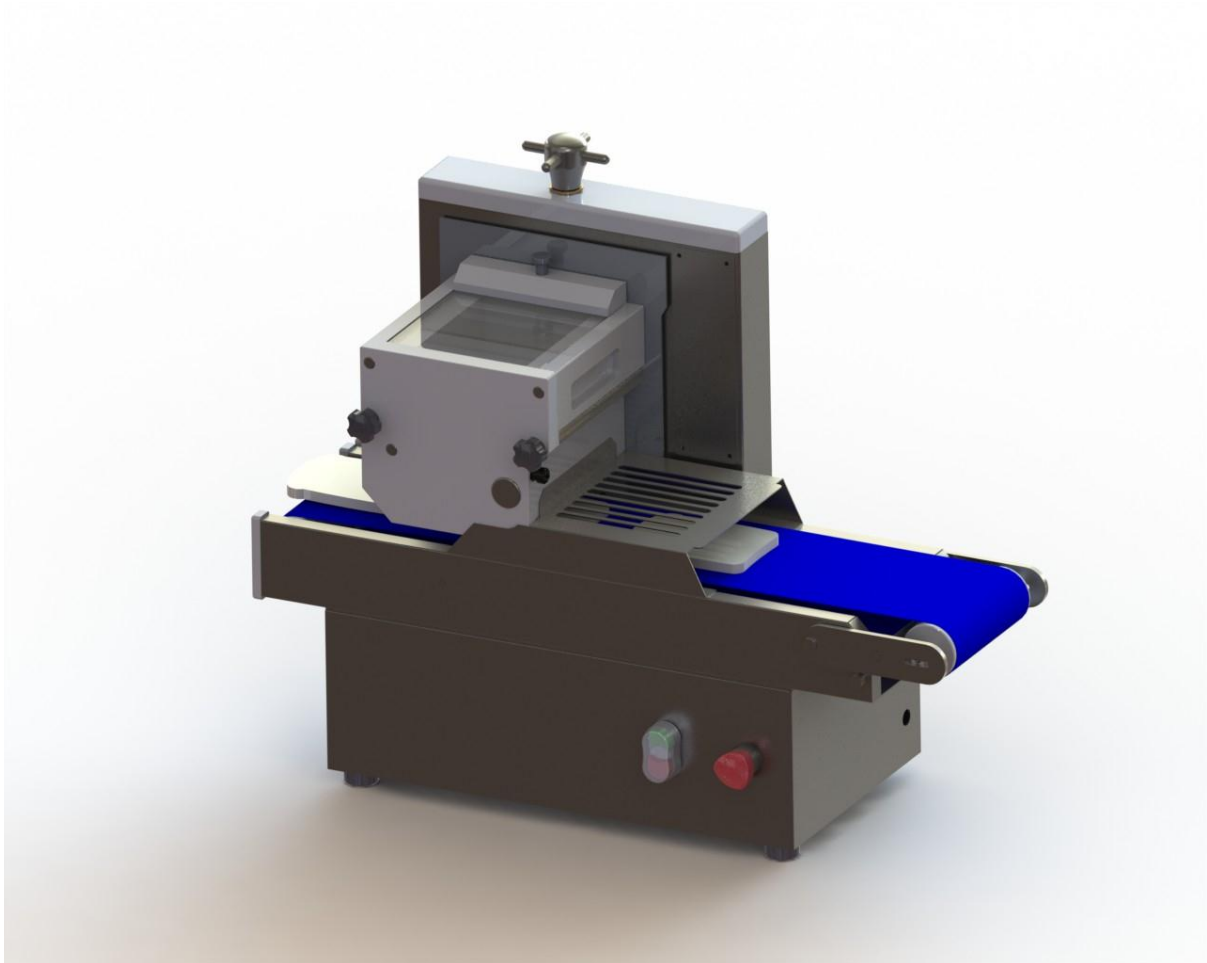


# COMMERCIAL SPREAD-MATIC

Instruction manual



**DEIGHTON**  
MANUFACTURING LIMITED

Gibson Street, Leeds Road, Bradford,  
West Yorkshire, England. BD3 9TR  
Telephone: +44 (0) 1274 668771 Fax: +44 (0) 1274 665214

# **COMMERCIAL SPREAD-MATIC**

This manual provides information on the Commercial SPREAD-MATIC with instructions on installation, operation, cleaning and maintenance.

## **CONTENTS**

- 1.0 Introduction
- 2.0 Technical Specification
- 3.0 Safety
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- 9.0 Recommended Spares List
- 10.0 Wiring Diagrams
- 11.0 Declaration of Conformity

## **GUARANTEE**

The machine is guaranteed for twelve months against breakdown. The items not covered under guarantee are those which wear through normal operation. Replacements are readily available from the manufacturer.

## **Section 1.0 INTRODUCTION**

### **1.1 SIMPLE AND SMOOTH OPERATION**

This booklet should be read before attempting to use the machine, training is also recommended.

The Deighton Manufacturing Commercial SPREAD·MATIC is a stand alone bread buttering machine, which can also be incorporated into a sandwich making line. It can be used to spread butter, margarine, butter containing ingredients, tomato puree or mayonnaise achieving a high quality consistency.

Certain types of spread are not suitable for use in the SPREAD·MATIC, i.e. cooking butter and some margarines containing minimal amounts of fats.

