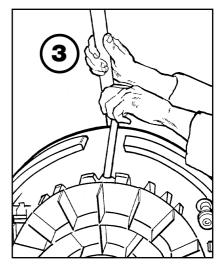
- **1** Two handed safe operation during cutting.
- 2 Guarded Head operation during rounding.
- **3** Two handed safe operation during cleaning operation to expose the Blades.



**1** Two handed safe operation during cutting.



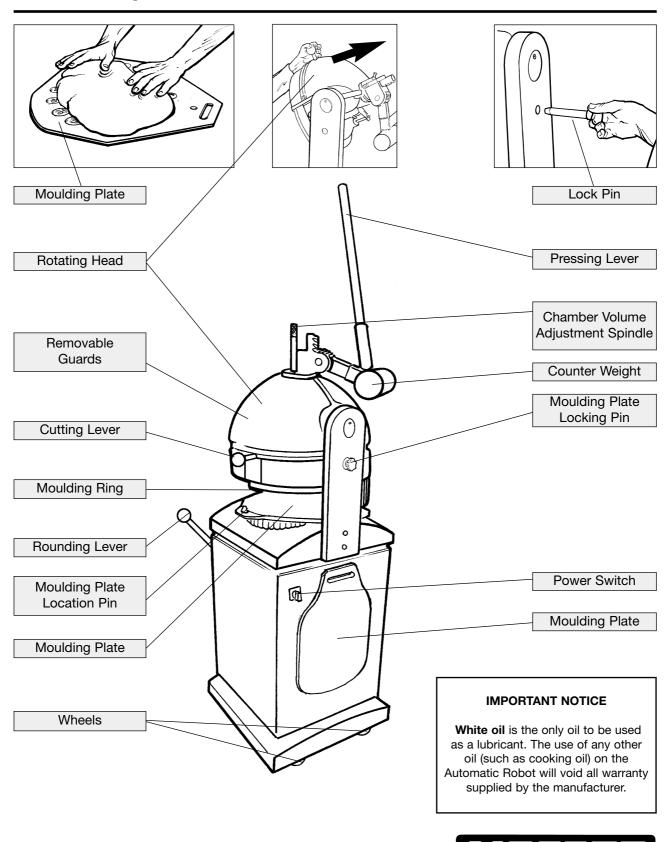
**2** Guarded Head operation during rounding.



**3** Two handed safe operation during cleaning operation to expose the Blades.



## Names of parts

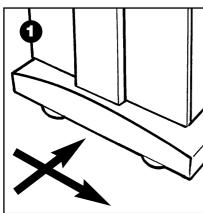


## **Hazard Risk Analysis**

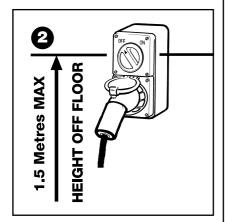
#### Installation

 Locate the machine on a flat even surface and ensure stability.





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



#### Machine in use

#### **WARNING:**

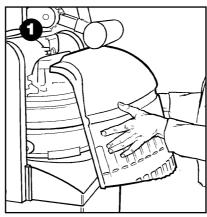
Only qualified employees may operate this machine. Single person operation only.

Other persons should keep well clear of the machine.



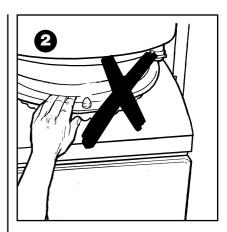
**1 Never** remove guards when the machine is operating.





2 Extreme caution must be taken not to allow fingers near dough press, Moulding Ring and Rounding Plate during operation.

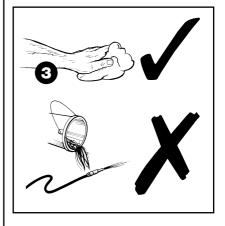




3 Cleaning machine should only be carried out with a damp cloth. Buckets of water or a hose should not be used







**4** Ensure single person operation only.

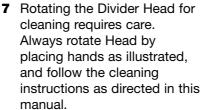
Ensure no one is in the danger area while operating the cleaning cycle.

