Enter Serial No. here.

MANUAL No.Y-OM-02E

In the event of an enquiry please quote this serial number.

Store this document safely and ensure it is available at all times. Non-availability may affect the service / repair to your machine.







OPERATING AND MAINTENANCE MANUAL

# **OMEGA TOUCH**

**DEPOSITOR** (400, 450, 580)

## -DECLARATION OF CONFORMITY-

We hereby declare that this machine complies with the essential health and safety requirements of:-

The Machinery Directive 2006/42/EC

The Low voltage Directive 2006/95/EC

The requirements of the Electromagnetic Compatibility Directive 2004/108EC,91/263/EEC,92/31/EEC and

General Safety of Machinery and food processing Standards applicable

Signed: (G.A.Williams: Quality Manager)

Machine Code	FG	Machine Serial No.	

Date: .....

A technical construction file for this machine is retained at the following address:

MONO EQUIPMENT Queensway, Swansea West Industrial Park, Swansea SA5 4EB UK

MONO EQUIPMENT IS A BUSINESS NAME OF AFE GROUP LTD

REGISTERED IN ENGLAND NO. 3872673 VAT REGISTRATION NO. 923428136
REGISTERED OFFICE: Unit 35, Bryggen Road, North Lynn Industrial Estate, Kings Lynn, Norfolk, PE30 2HZ

Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.



FOR SAFE WORKING, PAY SPECIAL ATTENTION TO ITEMS MARKED



#### Omega Touch

## **CONTENTS**

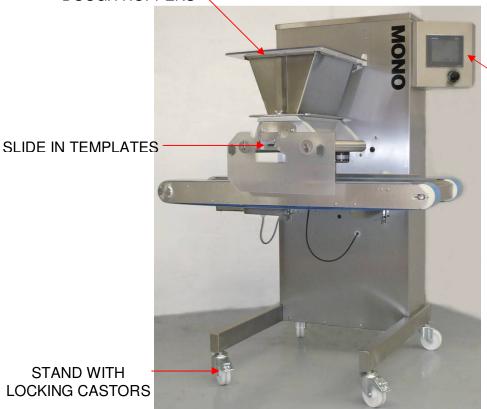
1.0	-	INTRODUCTION
7 ()	_	
1.0	-	

- 2.0 DIMENSIONS
- 3.0 SPECIFICATIONS
- 5.0 INSTALLATION
- 6.0 ISOLATION
- 7.0 CLEANING INSTRUCTIONS
- 8.0 OPERATING CONDITIONS
- 9.0 PREPARING FOR OPERATION
  - 9A FITTING THE HOPPER
  - 9B FITTING A TEMPLATE
- 10.0 OPERATING INSTRUCTIONS
  - 1 SELECT PRODUCT TYPE
  - 2 SELECT SAVED NAME OF PRODUCT TYPE
  - 3 CONFIRM SETUP
  - 4 OPERATOR SCREEN
  - 5 EDIT SCREEN
    - **5A** TRAY SETUP
  - 6 COPY
  - 7 DELETE
  - 8 PASSWORDS
  - 9 ENGINEERING SETTINGS
  - 10 FAULT INFORMATION SCREENS
- 11.0 MAINTENANCE
- 12.0 SPARES AND SERVICE
- 13.0 SPARES LIST
- 14.0 ELECTRICAL INFORMATION

## 1.0 INTRODUCTION

- The innovative "four axis deposit" design of MONO's "Omega Touch" depositor allows it to recreate most of the hand movements of the Master confectioner. This makes the "Omega Touch" capable of exceptional accuracy of product weight, size and shape.
- Maintenance is kept to a minimum and the smooth body design makes daily cleaning quick and easy.
- Easy to use computer software gives access to 550 programs, which are stored in the memory and easily recalled for use or modification. Control is via a colour touch screen with graphically represented products already installed that can be created or edited to the required product.
- It is available with soft and hard dough hoppers. There is also a large selection of templates and nozzles.

HARD OR SOFT **DOUGH HOPPERS** 

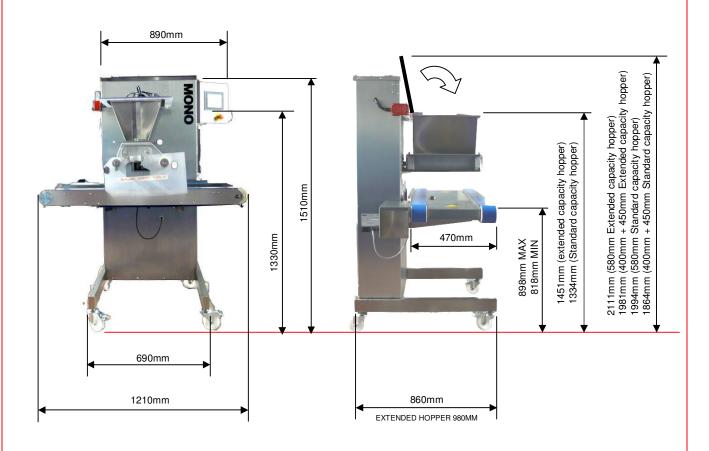


**EASY CONTROLS** 

STAND WITH LOCKING CASTORS

> As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice

## 2.0 DIMENSIONS





Omega Touch

		SOFT DOUGH			HARD DOUGH			
MODEL (Nom. hopper width (mm))	400	450	580	4	400	450	580	
Weight (with hopper fitted) (Kg):	176	185	194		196	210	224	
Standard hopper Capacity (litre):		22.5	29	<u> </u>	21	24	31	
Extended hopper Capacity (litre):	36	41	53	;	31	35	45	

**Power:** Single phase, 13A max load. Suitable for 200v, 220v,

230v, and 240v, 50-60 Hz supply.

MAX RATING 2.5kW single phase fused at 13A

Cycles per minute = 35
Min distance between trays = 50mm
Max vertical travel = 80mm
Max program storage = 650
Number of languages = 13

Noise level = Less than 85dB

Electronics = All microprocessor controlled

#### NOTE:

The minimum deposit that can be made depends on several factors - recipe, mixing method, template size, nozzle size and deposit speed.

As a guide the following is the minimum that should be attempted:

Macaroons 6g,
Meringues 3g,
Choux Paste 5g,
Viennese 4g,
Sponge Drops 4g.

However, consult **Mono Equipment** if intended product falls outside the above general machine specification to determine the exact capabilities of the "Omega" with any specific product.

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice

## 4.0 SAFETY

- 1 Never use a machine in a faulty condition and always report any damage.
- 2 Only trained engineers may remove parts from this machine that requires a tool to do so.
- 3 Always ensure hands are dry before touching any electrical appliance (including cable, switch and plug). **NEVER move machinery by pulling on the power cords or cables.**
- 4 Ensure that the floor area around the OMEGA is clean to avoid slipping especially if carrying heavy hopper and template components to and from the machine.
- 5 All operatives must be fully trained.

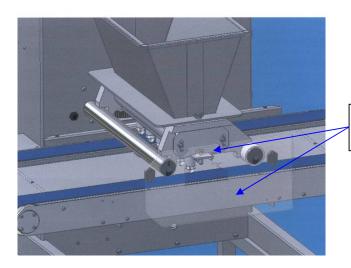
Use of the machine can prove dangerous if:

- u the machine is operated by untrained or unskilled staff
- □ the machine is not used for its **intended purpose**
- the machine is not operated correctly

All safety devices applied to the machine during manufacture and the operating instructions in this manual are required to operate this machine safely. The owner and the operator are responsible for operating this machine safely.

- 6 People undergoing training on the machine must be under **direct supervision**.
- 7 Do not operate the machine with any panels or **guards removed**.
- **8 No loose clothing** or jewellery should be worn while operating the machine.
- **Switch off power** at the mains isolator when machine is not in use and before carrying out any **cleaning** or **maintenance**.

- 10 The bakery manager or the bakery supervisor should carry out **daily safety checks** on the machine.
- 11 Do not operate machine without hopper template and guard fitted correctly.



(11) HOPPER TEMPLATE AND GUARD FITTED

12 Due to the essential requirement for handling heavy components during cleaning, it is recommended that **protective footwear** be worn when carrying out such procedures.

ALL CLEANING AND MAINTENANCE OPERATIONS MUST
BE MADE WITH MACHINE DISCONNECTED FROM THE
POWER SUPPLY.



- **1** Ensure that the depositor is connected to correct electric supply as specified on the serial number plate on the side of the machine.
- **2** Ensure that the correct fuse rating is fitted in the electrical supply

## 6.0 ISOLATION

# IN AN EMERGENCY, SWITCH OFF AT THE MAINS WALL ISOLATOR, OR EMERGENCY STOP BUTTON.

To release the emergency stop button, turn clockwise.



**STOP BUTTON** 

## 7.0 CLEANING INSTRUCTIONS

#### NOTE:



- Cleaning must be carried out by fully trained personnel only.
- Isolate machine from mains supply before carrying out any cleaning.
- Do not steam clean or use a jet of water.

-Do not use any form of caustic detergent or abrasive cleaners.-

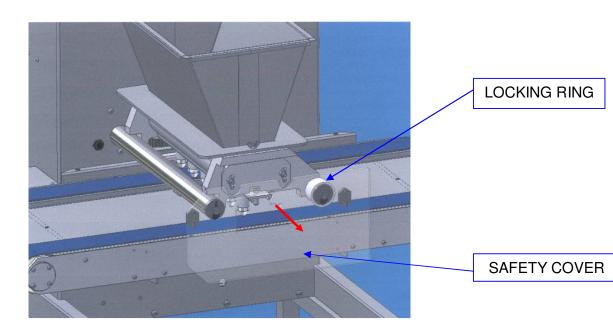
All the outer surfaces of the machine should be wiped over daily with warm soapy water.

## HARD AND SOFT DOUGH HOPPERS

**BETWEEN PRODUCT MIX CHANGES** 

The feed hopper, pump assembly, template, nozzles etc. should be removed from the machine and dismantled for thorough cleaning between product mix changes.

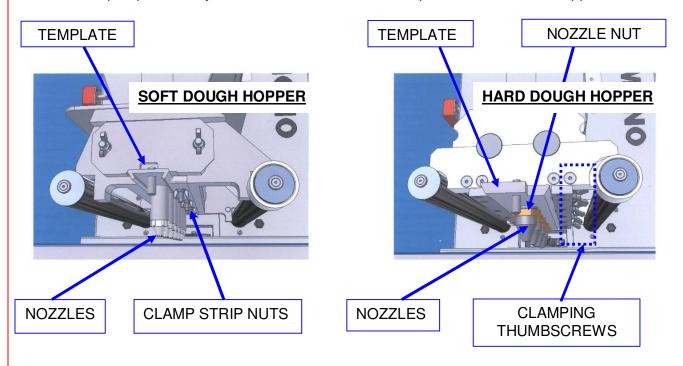
- 1. Open top safety guard and remove excess mixture remaining in the feed hopper.
- 2. Lift off front see-through safety cover and locking-ring.



3. <u>Slacken</u> template clamp strip nuts or thumbscrews (depending on type of hopper) Remove fitted template from pump assembly by sliding out to avoid subsequent damage.

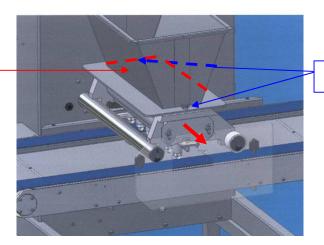
#### NOTE.