The SPREAD·MATIC can cover sliced bread, soft rolls, baps, scones and tea cakes up to a thickness of 30mm.

The butter-box is accessed by the safety guarded lid. A set of easy to use controls operate the buttering rollers and conveyor belt.

Once the process is complete the butter-box and conveyor belt can be removed for cleaning.

The unit is controlled from the front of the machine, the stop and start controls are situated on the electrical enclosure. Spread thickness is set using a knob on the butter-box, height adjustment is set with the knob on the top of the machine.

### **1.2 HYGIENE**

The SPREAD·MATIC assembly is of a stainless steel and Delrin construction which lends itself to ease of cleaning. All controls are sealed to at least IP67.

## Section 2.0      TECHNICAL SPECIFICATION





### 2.1      RATINGS AND SPECIFICATIONS:

<b>COMERCIAL SPREAD·MATIC</b>			
Model No's	<b>C230</b>		<b>C120</b>
Region	UK	EU	US
ELECTRICAL SPECIFICATIONS.			
<b>Voltage</b>	230 VAC		120 VAC
<b>Frequency</b>	50 Hz		60 Hz
<b>Power</b>	65 W		90 W
<b>Input Supply requirements</b>	230V, 50Hz 13A	230V, 50Hz 16A	120V, 60Hz 10A
<b>Cordset</b>	3 Core 0.75 mm <sup>2</sup> (L,N+E) supplied with a moulded plug.  UK model fitted with 13 Amp fuse.		2 wire + Gnd (3 x 18 Awg, SVT, 300V, 60°C VW-1)
<b>Input Protection</b>	The SPREAD·MATIC is to be connected to an appropriately rated Branch Circuit protected supply.  <b>THIS MACHINE MUST BE GROUNDED/EARTHED.</b>		
ENVIRONMENTAL			
<b>Operating Temperature:</b>	16°C to 25°C (61°F to 77°F)		
<b>Altitude:</b>	Less than 2000 m		
<b>Noise:</b>	Emissions do not exceed 70 dB at workstation position		
MECHANICAL			
<b>Dimensions:</b>	Length    -    722 mm Depth     -    291 mm Height    -    586 mm		
<b>Weight (Approx):</b>	40 kg (88.2 lbs)		
<b>Hopper Capacity:</b>	1 Litre		
<b>Belt Speed Approx:</b>	12m/min		
<b>Bread Width Max:</b>	135mm		
<b>Bread Thickness:</b>	5 to 30mm		
<b>Output Approx:</b>	3000 slices per hour		
<b>Spread Weight per Slice Max:</b>	8 g		

## Section 3.0 SAFETY INSTRUCTIONS

### 3.1 SAFETY SYMBOLS

The following safety symbols, are used and maybe referenced on the Commercial SPREAD·MATIC and within the supporting documentation.

SYMBOL	MEANING
	<b>Protective Earth</b>
	<b>Warning or caution.</b> A hazard or caution may exist, refer to the appropriate section within this instruction manual.
	<b>Moving Parts</b>
	<b>Heavy weight, lifting required by two persons</b>

## 3.2 SAFETY INSTRUCTIONS

- The SPREAD·MATIC contains no serviceable or re-useable parts.
- All cleaning and servicing requires the equipment to be isolated from the power source and disconnected.
- The SPREAD·MATIC weighs in the excess of 40kg (88.2 lbs) and requires 2 persons to lift.
- Should a fault occur with the SPREAD·MATIC, immediately isolate and disconnect the incoming power.
- When the machine is being transported it should be sat firmly on its feet. The machine should be strapped upright to a flat pallet during transport.
- When the machine is not in use power should be disconnected.
- Ensure the equipment is installed, operated and maintained by trained and authorised personnel.
- Always make sure that there are no hard items in the mix as they can damage your machine.
- Keep hands and loose clothing away from the machine when in operation.
- Always isolate the machine before cleaning or maintenance.
- Always ensure the machine is level when in use.
- In an emergency press the red 'E' stop button situated on the front of the control box.
- The machine should be used as provided and should not be tampered with nor altered as the machine contains inbuilt safety systems which could be compromised by any interference.
- Ensure safe storage/positioning of electrical cabling. Should the electrical cable become damaged do not operate the SPREAD·MATIC.

## Section 4.0 INSTALLATION

The SPREAD·MATIC is delivered as a complete unit. This machine is designed to be used indoors only.



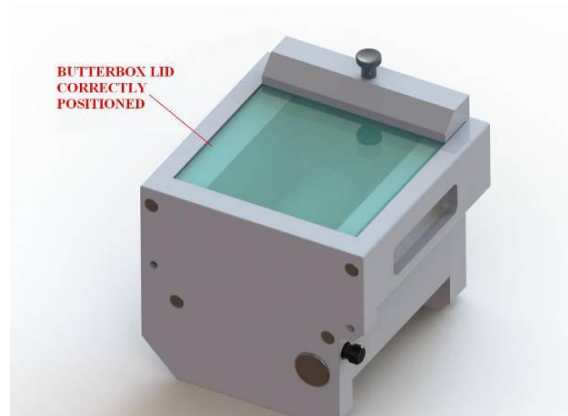
**Refer to Section 3.0 of this manual, relating to the safety**