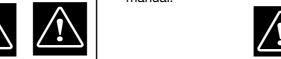


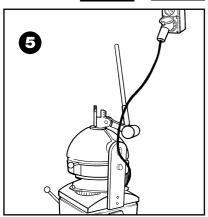


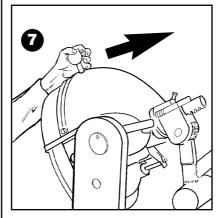
## **Hazard Risk Analysis**

5 Never allow electrical cord to become jammed, wrapped around or over the machine in case it is severed by the action of the machine.







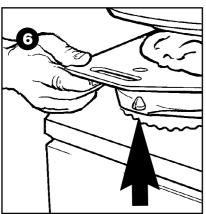


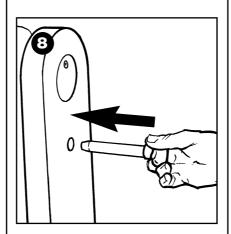
## **WARNING:** Electricity can kill.

**6** When inserting Moulding Plate into the machine, always ensure that it locates over the locking pin.

**8** Use hand pressure to locate the Locking Pin: **NEVER** hit the pin with a hard object.









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## **Safe Operating Procedure**

#### **WARNING:**

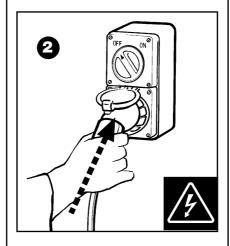
Only qualified employees may operate this machine. Single person operation only.

1 Check that all switches are in the OFF position and that the machine is clear of all objects before proceeding to step 2.

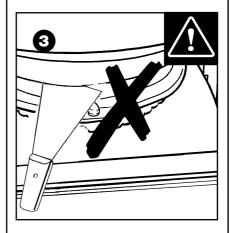
#### **WARNING:**

The operator should never tamper with or make repairs to this machine. All maintenance other than approved cleaning operations to be carried out by trained technicians **only**.

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



3 During normal dividing and rounding operation, do not place any instruments between the ring and the oscillating part of the machine.



**4** Divide and round the dough according to workplace procedures.



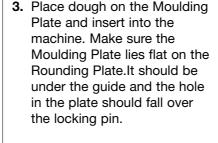
## Working the machine

#### **WARNING:**

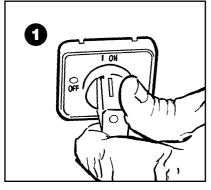
Only qualified employees may operate this machine. Single person operation only.

Other persons should keep well clear of the **danger area**.

1. Turn the power Switch ON.



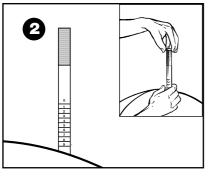
5. Holding the Pressing Lever down, pull the Cutting Lever to the right to lower the Blades. This action will cut the compressed dough piece into equal sized pieces.



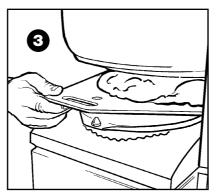
#### Note:

The display on the control panel will light up and give a short instruction concerning the working of the machine. Program choice 1 will appear in the display. The machine is now ready for use.

2. Turn the spindle setting to adjust the volume of the rounding chamber to suit the weight of the dough piece to be divided. The correct setting depends on the dough consistency.



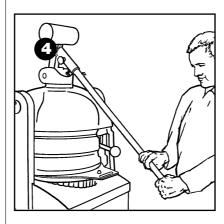
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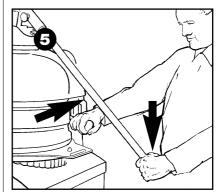


#### **WARNING:**

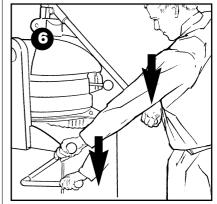
Inserting the Moulding Plate improperly can cause severe damage to the machine!