Thumbscrews only need to be released slightly to allow the template to slide away from the pump assembly. If loosened too much, the template will have to be supported.



4 To reduce weight and bulk, separate and remove empty feed hopper from pump assembly whilst still on the machine by unscrewing the wing nuts.

To gain access to the inner wingnut, slide the complete hopper away from the machine body slightly (keep on support bars) - this will also disengage the pump assembly from the drive shaft.



HOPPER WINGNUTS

Ensure that the nuts are placed where they will not be lost.

## **SOFT DOUGH HOPPER**



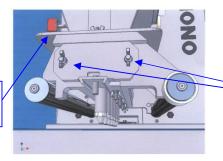
#### **CAUTION:**

The feed hopper and pump assembly exceeds 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

Take care to avoid damage to the sealing surface of the feed hopper during removal, cleaning, assembly and storage.

- 1. After removing the feed hopper, check condition of feed hopper seal.
- 2. Unscrew the end cap retaining nuts from the accessible side of the pump assembly. Ensure that the nuts are placed where they will not be lost.

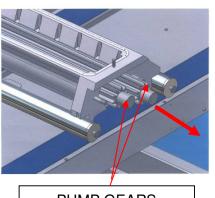
FEED HOPPER SEALING SURFACE



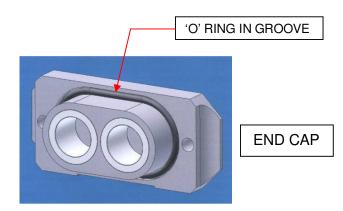
**ENDCAP NUTS** 

3. Withdraw the end-cap with the pump gears.

Ensure that the 'O' sealing ring on the inside of the end-cap is not damaged during cleaning.



PUMP GEARS
REMOVE WITH END CAP
(NOT SHOWN)



3. Remove remainder of pump assembly from the machine and remove remaining end-cap to fully dismantle pump assembly components for cleaning.

## HARD DOUGH HOPPER



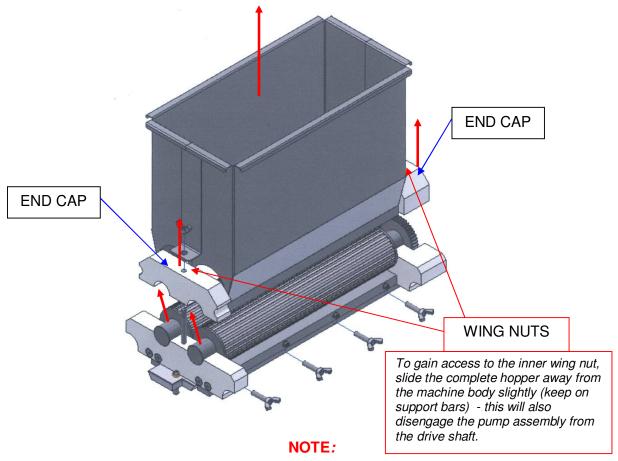
#### **CAUTION:**

The feed hopper and pump assembly exceeds 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

To reduce weight and bulk, separate and remove empty feed hopper from pump assembly, whilst still on the machine, by unscrewing the wing nuts. (Ensure that the nuts are placed where they will not be lost.)

The pump assembly will now be lighter and more easily removed.

- 1. Lift off both upper plastic end-caps.
- 2. Remove both gears from the assembly, one at a time, by lifting vertically.
- 3. Remove remainder of pump assembly from the machine for cleaning.



Use only warm soapy water to clean these parts that should be rinsed and thoroughly dried before re-assembly.

The greatest care must be taken not to drop the hopper.



Do not leave any components in the hopper.



## 8.0 OPERATING CONDITIONS

Omega Touch

To obtain the best product results and consistent operation,

- ✓ Make sure the depositor is used on a level floor.
- ✓ Ensure flat trays of consistent length, width, material and edge dimensions are used.
- ✓ Ensure undamaged nozzles and templates are used.
- ✓ Keep the machine clean.

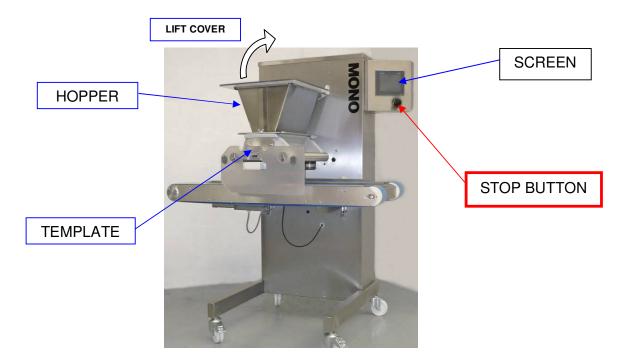


## 9.0 PREPARING FOR OPERATION

Omega Touch

Select template and nozzles required and fit as section 9a & 9b following. Fill hopper with mix and close hopper guard.

It is recommended that when heavy mixes are used, the inside of the hopper should be coated with vegetable oil; for lighter mixes such as meringue, dampen with water. The oil or water will help the mix to settle down the hopper walls and prevent air being sucked in.



- 2 Connect power cable to electrical supply.

  Make sure stop button is in released position (turn clockwise if required).
- 3 Select an existing program or create a new program through the on-screen menus. (see section 10 operation)
- 4 The machine is now ready for operation.

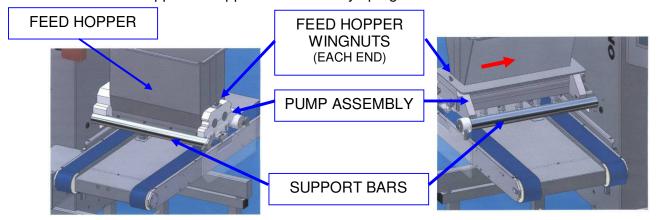
## 9a FITTING THE HOPPER

CAUTION SHOULD BE TAKEN WHEN FITTING HOPPER AND PUMP ASSEMBLY
AS WEIGHT EXCEEDS 25KGS ON SOME MODELS
It will need to be lifted off by two people, or
dismantled into smaller components while still on the machine.

MAKE SURE FLOOR AREA AROUND MACHINE IS CLEAN

To reduce weight and bulk fit the complete hopper assembly in two stages - first the pump assembly onto the support bars, then the feed hopper body onto the pump assembly.

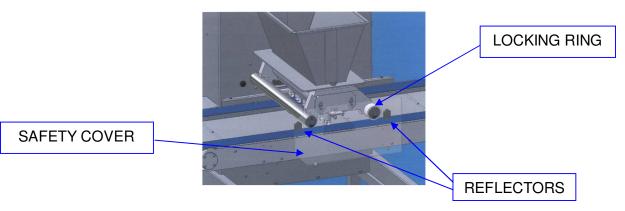
- 1 By hand, align pump assembly drive gear roller with drive shaft on machine.
- **2** Fit hopper to pump assembly and secure with wing nuts.
- 3 Slide hopper on support bars until fully up against machine.



#### **HARD DOUGH**

#### SOFT DOUGH

4 After the hopper is fitted, the hopper-locking ring **MUST BE** replaced on the support bar and safety cover replaced with the reflectors facing towards machine body.



 $\triangle$ 

DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED



## **9b FITTING A TEMPLATE**

## Soft dough

Non-rotary templates that can be fitted with nozzles, requires screwing the nozzles into the threaded holes provided.

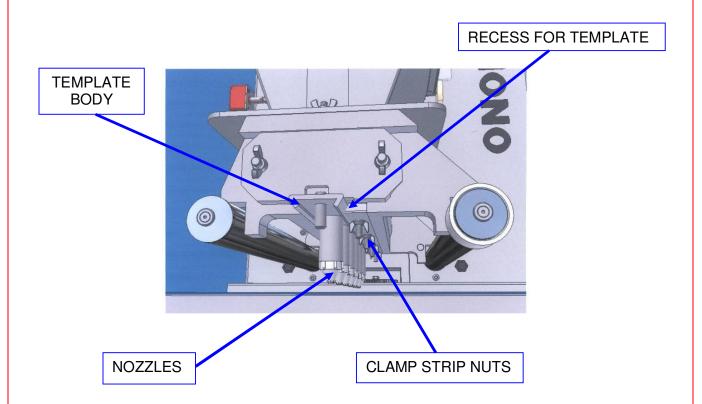
<u>Rotary templates</u> can have plastic nozzles screwed into nozzle holders (straight or offset).

OR

Metal nozzles secured in place by a separate nut.

- 1 Select template and nozzles required.

  (Nozzles are not required for sheeting, staggered or stub templates)
- **2** Attach nozzles to template body:



- 3 Slide template into matching recess at base of pump assembly until the stop is in position.
- 4 Tighten nuts on clamp strip (on underside of pump assembly) to secure template.

**NOTE.** If the nuts are not securely tightened, leakage of mix will occur, affecting deposit weights.





## Hard dough

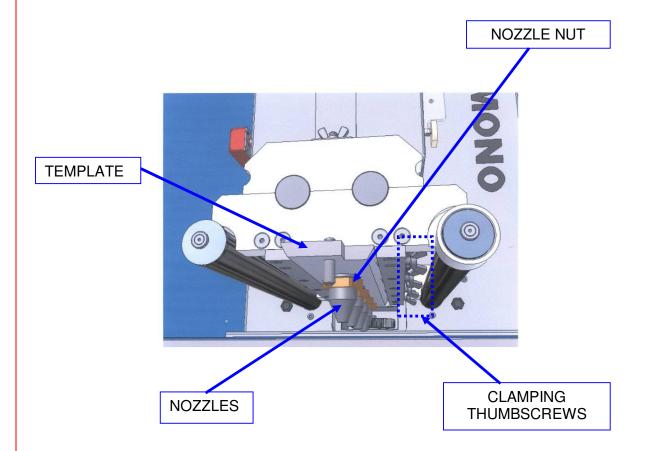
Non-rotary templates that can be fitted with nozzles, require them to be secured in place with a separate nut. Nozzles are not required for sheeting templates.

Rotary templates require nozzles to be secured in place with a separate nut.

- 1 Select template and nozzles required.
- 2 Attach nozzles to template body using special nut:
- 3 Slide template into position and hand-tighten thumbscrews.

#### NOTE.

Thumbscrews only need to be released slightly to allow the template to slide away from the pump assembly. If loosened too much the template will have to be supported while the screws are tightened.





DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED



19









20

# **OPERATING KEY** FOR FOLLOWING INSTRUCTIONS

BLUE



**OPERATION** 

FOLLOW BLUE ARROWS AND BOXES TO OPERATE THE DEPOSITOR WITH ALREADY SAVED PROGRAMS



**RED** — CHANGE SETTINGS

FOLLOW RED ARROWS AND BOXES TO CHANGE SETTINGS AND CREATE NEW **PROGRAMS** 





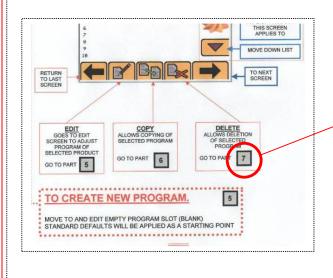
**KEYBOARD ENTRY** REQUIRED

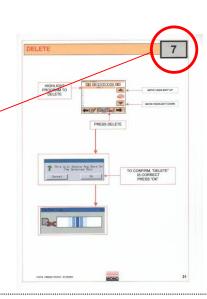
WHEN KEYBOARD APPEARS, A CODE MUST BE ENTERED BY TOUCHING THE NUMBERS IN THE CORRECT ORDER

IF A GREY BOX IS SHOWN IN THE BUTTON DESCRIPTION

GO TO THE CORRESPONDING PAGE FURTHER ON IN THE INSTRUCTIONS.