### 4.1 PRE OPERATION CHECKS (UNPACKING)

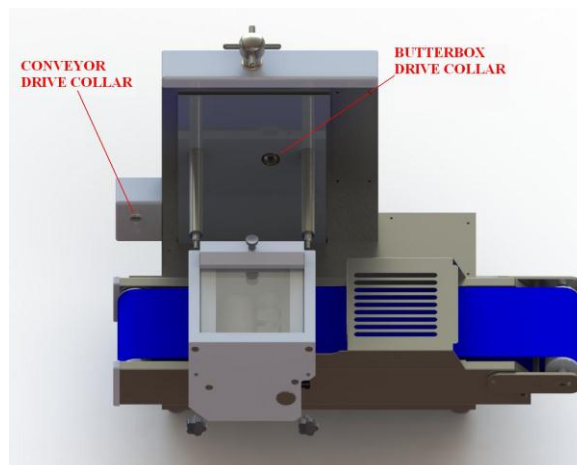
- 4.1.1 Check the machine for transport damage and report any immediately to Deighton Manufacturing Ltd.
- 4.1.2 Remove any packaging material.
- 4.1.3 Position the SPREAD·MATIC relative to any other equipment it is to connect with. Ensure the machine is not connected to the electrical supply.
- 4.1.4 Ensure the unit is placed on a flat surface that is able to support the equipment. Ensure that the machine is level and stable.

### 4.2 EQUIPMENT ASSEMBLY

- 4.2.1 Assemble the butter-box ensuring that the lid is sat firmly in the recess in the butter-box.

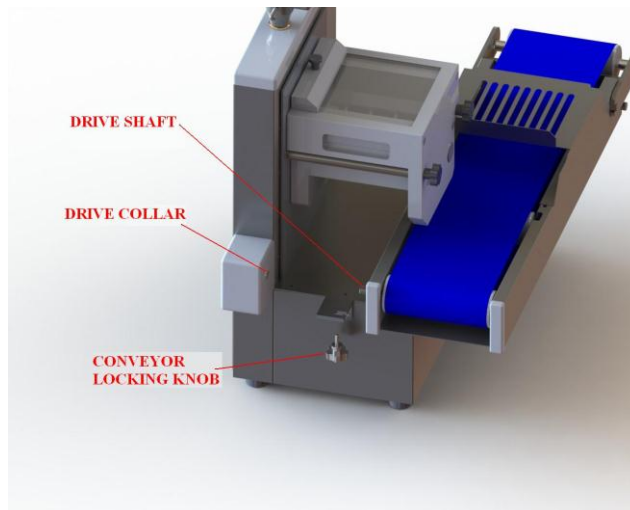


- 4.2.2 Locate the butter-box on the guide rails. Ensure that the butter-box is pushed back in position engaging butter-box driving collar.

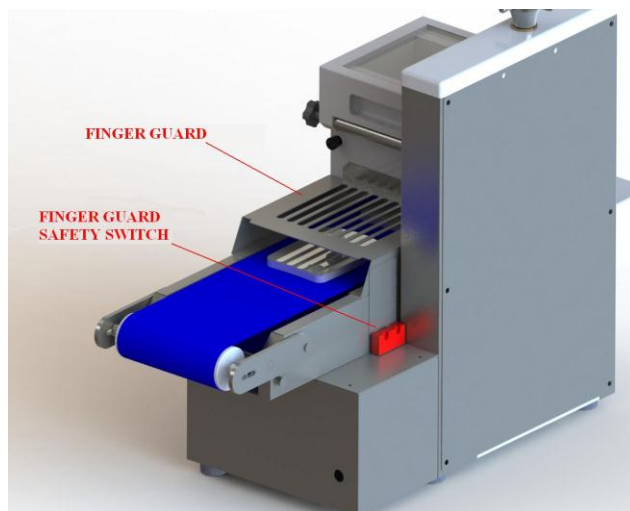




- 4.2.3 Ensure the conveyor is pushed back in position engaging the conveyor driving collar, locking in place with the conveyor locking knobs.

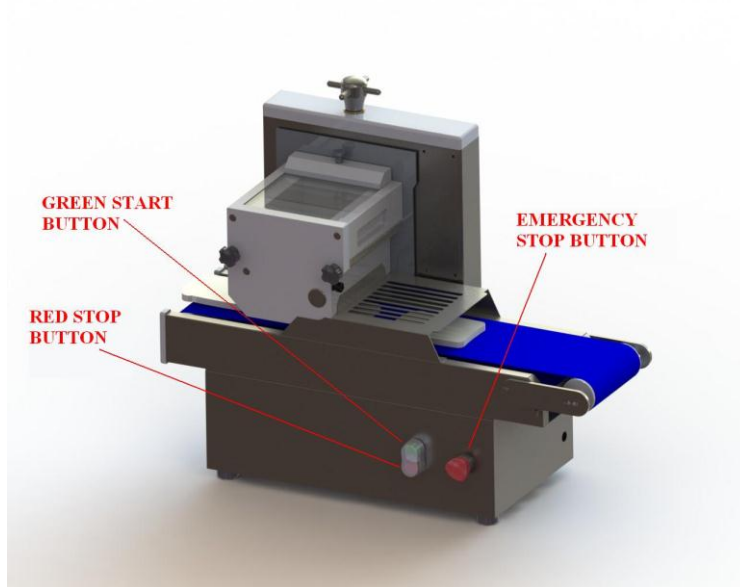


- 4.2.4 Ensure the finger guard is pressed up against the butter-box.