**4.** Use the Pressing Lever to compress the dough on the Moulding Plate. Pull down as far as possible.



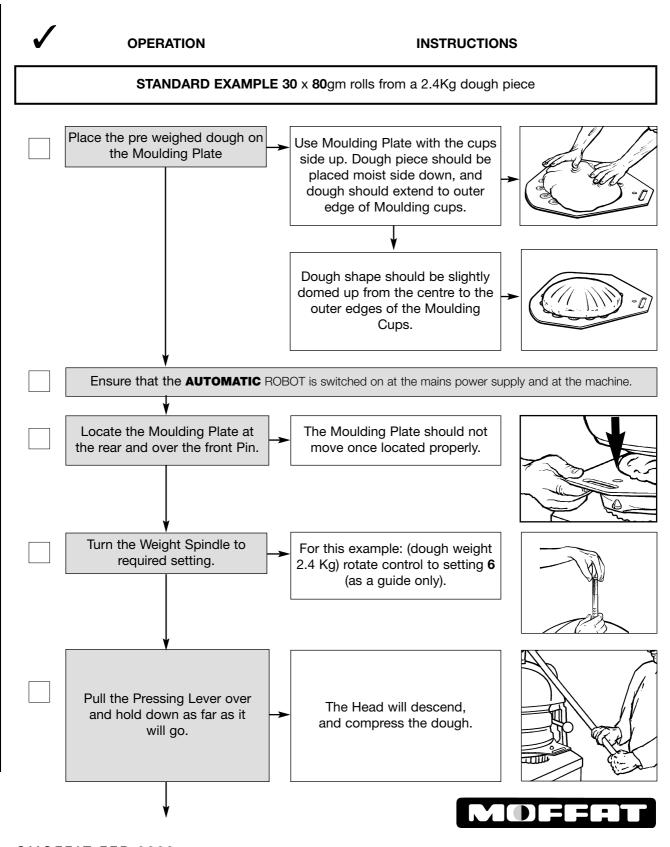


6. Continue to hold the Pressing Lever down and pull down the Rounding Lever. This will round the cut dough pieces as required.

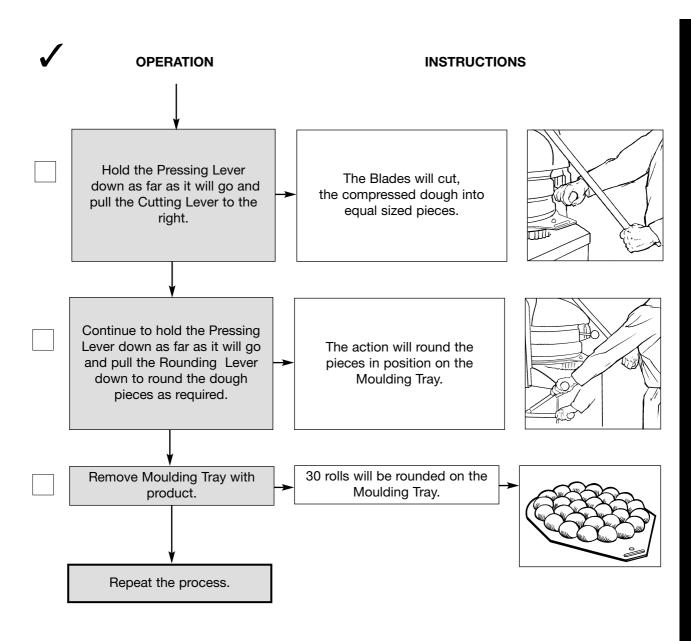




## **Standard Operations Checklist**



## **Standard Operations Checklist**





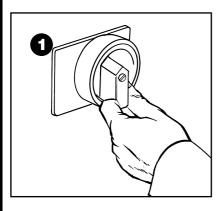
## **Cleaning Procedure**

#### **WARNING:**

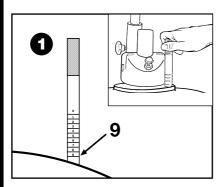
Only trained employees may clean this machine. Single person operation only.

Other persons should keep well clear of the **danger area**.