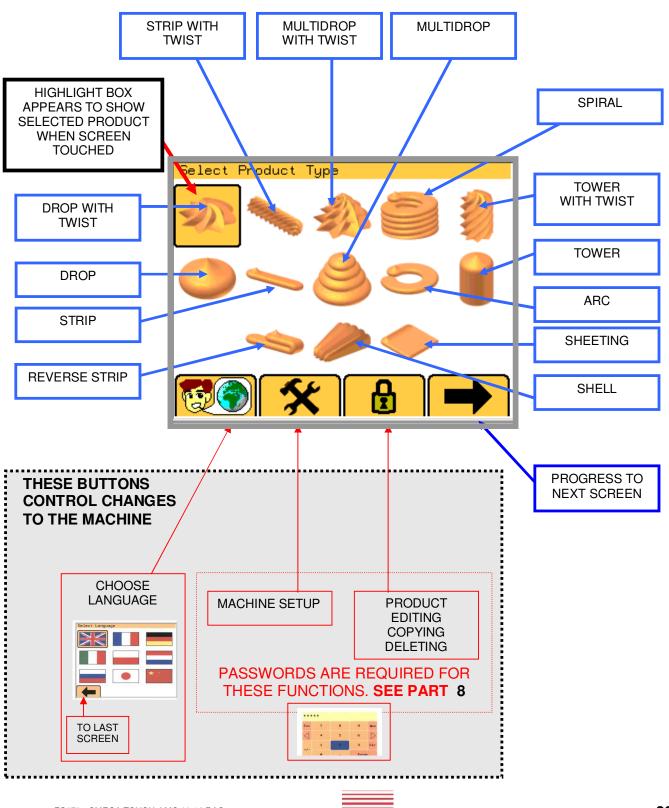
(MARKED IN TOP RIGHT HAND CORNER OF EACH PAGE)





SELECT PRODUCT TO DEPOSIT OR TO CREATE NEW PROGRAM

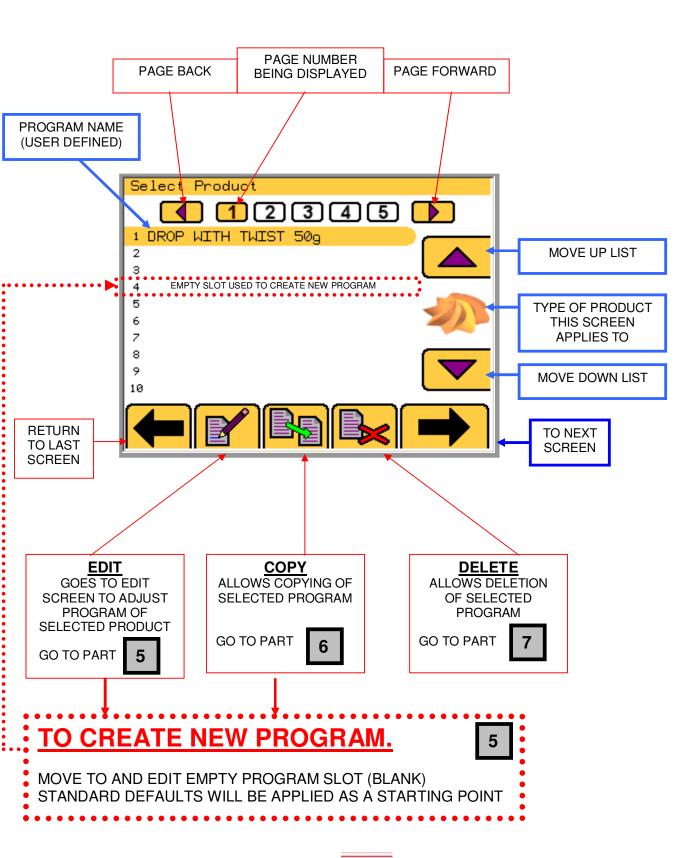
# TOUCH THE SCREEN FOR THE TYPE OF PRODUCT REQUIRED THEN TO MOVE TO NEXT SCREEN



MONO

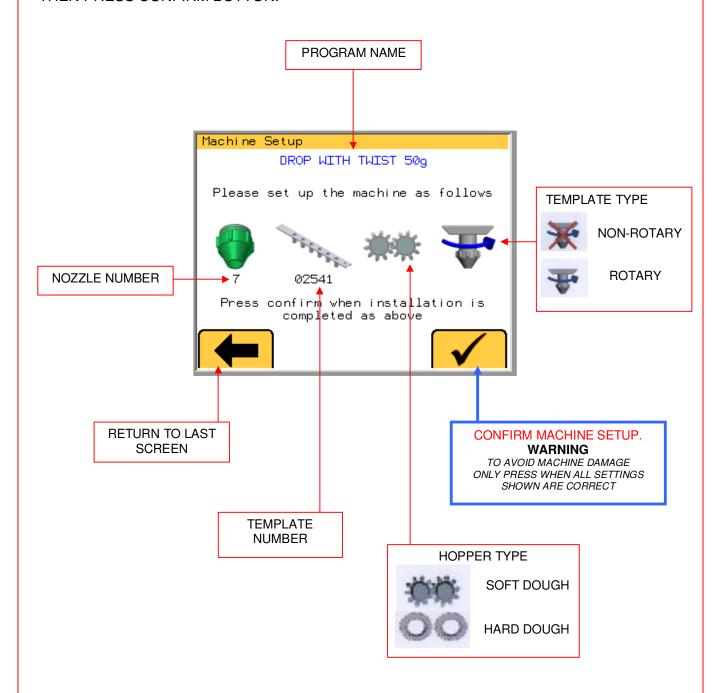
## **SELECT SAVED PRODUCT TYPE**

OR CHOOSE EMPTY SLOT TO CREATE A NEW PROGRAM



## **CONFIRM SETUP OF MACHINE**

MACHINE MUST BE SET AS SHOWN ON THE SCREEN. THEN PRESS CONFIRM BUTTON.