- 4.2.5 Connect to the electricity supply.

4.2.6 Press the green start button.



4.2.7 Check for smooth operation of the belt and buttering rollers.

If the conveyors do not begin moving check –

- The power is connected and switched on.
- The emergency stop button is not depressed.
- Ensure that there are no obstructions preventing the running of the belts/rollers.

If, after carrying out these checks no movement occurs when the start button is depressed, disconnect the machine and contact your machine service contractor for further assistance.

4.2.8 To stop the machine, press the red stop button.

4.2.9 The machine should now be cleaned ready for production (refer to section 7.0 - **Cleaning**).

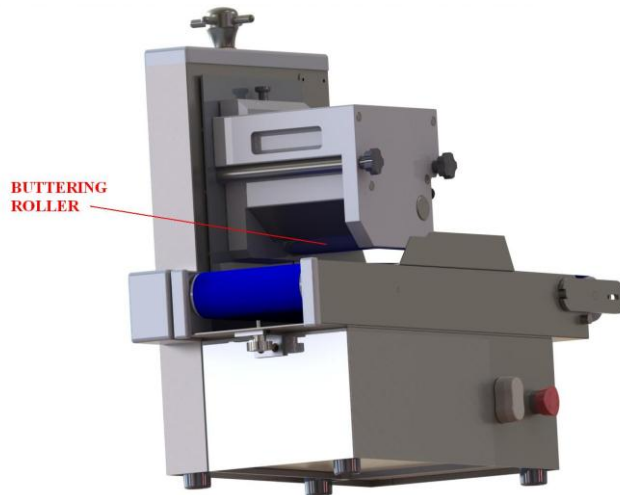
Installation is now complete and the machine can now be sited ready for production.

## Section 5.0 OPERATING THE MACHINE



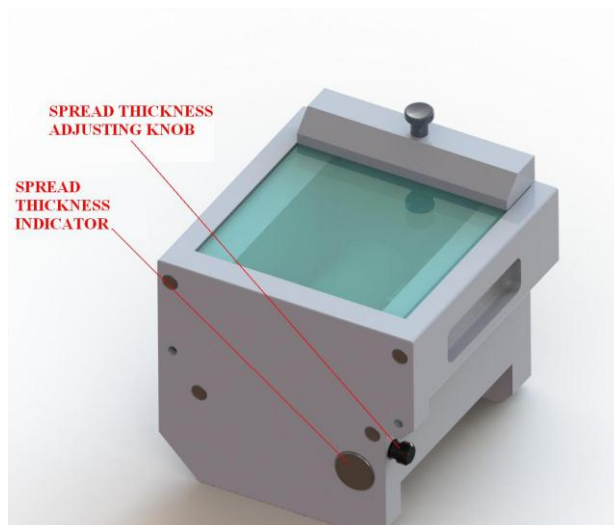
Refer to Section 3.0 of this manual, relating to the safety instructions.

- 5.1 Ensure the machine is supplied with the correct voltage (refer to Section 2.0 specification). Connect the machine to the electrical supply.
- 5.2 Remove the butter-box lid, using a plastic spatula place the product to be spread in the butter-box, primarily filling the right hand side of the container, the container will hold approximately 1 litre. Do not overfill the container as room must be kept for the lid to fit securely in the butter-box recess.
- 5.3 Start the machine, leave the machine running until the buttering roller is covered, this should take 2-3 minutes.



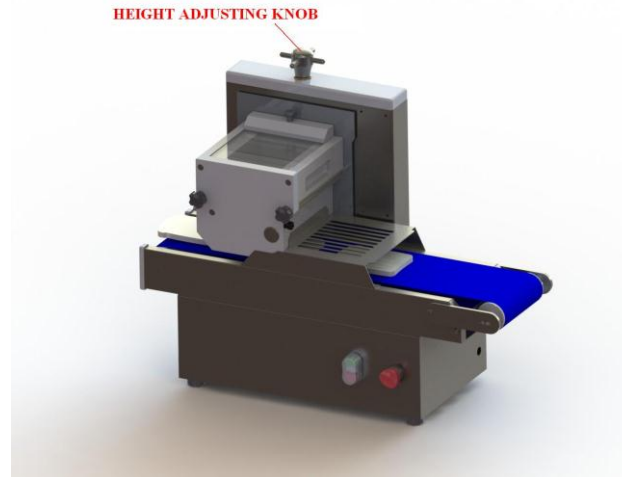
- 5.4 If no spread appears on the roller increase the spread thickness. If this has no effect further softening of the product may be required.

**NOTE: THE SPREAD THICKNESS ADJUSTING KNOB SHOULD MOVE EASILY, CARE SHOULD BE TAKEN NOT OVER TIGHTEN THIS KNOB. THE SPREAD THICKNESS INDICATOR WILL ONLY ROTATE 1-2 MILLIMETRES.**



- 5.5 Use the height adjusting knob to set the height to match the product being coated. The SPREAD-MATIC will accommodate a variation in the product thickness but an excessive variance will result in reduced covering.