**1.** Turn the Power Switch **OFF** and remove plug from socket.

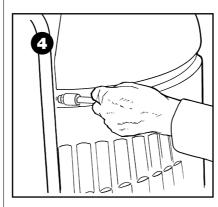


 Wind the Spindle Setting Adjuster to the maximum height setting - highest number (9) before starting dis-assembly.

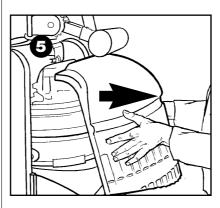


3 Roll the machine forward to access the rear of the machine.

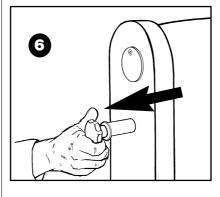
4 Undo the two screws on rear Safety Guard with socket wrench.



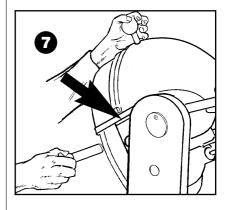
**5.** Remove the rear Safety Guard and place on work bench.



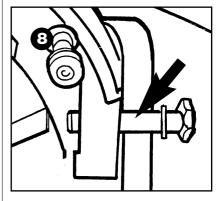
**6.** Draw out Locking Pin from right hand side of head.



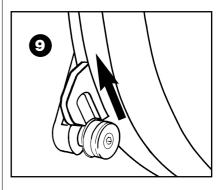
7 While rotating the Head, using the Cutting Lever, insert the Locking Pin into the hole as indicated.



8 Illustration shows the Pin correctly in place.



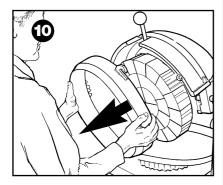
**9** Rotate to the left and remove the Moulding Ring.



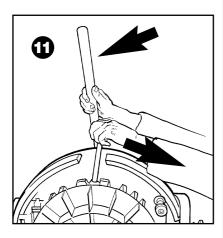


## **Cleaning Procedure continued**

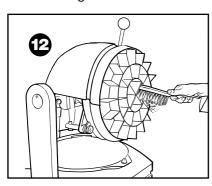
**10** Place the Moulding Ring securely on a bench.



11 Move the Pressing Lever into the pressing position and pull the Cutting Lever to the right to expose the Blades.

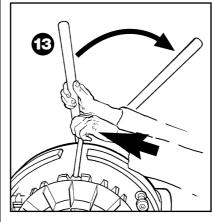


12 Using a plastic scraper and a bannister brush, carefully clean all exposed surfaces including Blades and Rounding Plate.

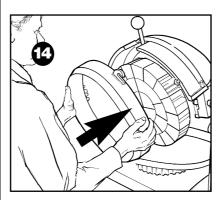


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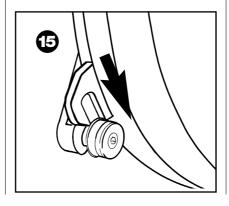
13 After cleaning, return the Blades to the normal operating position by pushing the Cutting Lever to the left and returning the Pressing Lever to its "at rest" position.



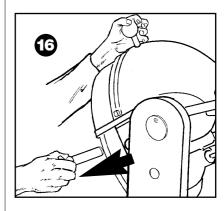
14 Refit the Moulding Ring.



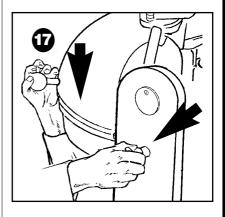
**15** Rotate the Moulding Ring to the right to lock it back into position.



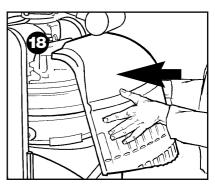
16 Remove the Locking Pin.



17 Pull down on the Cutting Lever to return the Head to the vertical position and replace the Locking Pin to secure the Head.



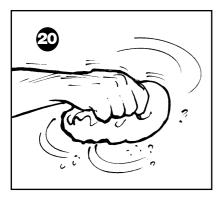
**18** Replace the rear Safety Guard and tighten screws with a socket wrench.





## **Cleaning Procedure continued**

- **19** Brush off all external surfaces Use a bannister brush and work from top to bottom.
- **20** Wipe all surfaces with a damp cloth. Dry all external surfaces.