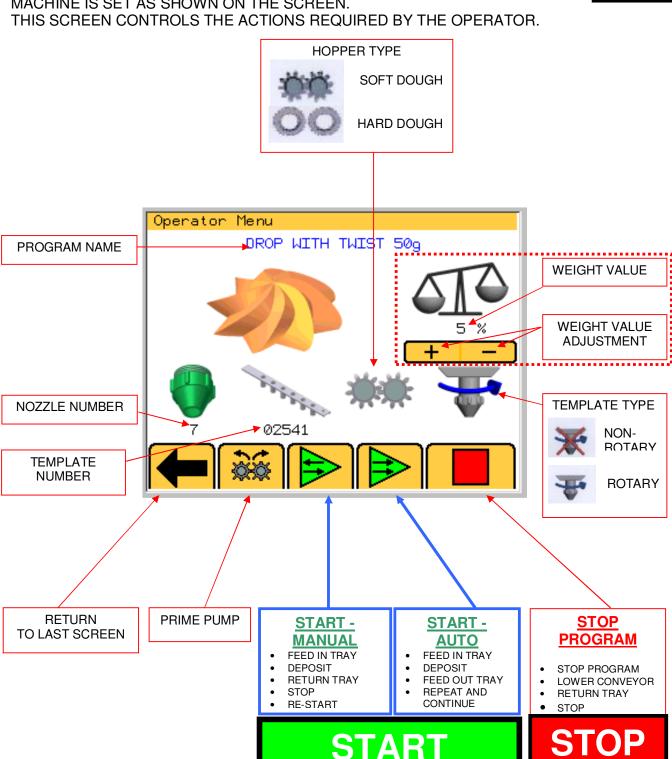
TO AVOID MACHINE DAMAGE

ONLY PRESS CONFIRM BUTTON WHEN ALL PARTS ATTACHED TO THE MACHINE

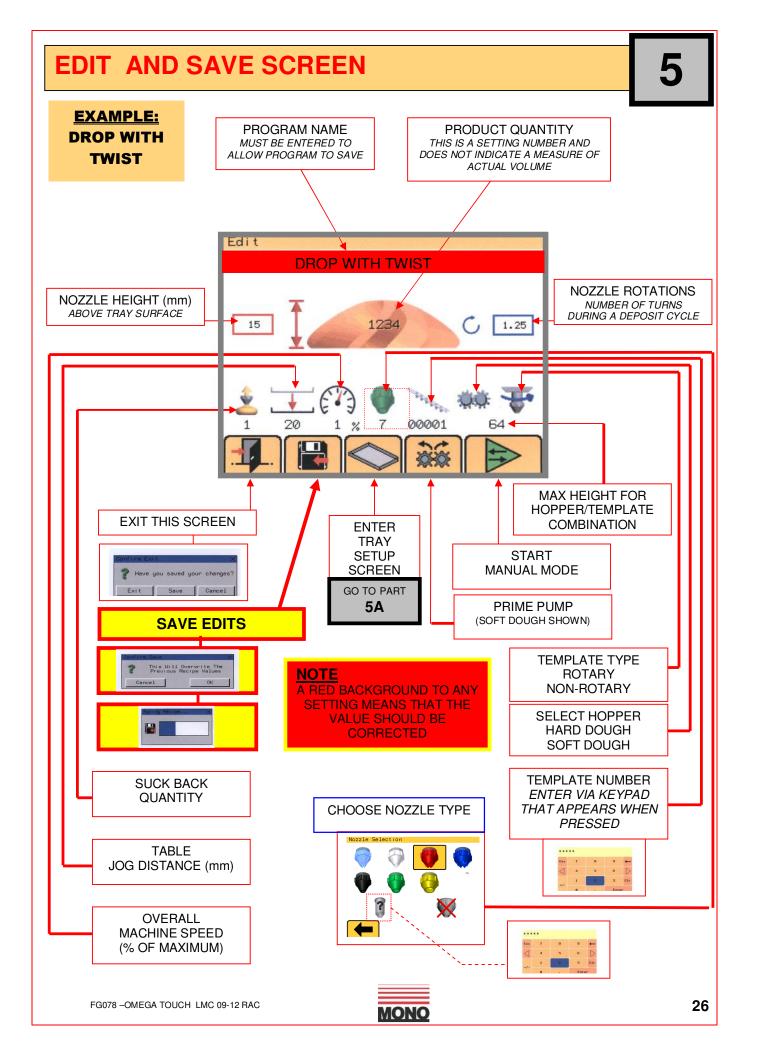
ARE AS SHOWN ON THE SCREEN

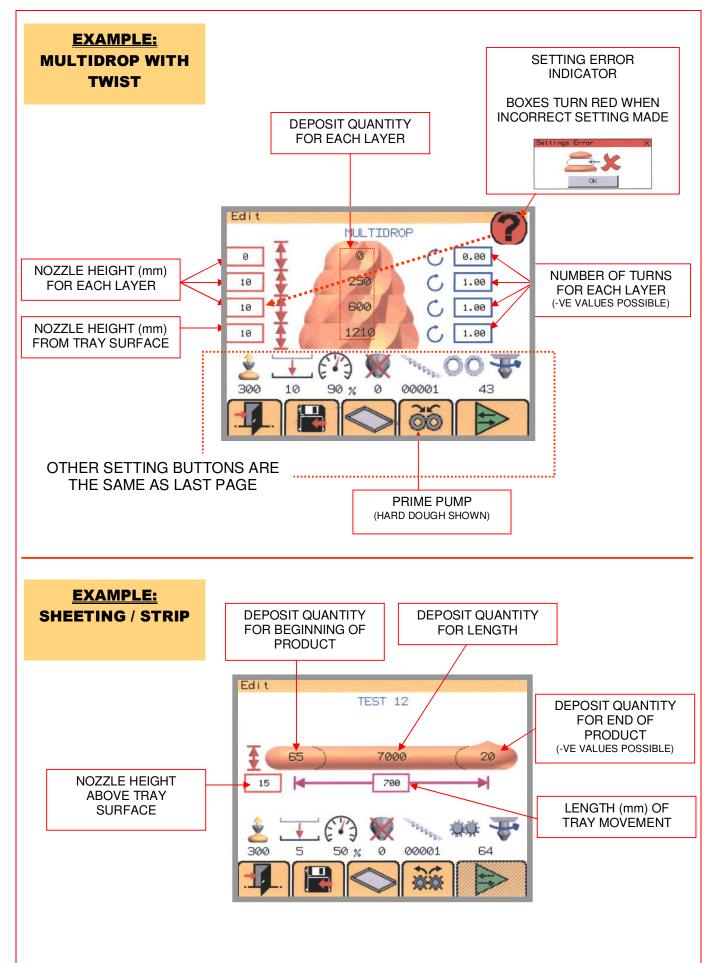
24

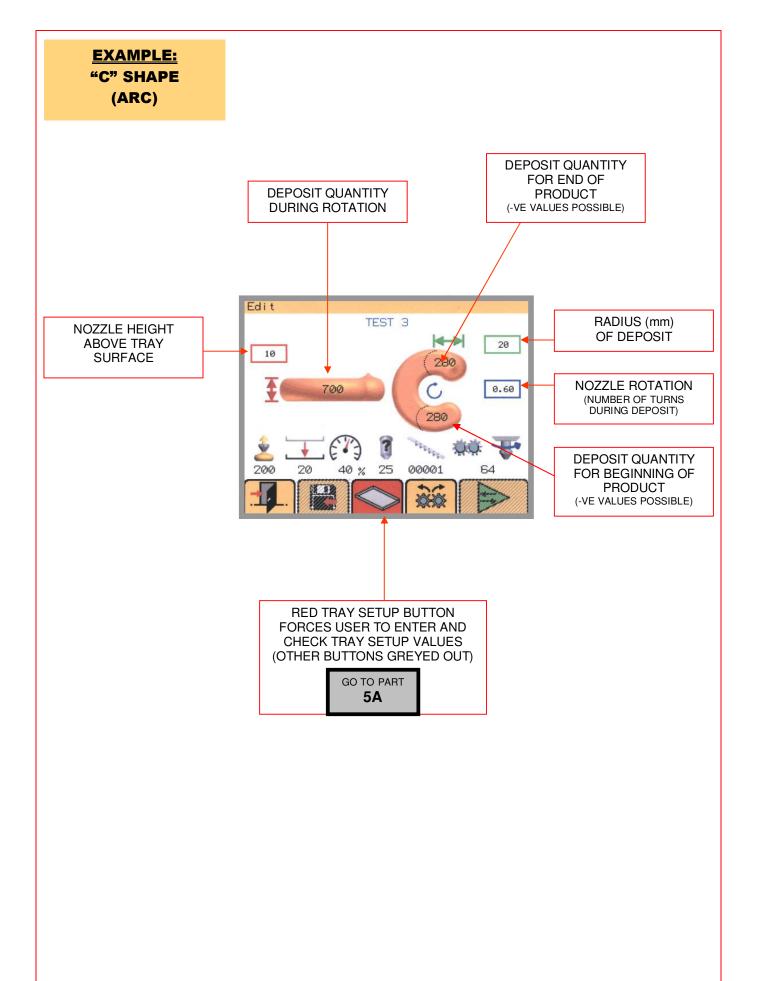
MACHINE IS SET AS SHOWN ON THE SCREEN. THIS SCREEN CONTROLS THE ACTIONS REQUIRED BY THE OPERATOR.



**START** 

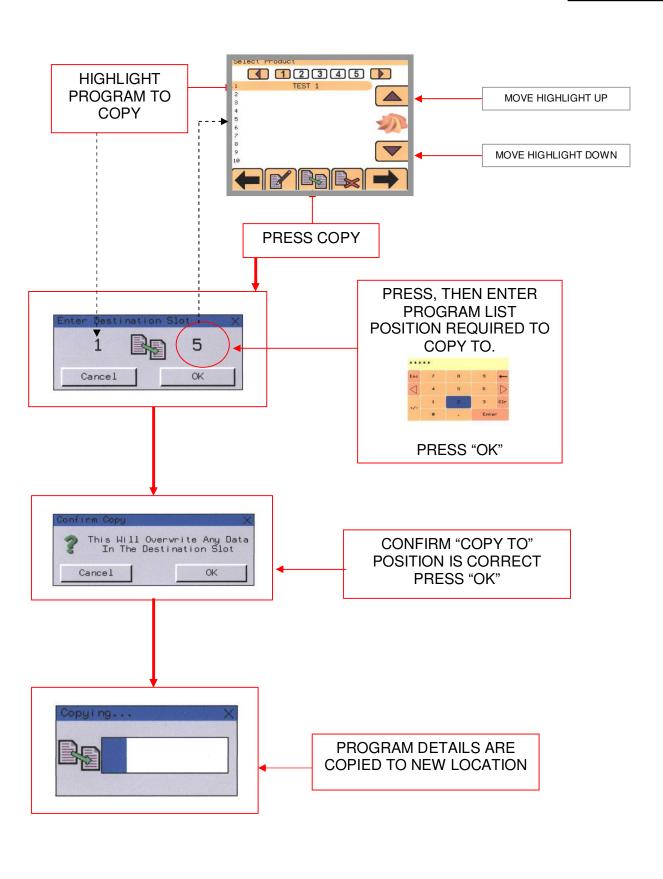






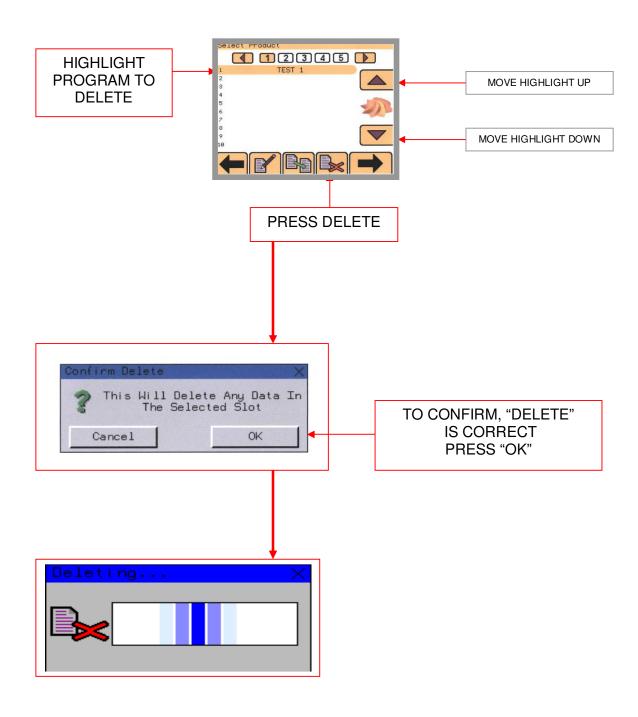


DISTANCE (mm) TO 1<sup>ST</sup> ROW ON TRAY (WHEN USING MANUAL OVER-RIDE) DISTANCE (mm) BETWEEN ROWS (WHEN USING MANUAL OVER-RIDE) MANUAL OVER-RIDE FOR **DIRECTION OF TRAY ROW SPACING MOVEMENT** ON/OFF Tray Settings TRAY EDGE **NUMBER OF** 15 HEIGHT (mm) **ROWS PER TRAY** 760 TRAY LENGTH (mm) -50 mm 2 mm WIPE BACK BUTTON (DISTANCE MOVED BY TRAY AFTER DEPOSIT) TO LAST SCREEN PRODUCT TYPE