**NOTE** Ensure as much loose crumb as possible is removed from the product being coated.



- 5.6 Initially set the height to be 1-2mm less than the thickness of the product to be coated. Start the SPREAD-MATIC, using the green button, and place the product on the right hand side of the conveyor, once the product has been under the spreading roller check evenness and quality of covering, modify height or thickness as required.

If satisfactory coverage is not achieved check the spread, the spread should flow with the movement of the rollers in the butter-box, if the spread does not it may be too hard or unusable with this type of butter-box. If the spread flows freely increase the spread coverage using the spread thickness adjusting knob.

## Section 6.0 MAINTENANCE

Before and after use it is essential to ensure that the SPREAD-MATIC is fully serviceable and in good working order.



**Refer to Section 3.0 of this manual, relating to the safety instructions.**

Correct operation and cleaning of the equipment should keep the machine in good working order. During periodic inspections, we recommend that you pay attention to the following checklist, and replace any suspect parts.

**WARNING: Always isolate the machine before cleaning or maintenance.**

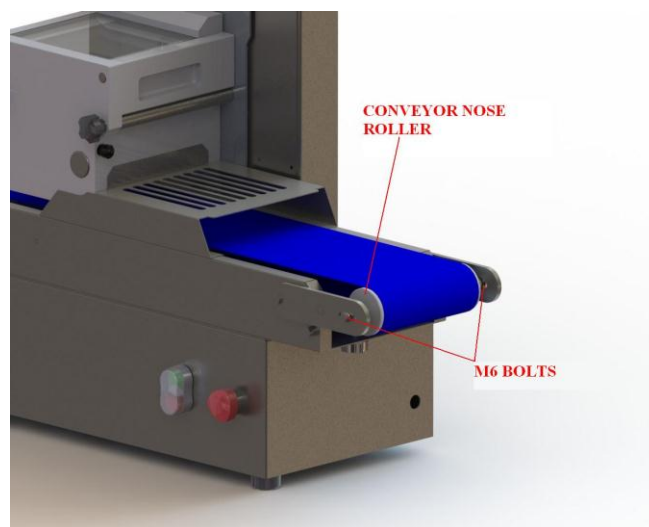
- Check seals on the buttering roller and on the 3 shafts in the butter-box.
- An electrician should check the soundness of the operating button seals, cable gland and socket so preventing water ingress.
- Electric cables should be checked for damage.
- If the conveyor belt slips tighten the belt using the nose roller.

### 6.1 ADJUSTING THE CONVEYOR BELT

6.1.1  Isolate the SPREAD-MATIC from the electrical supply.

6.1.2 To tension the conveyor belt rotate the nose roller assembly around its pivots, release the M6 bolts and move the nose roller towards the end of the slots on the conveyor tension arms, re-tighten the M6 bolts and rotate the assembly back into position.

**CAUTION:** Do not over tighten the conveyor belt, the belt should contain enough tension to be driven but not be taut.



## Section 7.0 CLEANING

At the end of a day's production run it is recommended that the machine is cleaned.



**Refer to Section 3.0 of this manual, relating to the safety instructions.**

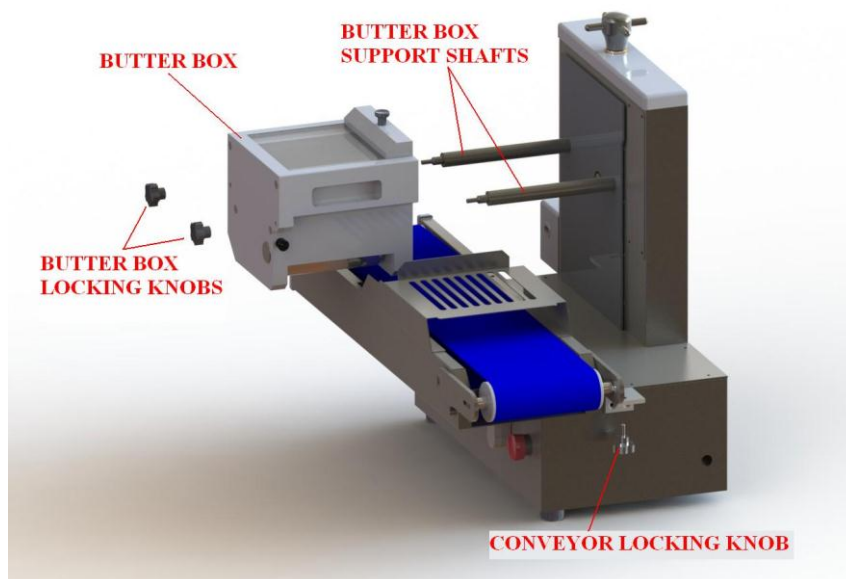
**WARNING: ALWAYS ISOLATE THE MACHINE FROM THE MAINS SUPPLY BEFORE COMMENCING CLEANING.**

The SPREAD·MATIC is of a stainless steel and construction including some plastic (Perspex and Ertacetal) components and can be cleaned using hot, soapy water. Do not hose down machine body and base as they are rated IP41.

Use only hot soapy water, **DO NOT** use strong alkaline/acid based cleaners.

### 7.1 PREPARING THE SPREAD·MATIC FOR CLEANING

- 7.1.1 Remove the finger guard, unlock the butter-box locking knobs and slide the butter-box along the support shafts.
- 7.1.2 Unlock the conveyor locking knobs and slide the conveyor away from the base.