21 Wheel the machine back to its correct location. The DR2 Divider Rounder is now ready to re-commence operation.

#### **WARNING:**

Make sure that there is no dough residual between the Moulding Plate and the Rounding Plate. This will cause damage to the Blades and the Rounding and Moulding Plates during operation.

#### NOTE:

This procedure will need to be carried out at least daily, or more regularly in busy bakeries.



# GUIDE SHEETS for Staff Training

Pages in the following section of this manual should be copied and used when training staff to operate the **DR2** Bun Divider Rounder 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 staff training.
- 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**

Elem	Implement safe work procedures for the the DR2 Bun Divider Rounder				
<b>√</b>	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?				
Com	ments				
_	ompetency in the use of the <b>DR2</b> Bun Divider Rounder the assessor must be satisfied that stor 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 / /				



## **Daily Cleaning Competency Checklist**

Element Implement essential hygiene and sanitation procedures for the DR2 Bun Divider Rounder				
<u> </u>	Assessment Criteria			
	"Can the operator" Maintain sound personal hygiene at all times when working with the DR2 Bun Divider Rounder?			
	Use appropriate protective and work clothing while working with the DR2 Bun Divider Rounder?			
	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 <b>DR2</b> Bun Divider Rounder?			
Con	nments			
-	competency in the use of the <b>DR2</b> Bun Divider Rounder the assessor must be satisfied that trator 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 / /			



## **Machine Based Trouble Shooting**

Problem	Possible cause	Remedy
The <b>DR2</b> Bun Divider Rounder does not operate/start.	Not plugged in to socket at main switch.	Plug in and switch on.
	The main switch is <b>OF</b> F.	Turn on at mains supply.
	Fuse overload at the power board.	Contact supervisor/Moffat Service Agent.
	The Power Switch is <b>OF</b> F.	Switch "ON" the Power Switch.
The <b>DR2</b> Bun Divider Rounder starts and then stops.	Fuse overload at the powerboard.	Contact supervisor/Moffat Service Agent.
	Mechanical malfunction.	Attach DANGER TAG to machine control panel.
The <b>DR2</b> Bun Divider Rounder does not switch "OFF".	Electrical/Mechanical malfunction.	Switch <b>OFF</b> power at main switch Isolate the machine by removing the plug.
		Attach DANGER TAG to machine control panel.
		Contact supervisor/Moffat Service Agent.
The <b>DR2</b> Bun Divider Rounder labours during rounding sequence.	Incorrect weight on Spindle Setting adjustment.	Increase weight on Spindle Setting adjustment to accommodate larger dough piece. Refer to product based trouble shooting, page 24.
The <b>DR2</b> Bun Divider Rounder Rounding Plate operates in the wrong direction.	Inserting the power supply plug in a non compatible socket.	Switch <b>OFF</b> power at main switch Isolate the machine by removing the plug.
		Attach DANGER TAG to machine control panel.
		Contact supervisor/Moffat Service Agent.
	Inserting power supply plug into incorrect socket after cleaning.	Insert power supply plug into correct socket.



## **Machine Based Trouble Shooting continued**

Problem	Possible cause	Remedy
The <b>DR2</b> Bun Divider Rounder Moulding Plate scored or damaged	Moulding Plate not located correctly when rounding.	Locate Moulding Plate correctly.
during moulding.	Damaged or broken Divider Blade.	Contact supervisor/Moffat Service Agent.
	Dough residue on Rounding Plate.	Refer to cleaning procedures in this manual.
The <b>DR2</b> Bun Divider Rounder Dividing Blades do not engage/divide dough correctly.	Dirty Divider Blades.	Refer to cleaning procedures in this manual.
The <b>DR2</b> Bun Divider Rounder Head swivels during normal operation.	Locking pin left out.	Correctly insert locking pin.
The <b>DR2</b> Bun Divider Rounder	Locking pin left in.	Remove pin.
Head does not rotate through 90 degrees during cleaning process.	Rear Guard not removed.	Remove Rear Guard.