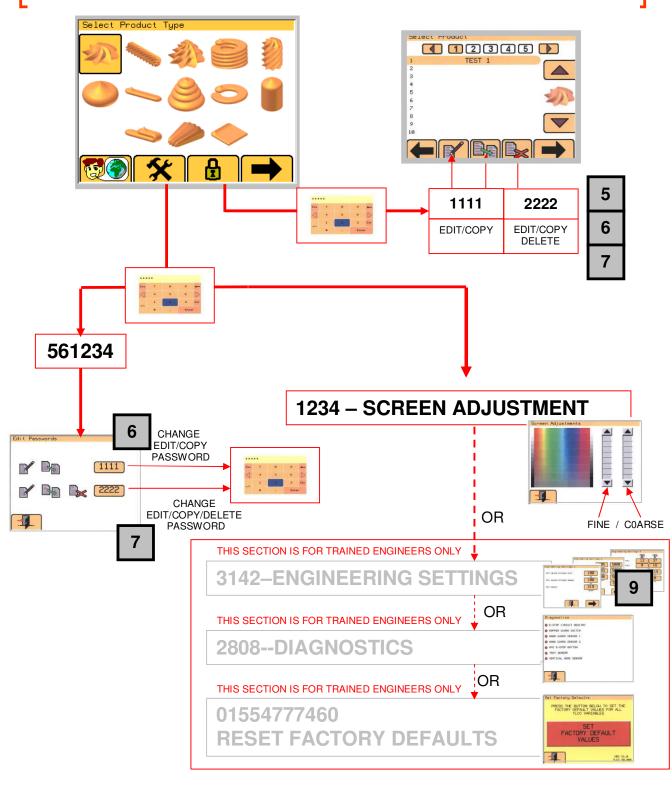


30

## **DELETE**



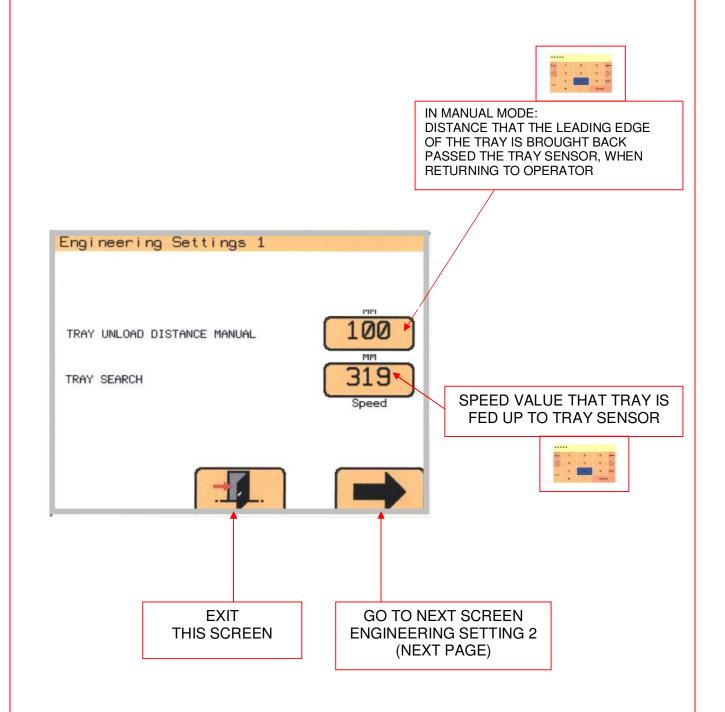
#### **CAUTION**



## **ENGINEERING SETTINGS (1)**

9/1

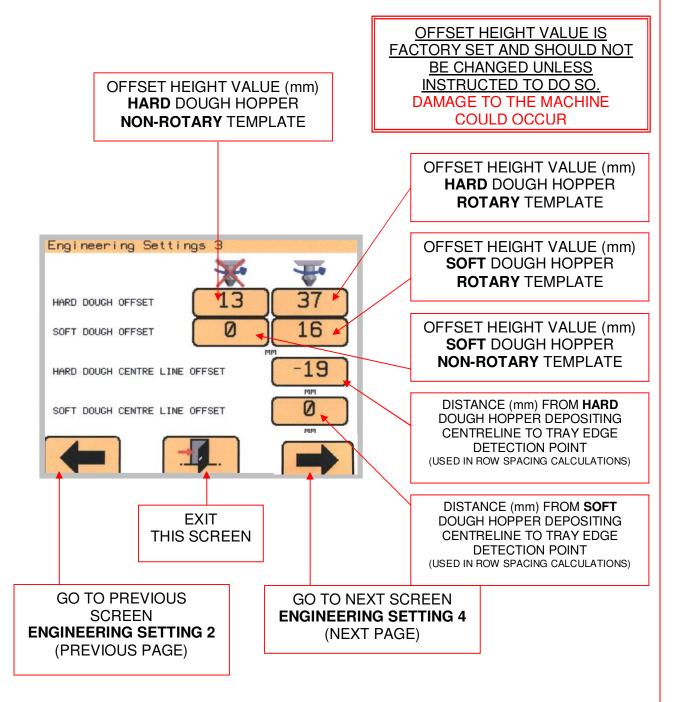
#### THIS SECTION IS FOR TRAINED ENGINEERS ONLY



## **CAUTION**

## **CAUTION**

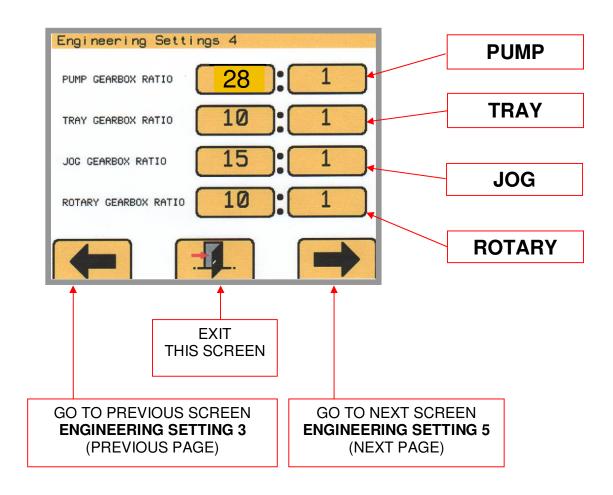
THIS SECTION IS FOR TRAINED ENGINEERS ONLY



## **CAUTION**

THIS SECTION IS FOR TRAINED ENGINEERS ONLY

### **GEARBOX RATIOS**



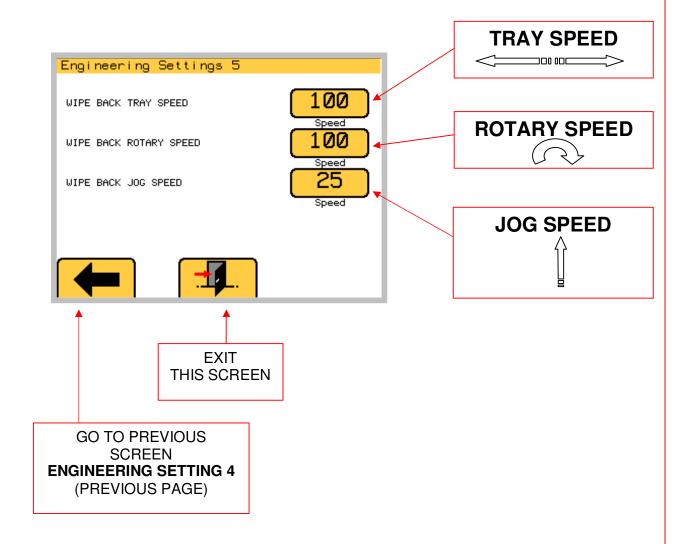
## **CAUTION**

## **ENGINEERING SETTINGS (5)**

9/5

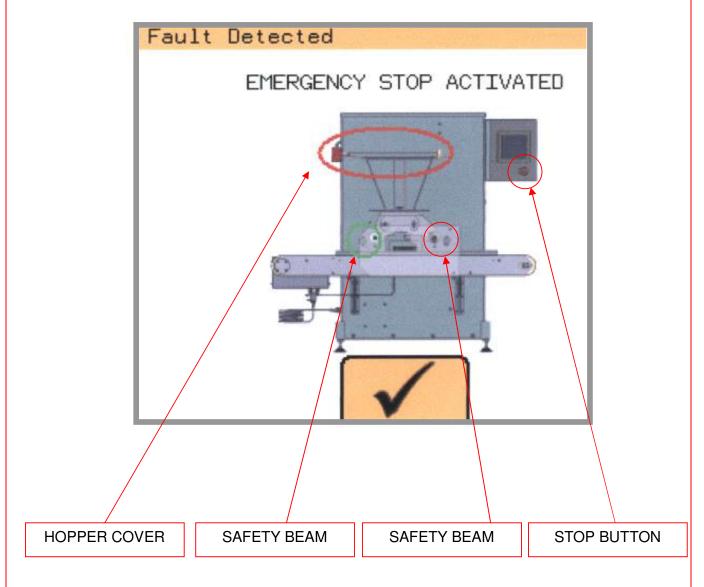
THIS SECTION IS FOR TRAINED ENGINEERS ONLY

## WIPE BACK DEFAULT SETTINGS (SEE 5A)



#### **CAUTION**

DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS

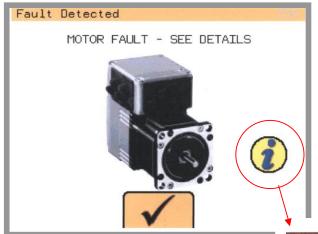


THIS SCREEN INDICATES A FAULT CONDITION IN THE SAFETY AREAS.

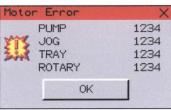
WHEN RED, CLOSE COVER OR CLEAR OBSTRUCTIONS TO CLEAR FAULT. WHEN INDICATOR GOES GREEN, FAULT HAS BEEN CORRECTED AT THAT POSITION.

PRESS BUTTON TO CLEAR SCREEN

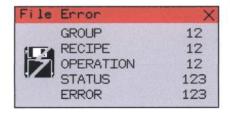
IF THE FOLLOWING SCREEN APPEARS, CHECK THAT THE TABLE MOVEMENT ETC. IS NOT JAMMED WITH SOMETHING. I F IT IS, CLEAR THE OBSTRUCTION AND PRESS TO PROCEED.



PRESS THIS BUTTON IF MORE INFORMATION IS REQUIRED AS TO WHICH MOTOR IS AT FAULT



IF THE FAULT IS NOT OBVIOUS AND NOT ABLE TO BE CLEARED SAFELY, A SUITABLY TRAINED ENGINEER SHOULD BE CALLED



ERROR WHEN LOADING/SAVING RECIPE DATA TO HMI STORAGE CARD PLEASE CONTACT SERVICE DEPT. / ENGINEER IF PROBLEM PERSISTS

## 11.0 MAINTENANCE

Under most conditions the machine only needs to be kept clean and used as instructed in this manual.



WARNING: DO NOT UNDER ANY CIRCUMSTANCES
LUSE A WATER HOSE OR PRESSURE WASHER TO
CLEAN THIS MACHINE.

# Mono Omega Touch

## Check and Maintenance Schedule

Operation	Daily	weekly	3 monthly	Yearly
Clean depositor as per instructions in manual	*			
Check condition of supply lead and plug	*			
check fit of guards	*			
Clean under conveyor belts		*		
Check hopper seals		*		
Check end cap seals		*		
Check condition and tension of conveyor, adjust / replace as required			*	
Check end cap bearings			*	
check alignment of sensors on guards			*	
Check tray sensor is secure			*	
Check condition of idle roller bearings				*
Check condition of drive shaft bearings				*
Check condition and tension of chain and grease as required				*
Grease slides as required				*
adjust eccentric guide rollers as required				*
adjust concentric guide rollers as required				*
Check and grease all slide plates as required				*
Check all motor mounts are tight				*
inspect electrical connections and tighten as required				*

Under no circumstances should maintenance or cleaning of this machine be done with the power connected



42

#### 12.0 SPARES AND SERVICE

If a fault arises, please do not hesitate to contact the Customer Service Department, quoting the **machine serial number** found on the silver information plate of the machine and on the front cover of this manual