## 7.2 CLEANING THE CONTROL SYSTEM

**WARNING: ALWAYS TRY TO KEEP WATER AWAY FROM THE CONTROL BOX AND MOTOR.**

**DO NOT PRESSURE WASH.**

**DO NOT HOSE DOWN MACHINE BODY AND BASE.**

7.2.1 Remove the finger guard, butter-box and conveyer system as detailed in section 7.1.

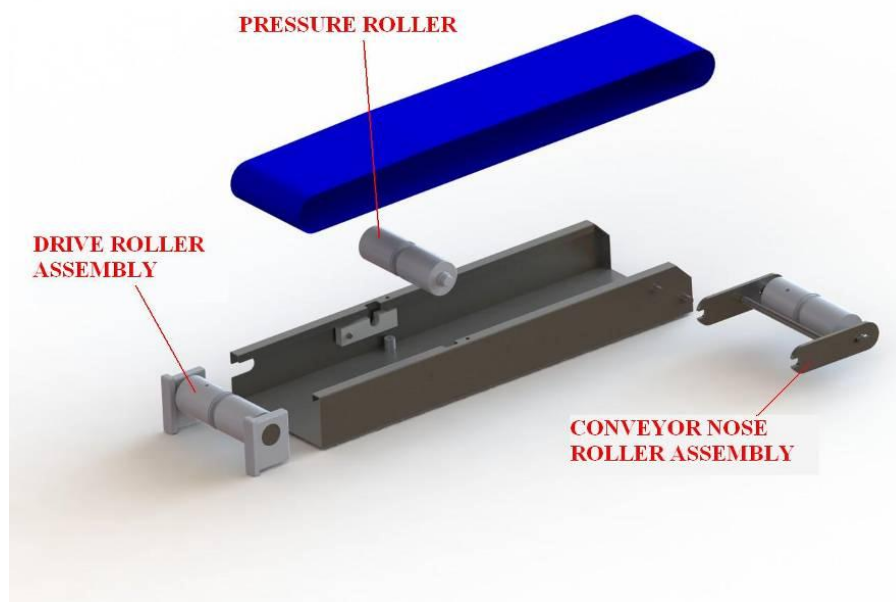
7.2.2 Clean down the Control box and with a damp cloth only.

## 7.3 CLEANING THE CONVEYOR BELT

7.3.1 Remove the butter-box and conveyer system as detailed in section 7.1.

7.3.2 To remove the conveyor belt for cleaning rotate the conveyor nose roller assembly upwards around its pivot pins and pull clear.

7.3.3 Pull the drive roller assembly backwards and clear of the belt. The belt and pressure roller will then come clear of the platform.



7.3.4 The Conveyor belt and rollers can be washed in hot soapy water (at a temperature no greater than 60°C/140°F).

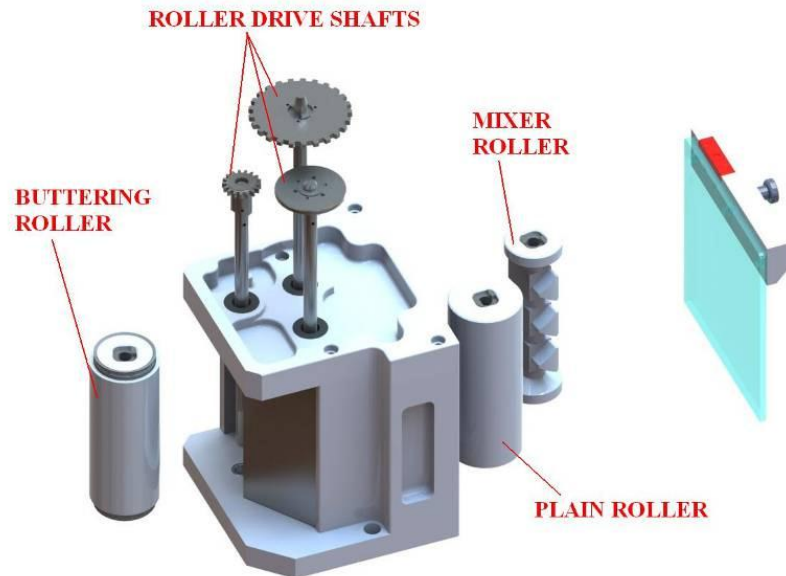
7.3.5 Parts should not be scraped clean with metal objects, a plastic scraper is an ideal cleaning aid.

7.3.6 Rinse with clean water.

7.3.7 Ensure components are completely dry before reassembling and refitting to the machine.

## 7.4 CLEANING THE BUTTER BOX

- 7.4.1 Remove the butter-box as detailed in section 7.1.
- 7.4.2 Remove the butter-box lid.



- 7.4.3 Pull the 3 drive shafts out of the butter-box (the sprockets are connected to the shafts and can be used to prise the shafts from the butter-box).
- 7.4.4 Remove the 3 rollers for cleaning. Do not dismantle the rest of the butter-box.
- 7.4.5 Clean the butter-box lid with a damp cloth only.
- 7.4.6 The butter-box parts can be cleaned in an industrial washer.
- 7.4.7 Ensure components are completely dry before reassembly

When re-assembling ensure the seals on the buttering roller are compressed but not doubled over or damaged.