## **Product Based Trouble Shooting**

Problem	Possible cause	Remedy
The dough pieces do not have the same weight.	Dough piece is not centred on the Moulding Plate.	Ensure the dough is placed evenly in the centre of the Moulding Plate, and within the circles of the Plate. Dough shape should be slightly domed up from the centre to the outer edges.
	The Moulding Ring is not level with the Rounding Plate.	Check the Moulding Ring has been correctly fitted.
	Excessive rest time prior to placing dough into Automatic Robot.	Process dough quicker as per company approved standard work place practices.
The dough pieces have not been rounded enough.	Weight Spindle adjustment too high.	Set weight spindle adjuster to a lower setting.
	Insufficient Rounding time.	Increase Rounding time.
		N.B. a combination of both the above may be necessary.
The dough pieces have a dot on top.	Weight Spindle adjustment too low.	Set weight spindle adjuster to a higher setting.
	Dough piece may be outside the capacity of the machine.	Ensure dough piece is within 40 – 120 grams (3.6 kg. Total).
The dough pieces have a damaged skin.	Rounding time too long.	Decrease Rounding time.
The dough leaks out between the Moulding Ring and the Rounding	Pressing time too long.	Decrease Pressing time
Plate.	Incorrectly pre-weighed dough piece.	Ensure dough piece is within 40 – 120 grams (3.6 kg. Total).
Foreign matter in dough.	Dough cross-contamination.	Thoroughly clean Automatic Robot between different dough types.
	Inappropriate cleaning.	Consult cleaning section in this manual and follow correct procedure.
	Poor ingredient quality.	Contact ingredient supplier.
	Machine malfunction.	Contact Supervisor/Moffat Service Agent.
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## **Risk Assessment**

The following risk assessment covers the reasonably foreseeable hazards to health and safety arising from the **DR2** Bun Divider Rounder 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 Extreme risk High risk Moderate risk Low risk
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.	Safe work practices and specific cleaning procedures included in this manual.  Site supervision, inspection and training as detailed in this manual.	Catastrophic	Rare	High
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	High
Operating machine without safety guards may present a trap/crush hazard.	Instructions in manual requires guards in place during normal operation. Machine carries clear warning signs.  Site supervision, inspection and training as detailed in this manual.	Major injuries	Unlikely	High
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. Site supervision, inspection and training as detailed in this manual.	Major injuries	Unlikely	High



## **Risk Assessment**

The following risk assessment covers the reasonably foreseeable hazards to health and safety arising from the **DR2** Bun Divider Rounder 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 Extreme risk High risk Moderate risk Low risk
Ensure that fingers or instruments are not placed between Oscillating Ring and Oscillating Plate.	Machine requires two hands to fully operate.  Safe work practices reinforce keeping hands away from operating surfaces.  Warning signage on machine.	Major injuries	Unlikely	High
	Site supervision, inspection and training as detailed in this manual.			
Draping electrical cord over machine. Electric cord caught between operating parts of the machine.	Cable locating holder on back of machine must be used.  Site supervision, inspection and training as detailed in this manual.	Catastrophic	Rare	High
Rotating the <b>DR2</b> Bun Divider Rounder Head on its side for cleaning can require physical effort and co-ordination.	Safe and efficient procedures outlined in manual.  Site supervision, inspection and training as detailed in this manual.	Major injuries	Unlikely	High



## **Risk Assessment**

The following risk assessment covers the reasonably foreseeable hazards to health and safety arising from the **DR2** Bun Divider Rounder 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 Extreme risk High risk Moderate risk Low risk
Unbalancing the <b>DR2</b> Bun Divider Rounder while the Head is on its side for cleaning, causing it to fall over.	Machine must be kept on a stable level surface.  Safe operating procedure highlight appropriate cleaning process.  Site supervision, inspection and training as detailed in this manual.	Major injuries	Unlikely	High
Blade edges may present a cut hazard during cleaning.	Safe operating procedures detailed in manual.  Site supervision, inspection and training as detailed in this manual.	Minor injuries	Unlikely	Low

#### **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.