### **UK SERVICE, SPARES and OVERSEAS SUPPORT:**



Queensway Swansea West Industrial Estate Swansea. SA5 4EB UK

email:spares@monoequip.com Web site:www.monoequip.com

**Spares Tel. +44(0)1792 564039**Main Tel. +44(0)1792 561234

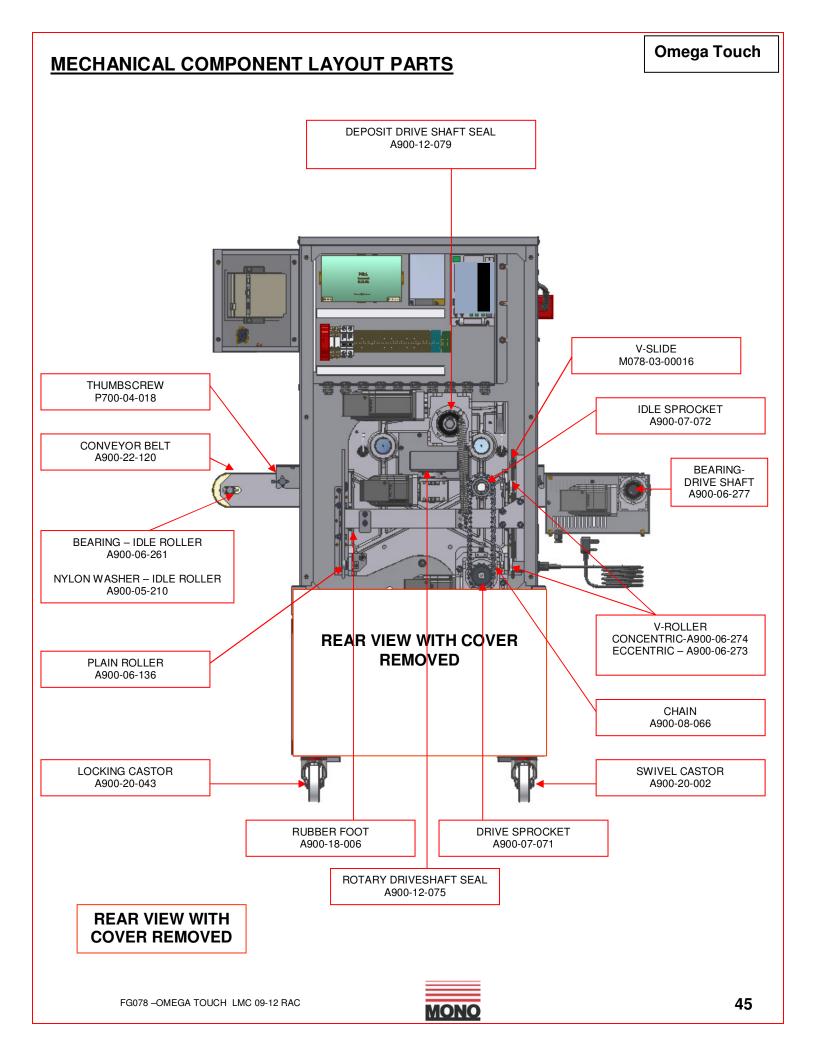
Fax. 01792 561016

FG078 -OMEGA TOUCH LMC 09-12 RAC



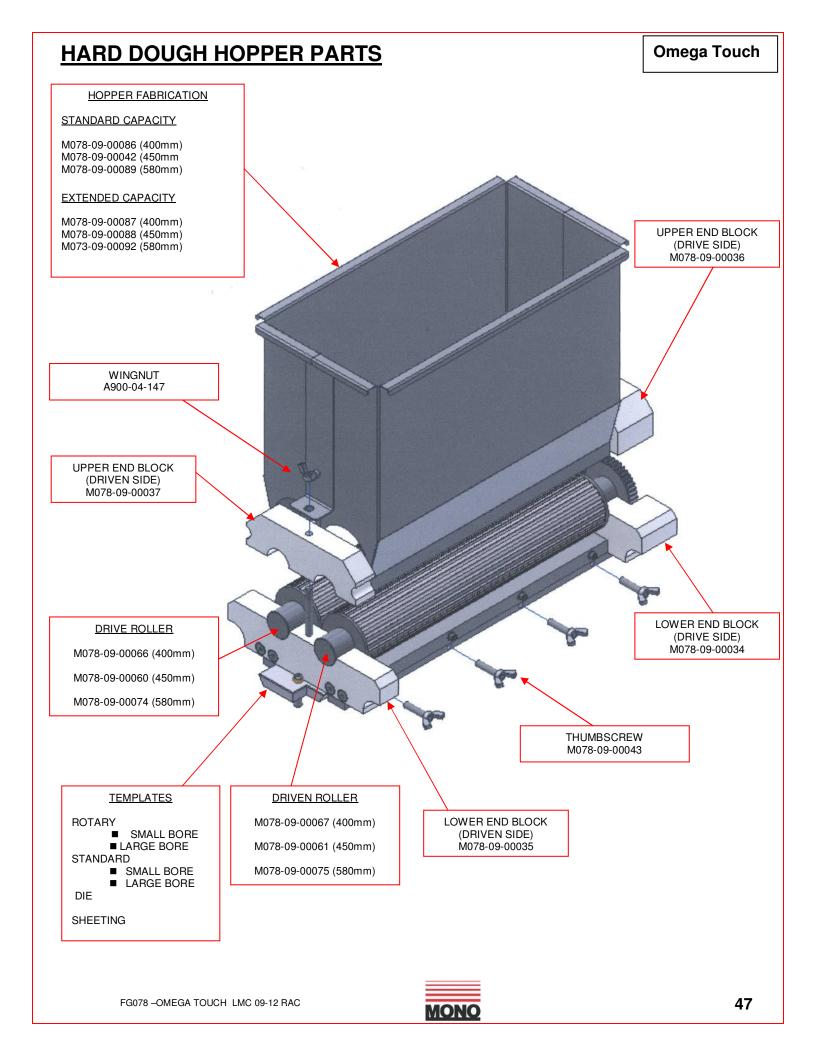
13.0 SPARES
TOUCH VERSION

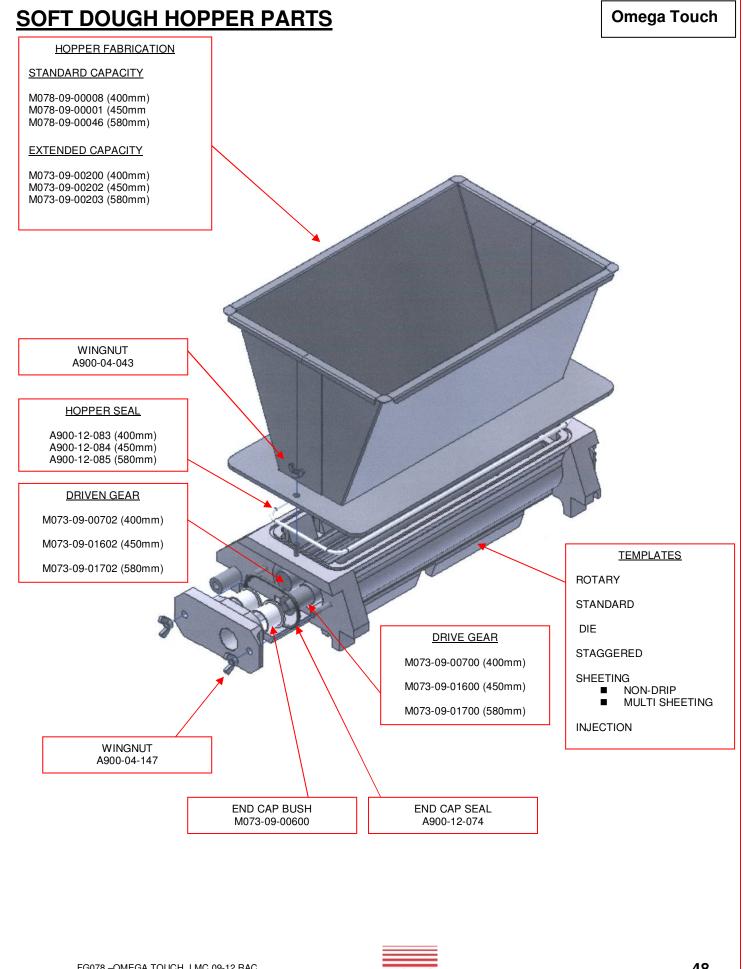
#### **ELECTRICAL COMPONENT LAYOUT PARTS Omega Touch** SAFETY RELAY B801-11-019 36V PSU 24V PSU LMC 20 RELAY B801-37-001 B782-93-001 B801-93-005 B801-80-035 BASE B801-36-001 MCB B872-22-063 НМІ B801-94-009 MCB B872-22-062 HMI CF CARD B801-80-017 HOPPER GUARD SWITCH B818-07-017 **DEPOSIT GEARBOX** A900-11-090 **DEPOSIT MOTOR** B781-74-001 **PHOTOCELL** B801-99-010 **PHOTOCELL** TRAY GEARBOX B801-99-010 A900-11-091 TRAY MOTOR B781-74-004 **ROTARY MOTOR** B781-74-003 **ROTARY GEARBOX** JOG GEARBOX **REAR VIEW WITH COVER** A900-11-091 A900-11-092 **REMOVED** JOG MOTOR B781-74-002 JOG SENSOR B801-99-012 **EMERGENCY STOP BUTTON** B801-12-003 **LEGEND** B801-15-025 TRAY SENSOR B801-99-011 REFLECTOR B801-99-008 SIDE VIEW



# **BASE MACHINE SPARES LIST**

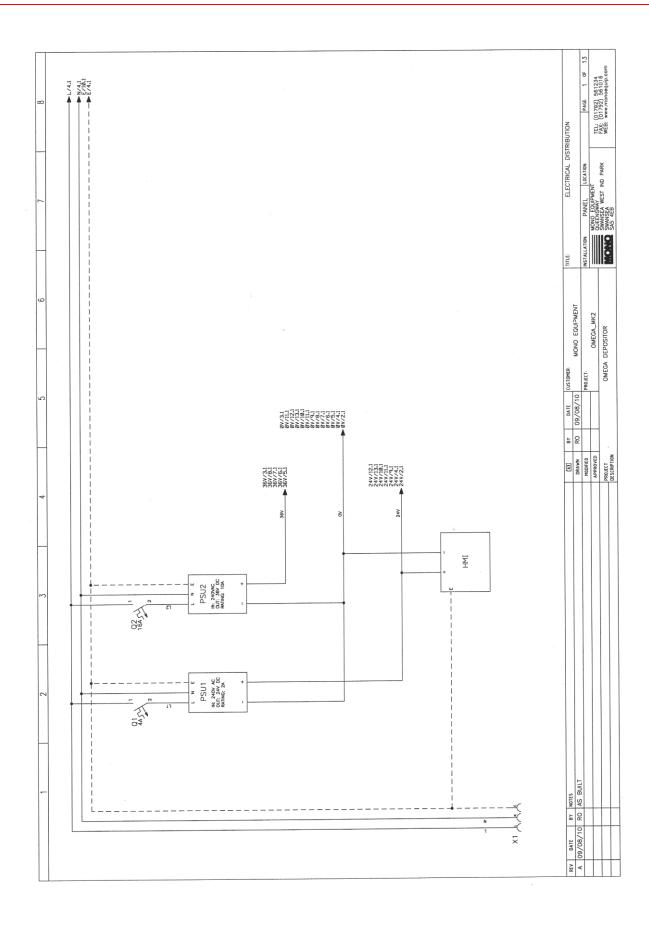
Spares Item Description	Mono Part No.	Qty Req. per M/C
Deposit Gearbox Jog Gearbox Rotary Gearbox Tray Gearbox	A900-11-095 A900-11-092 A900-11-091 A900-11-091	1 1 1
Concentric Guide Roller	A900-06-274	2
Eccentric Guide Roller	A900-06-273	2
Slide Plate	078-03-00016	2
Jog Drive Chain	A900-08-066	1
Simplex Sprocket 16T 1/2" Pitch	A900-07-071	1
Idler Sprocket 16T 1/2" Pitch	A900-07-072	1
Circlip-Ext Metric 14mm Dia	A900-01-280	1
Circlip-Ext Metric 24mm Dia	A900-01-193	1
Drive Shaft – Hopper	078-03-00015	1
Rotary Drive Shaft	078-03-00011	1
Drive Gear - Rotary Template	078-03-00010	1
Lip Seal (Rotary Drive Shaft)	A900-12-075	1
Lip Seal (Deposit Drive Shaft)	A900-12-079	1
Top Guard 400mm/450mm Hopper	078-09-00005	1
Top Guard 580mm Hopper	078-09-00044	1
End Guard	078-11-00001	1
Retainer – End Guard	078-11-00002	2
Spacer - 450/580mm Hopper	078-11-00003	1
Spacer - 400mm	078-11-00004	1
Seal-Rear Cover	A900-25-309	1