## Section 8.0 FAULT FINDING GUIDE



**Refer to Section 3.0 of this manual, relating to the safety instructions.**

In the event of a breakdown/blockage the unit should be stopped using the Emergency Stop button and disconnected from the electrical supply.

- Check for obstructions in the butter-box.
- Check finger guard and butter-box lid are in the correct position.
- Check the conveyor and butter-box drives are engaged.
- Ensure that the “E” stop is not engaged as this will result in the SPREAD·MATIC not operating.

If the SPREAD·MATIC does not re-start contact Deighton Manufacturing Limited or your service provider for advice.

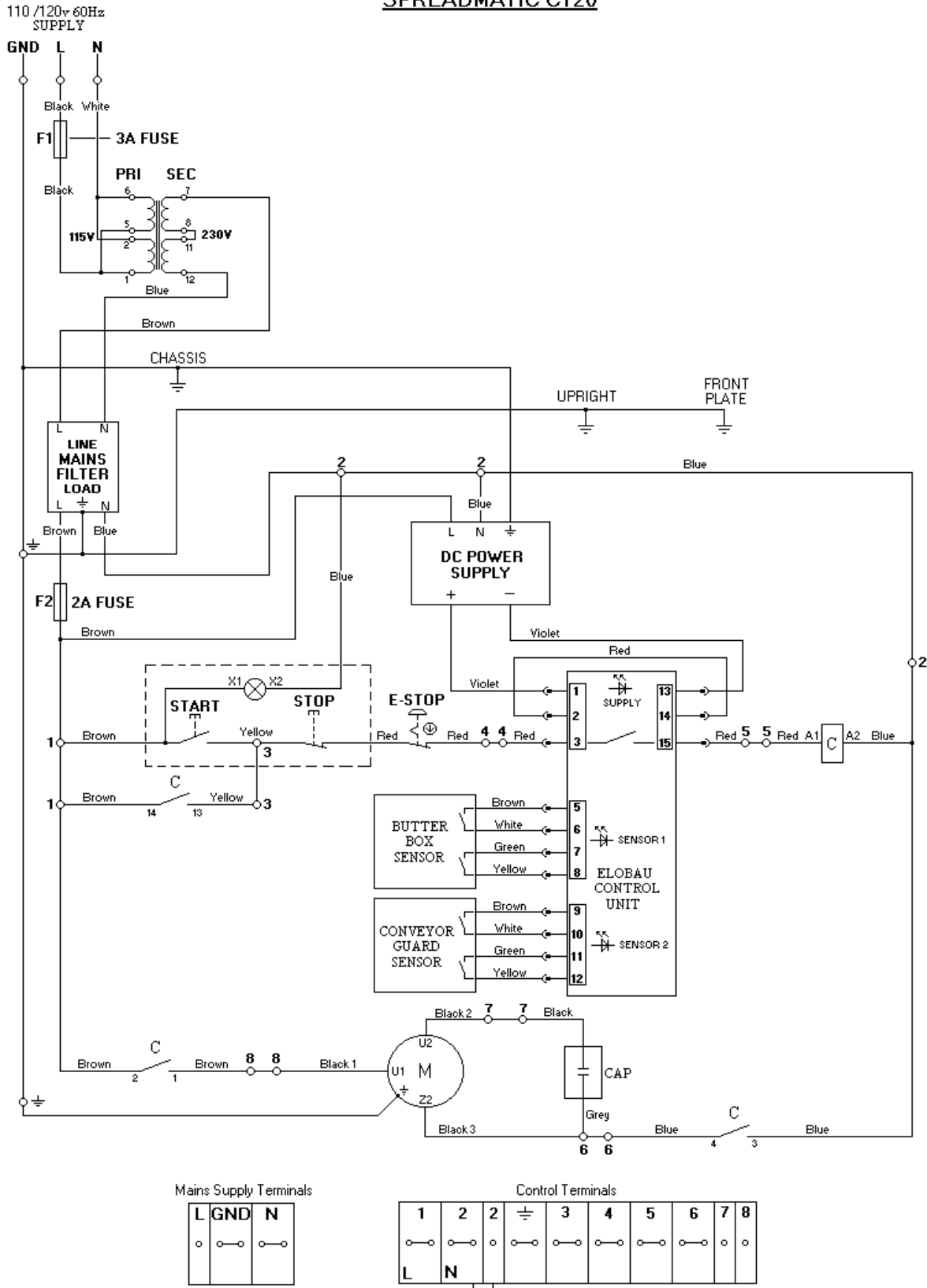
## Section 9.0 RECOMMENDED SPARES LIST

Description	Part Number
Commercial Butter Box Assembly	S003
Buttering Roller Seal	S200B
Shaft Seal	S201
Idler Bush	S239
Butter Box Lid	S421B
Butter Box LH Side	S402B
Butter Box RH Side	S403B
Conveyor Belt	S231
Butter Box Magnet	S244B
18 Tooth Gear	S204
34 Tooth Gear	S206
50 Tooth Gear	S205
Butter Box Lid Knob	S235B
Butter Box Retaining Knob	S234B
Conveyor Retaining Knob	S222B