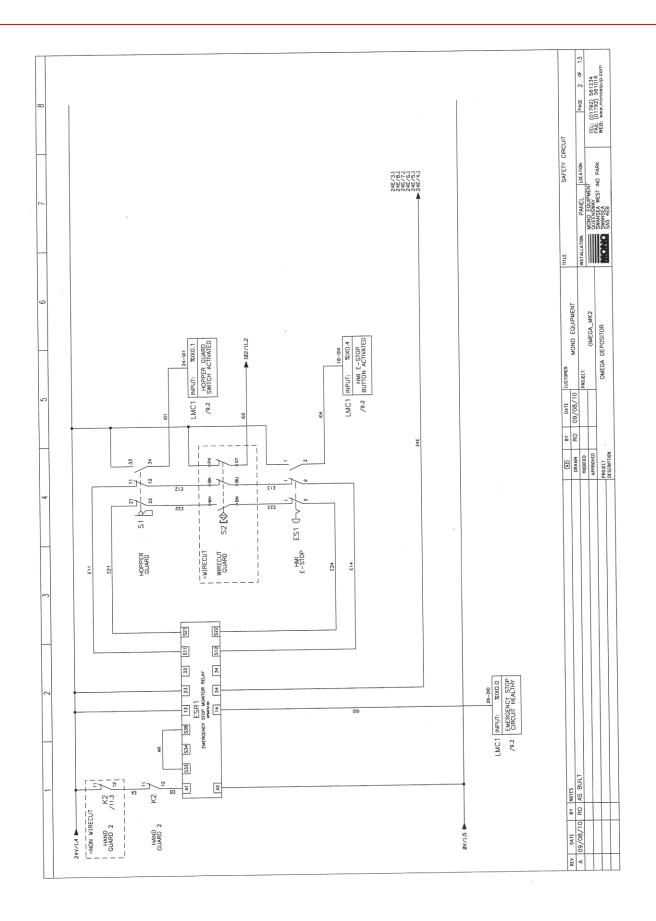




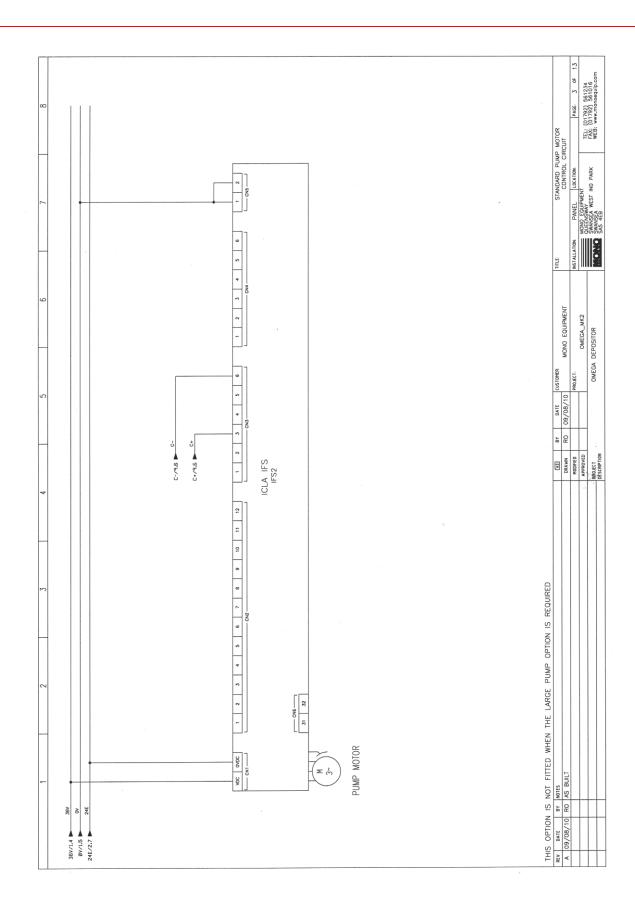
# 14.0 ELECTRICAL INFORMATION TOUCH VERSION



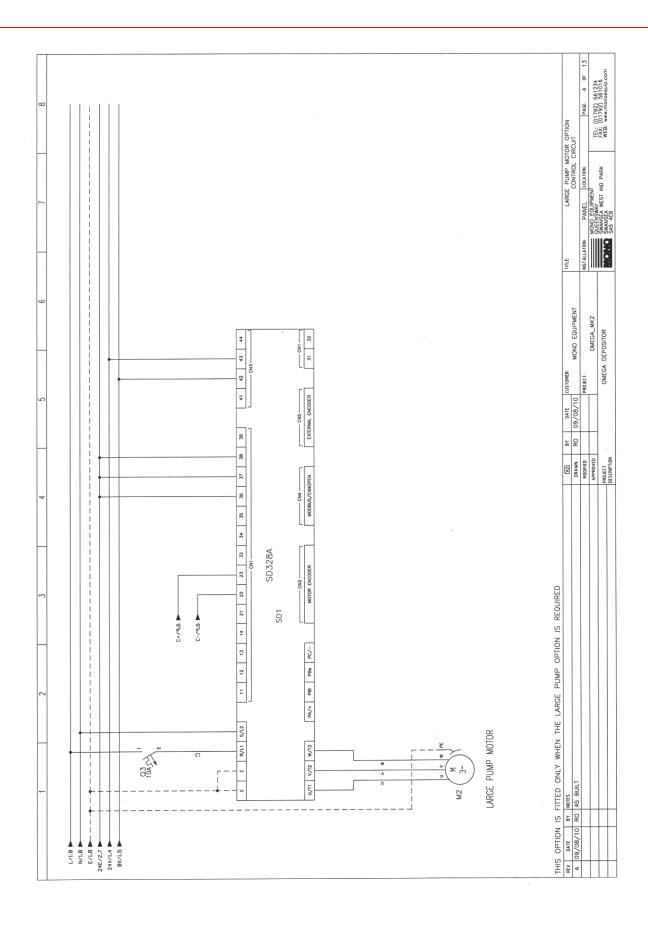




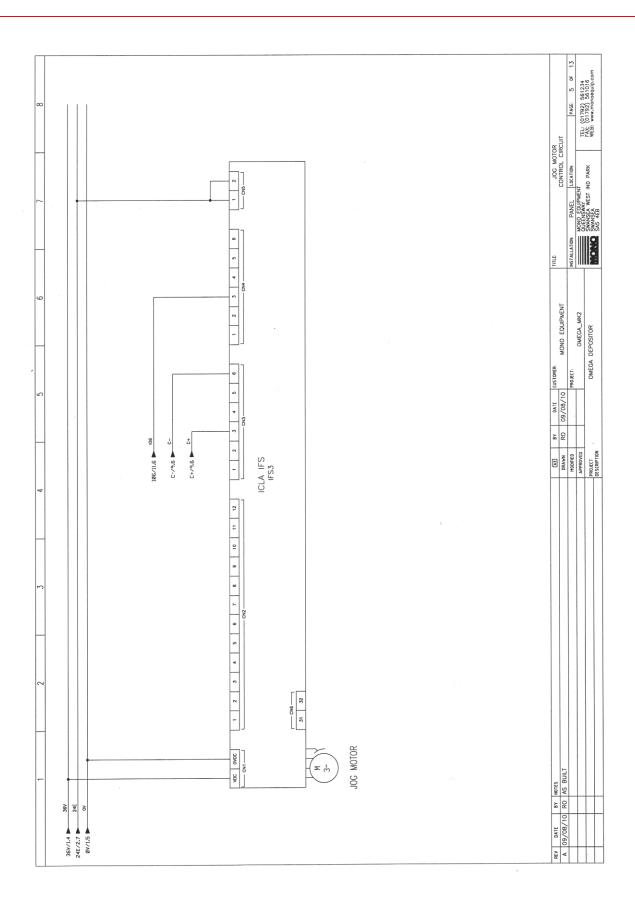




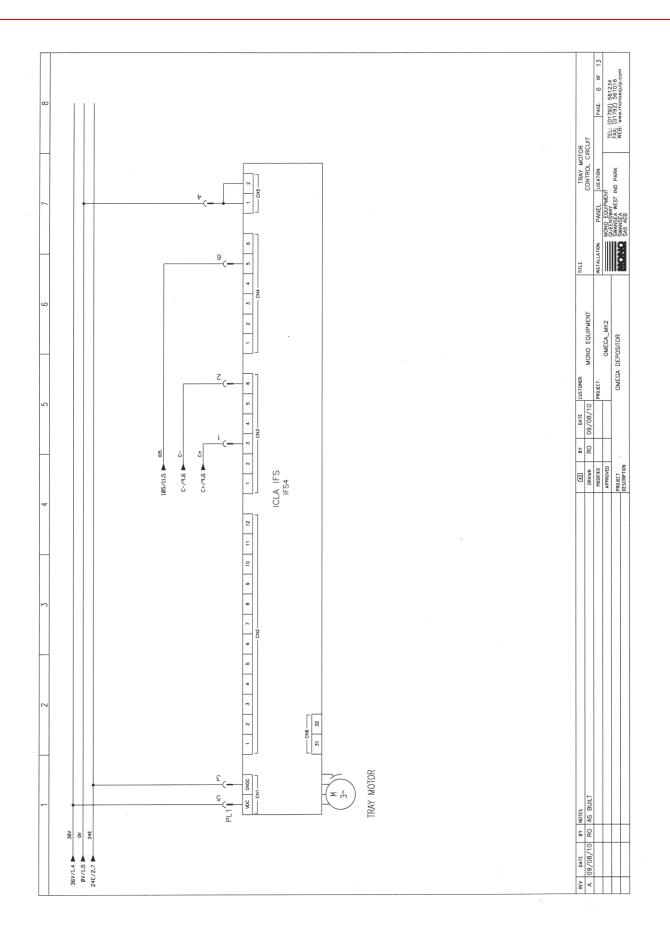




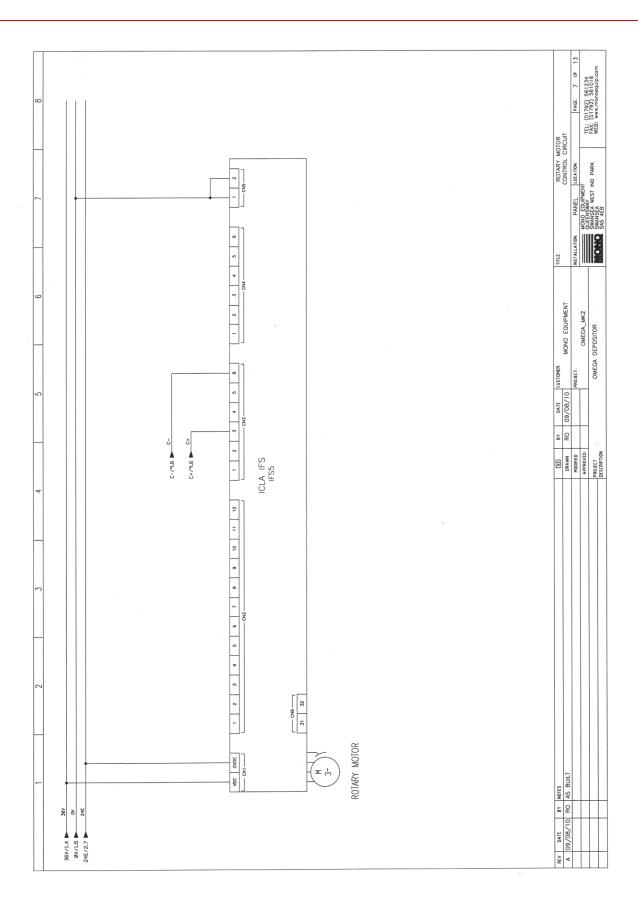




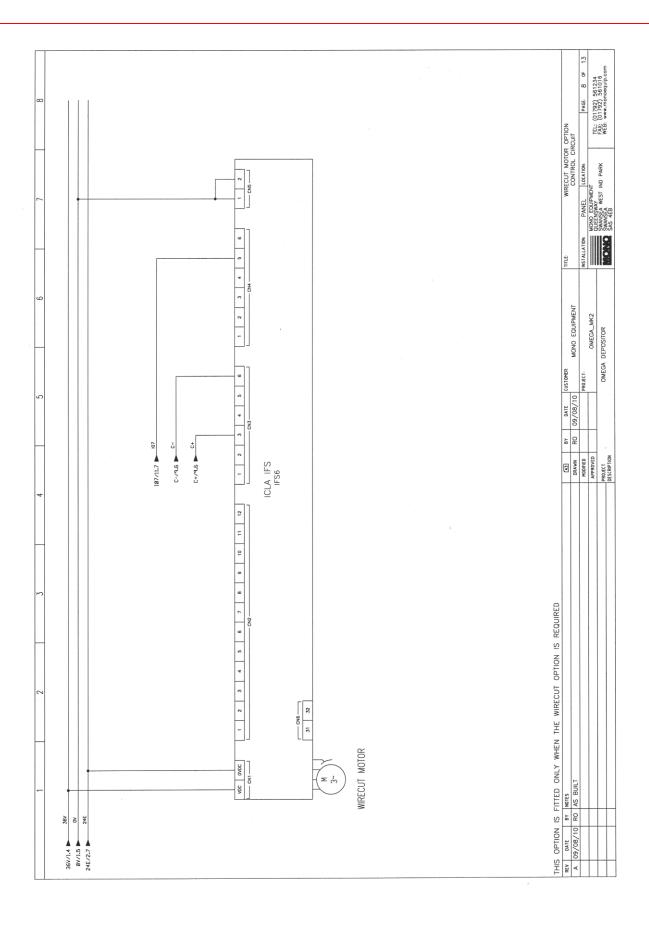




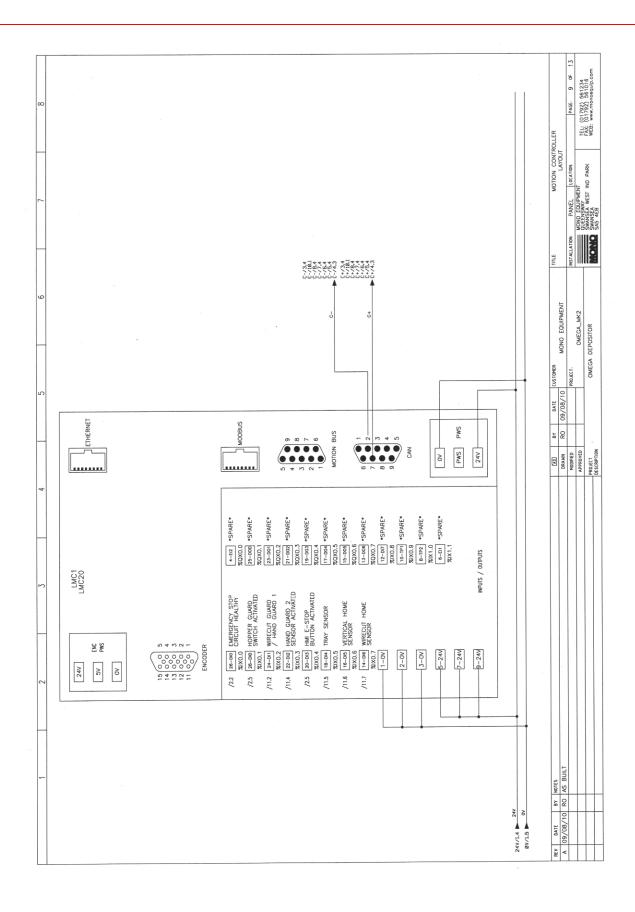




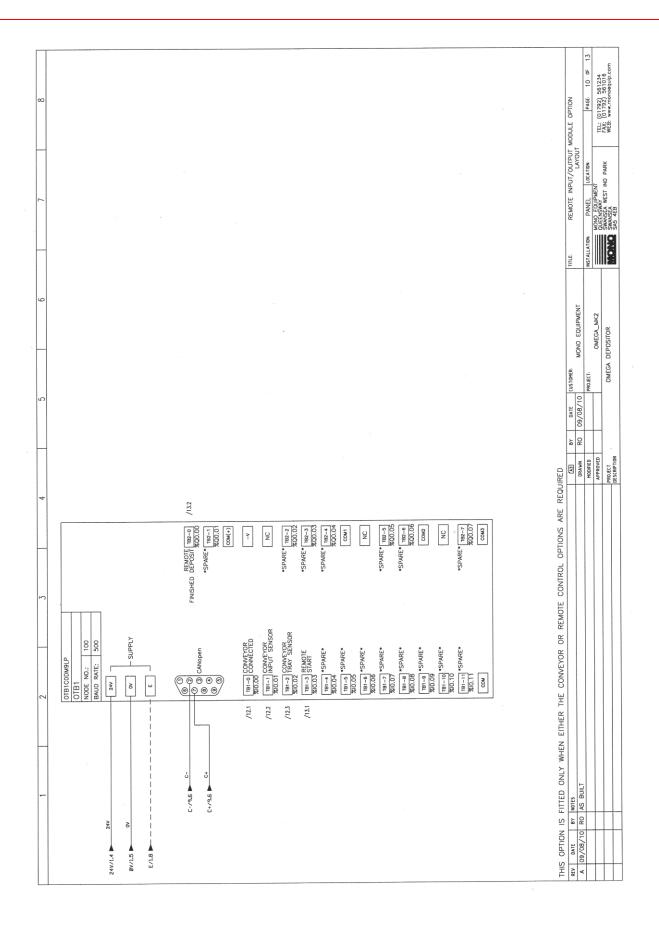




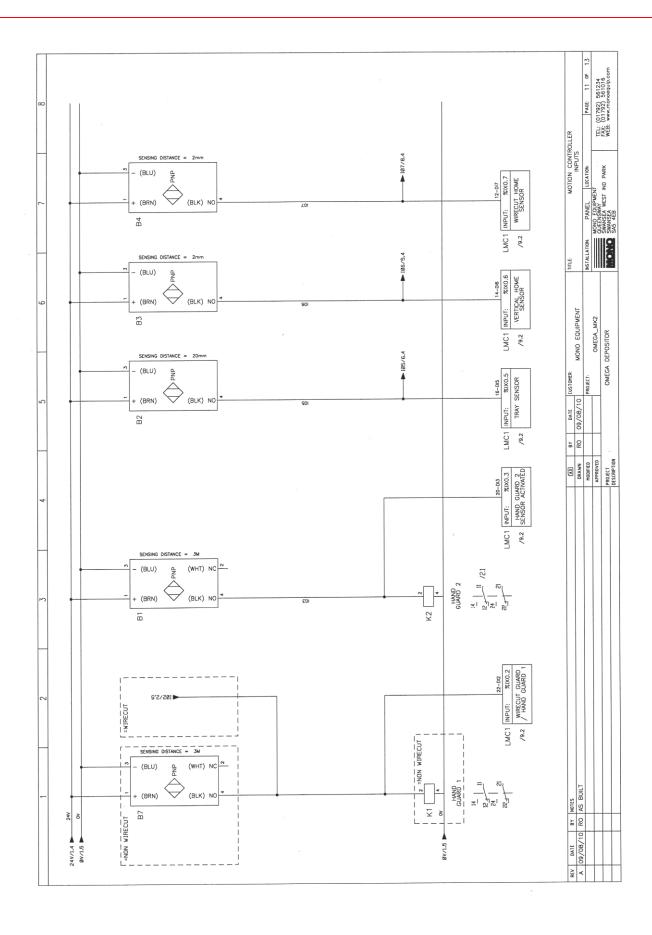