# Section 10.0 WIRING DIAGRAMS

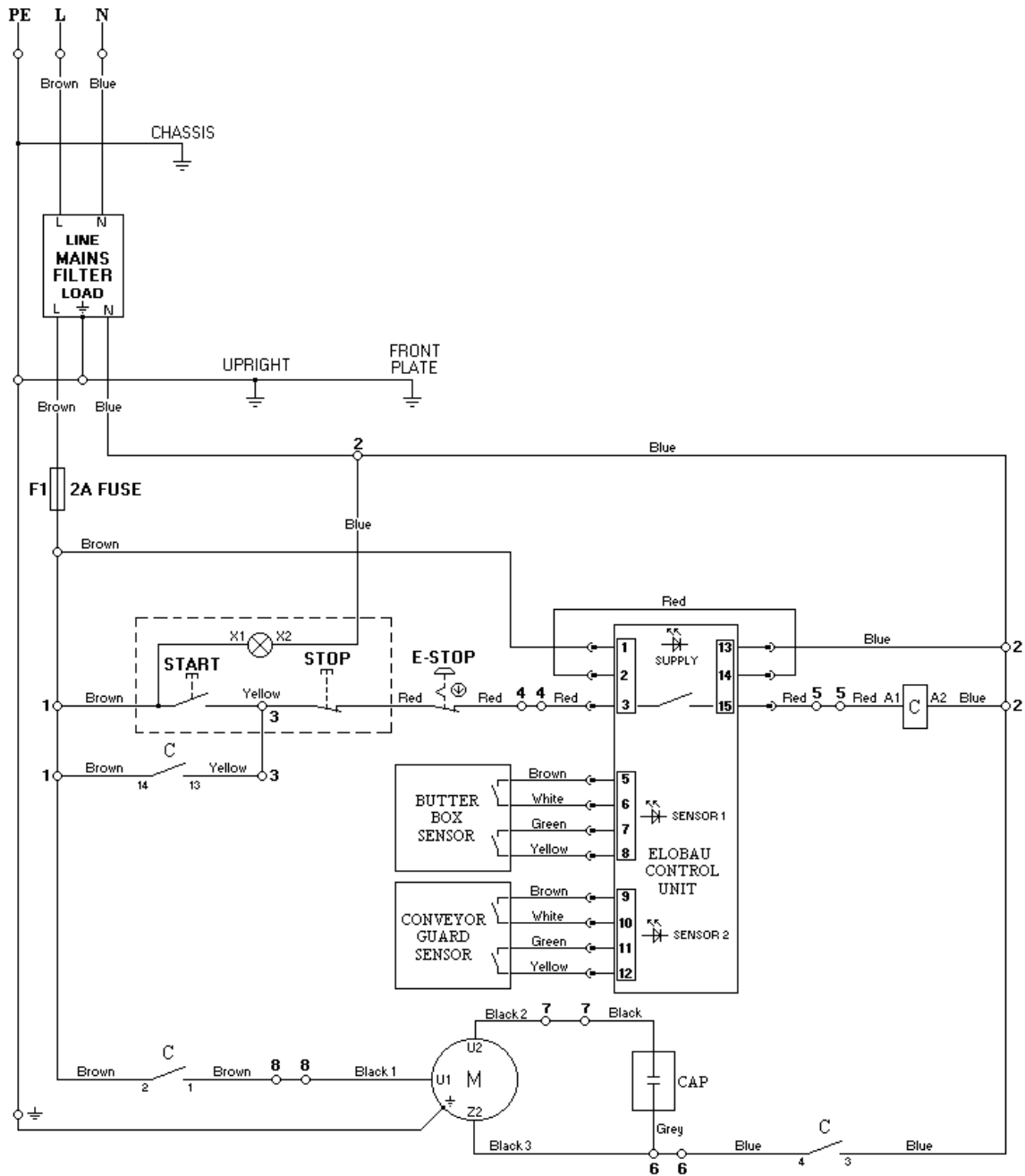
## SPREADMATIC C120



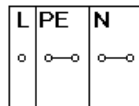
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# SPREADMATIC C230

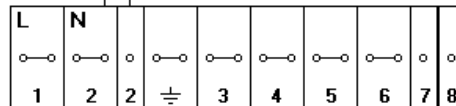
220 - 240v 50Hz  
SUPPLY



Mains Supply Terminals



Control Terminals



NOV 2012

# DEIGHTON

MANUFACTURING UK LIMITED

Gibson Street  
Leeds Road  
Bradford  
West Yorkshire  
BD3 9TR  
ENGLAND

Tel: +44 (0)1274 668771  
Fax: +44 (0)1274 665214

## EC DECLARATION OF CONFORMITY

We hereby declare that the following machinery complies with the essential Health and Safety requirements of the machinery directives 2006/42/EC and EMC directive 2004/108/EC and regulation EC 1935/2004 on materials and articles in contact with food.

Machine Description: COMMERCIAL SPREAD·MATIC

Serial Number:

Manufactured By:  
Deighton Manufacturing UK Ltd  
Gibson Street  
Leeds Road  
Bradford  
BD3 9TR  
ENGLAND

Signed:

Name: A Hamilton

Position: Managing Director

Date:

Signature of applicant;

*Specialists in food processing equipment*  
FOOD COATING, CRUMBING & FRYING      FOOD FORMERS      SPREADING SYSTEMS

ECONOSYSTEM



SPREAD·MATIC

J. WADE (Financial Director/Company Secretary) . A. HAMILTON (Managing Director) . Registered in England as address above . No. 4100204