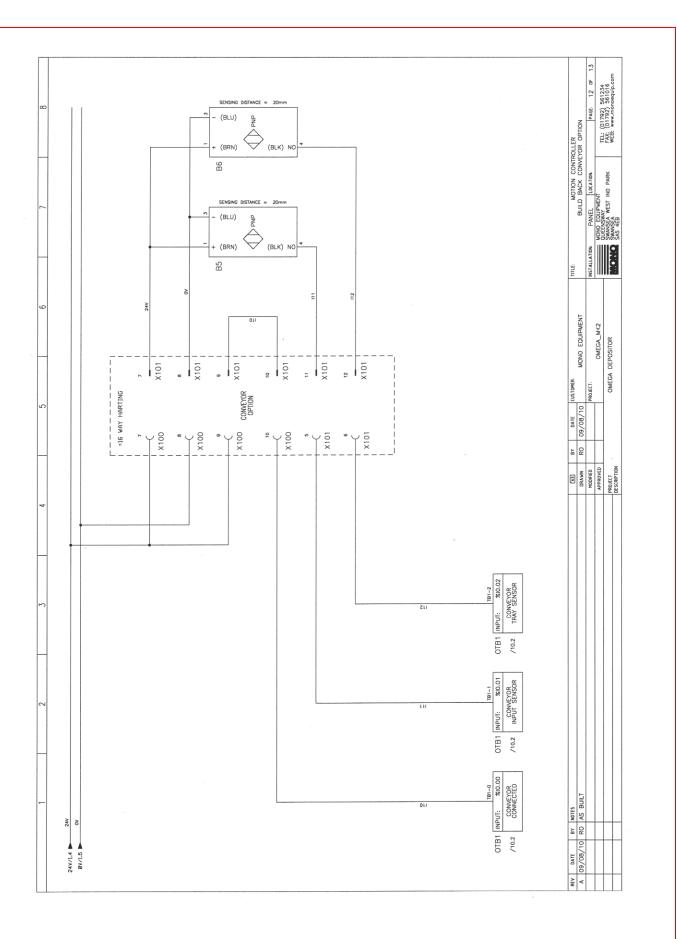




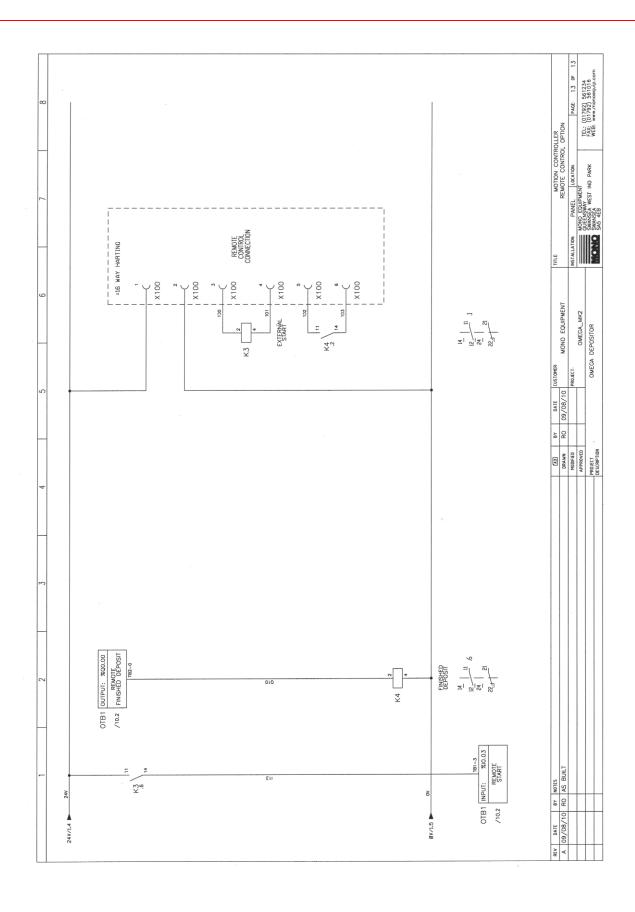














#### The equipment mentioned in this manual has CE accreditation.

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice





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#### DISPOSAL

Care should be taken when the machine comes to the end of its working life. All parts should be disposed of in the appropriate place, either recycling or other means as the law permits at the time.