MAGUIRE PRODUCTS INC.

Weigh Scale Dispense System®

WEIGH SCALE DISPENSE SYSTEM

OPERATIONAL SUPPLIMENT for 6811 Controllers (Red Display)

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To every person concerned with use and maintenance of the Maguire Weigh Scale Dispense System it is recommended to read thoroughly these operating instructions. Maguire Products Inc. accepts no responsibility or liability for damage or malfunction of the equipment arising from non-observance of these operating instructions.

To avoid errors and to ensure trouble-free operation, it is essential that these operating instructions are read and understood by all personnel who are to use the equipment.

Should you have problems or difficulties with the equipment, please contact Maguire Products Inc. or your local Maguire distributor.

These operating instructions only apply to the equipment described within this manual.

Manufacturer's Contact Information

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Maguire Products Inc.
Weigh Scale Dispense System

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EC Declaration of Conformity

Manufacturer: Maguire Products Inc.
Address: 11, Crozerville Road, Media, Pennsylvania, 19014, USA

Declares the following range of equipment described;

Make: Maguire Weigh Scale Dispense System
Model: WSD

Conforms to the following CE directives;

EEC 89/392 Machinery Directive
EEC 89/336 Electromagnetic Compatibility

Using the following CE standard references:

CEI EN 50081-1/2	CEI EN 55022
CEI EN 55082-2	CEI EN 61000-4-2
CEI EN 61000-4-3	CEI EN 61000-4-4
CEI EN 61000-4-5	CEI EN 61000-4-6
CEI EN 60204-1	

And complies with the relevant Health and Safety requirements.

Responsible Person: Steve Maguire
President, Maguire Products, Inc.

Please Note: All Maguire blenders shipped within Europe have a CE Certificate with the shipping documentation, which is specific to the model and serial number of the Maguire WSB blender shipped. Please refer to your shipping documentation for further information.

GETTING STARTED – READ THIS PAGE

This "DISPENSE" booklet provides SUPPLEMENTAL INFORMATION only about your DISPENSE system. The other manual, the WEIGH SCALE BLENDER OPERATION MANUAL, is the primary source of information about the equipment, controller, and software.

Pages 7 through 21 of the BLENDER manual followed by pages 6 through 10 of this SUPPLEMENTAL manual, WILL GUIDE YOU, STEP BY STEP, TO A SUCCESSFUL STARTUP.

IT WON'T TAKE LONG; SO.... PLEASE, DON'T SKIP AHEAD.

FIRST... in the BLENDER MANUAL, read:

SAFETY HAZARD: Page 7	ONE HAZARD exists: SLIDE VALVES. Read this page so no one gets hurt.
ASSEMBLY INSTRUCTIONS: Page 12	Very little assembly is required. But you might as well get it right the first time. ALSO: Pay attention to the section on WIRING.
CHECK OUT PROCEDURE: Page 17	This is to see if you did it right. It also will tell if anything was damaged in shipping.
LOAD CELL CALIBRATION: Page 21	We have already done this. But rough handling during shipping can create load cell problems. If weight readings are not correct, you MUST recalibrate the load cells.

THEN.... return to this manual for:

CONFIRM SOFTWARE SETUP:	This should already be done. You should confirm that it is.
SELECTING DISPENSE WEIGHT:	There are three ways: **Direct entry** of **single** dispense weight, **Recipe** selected **single** weight, **Recipe** selected **series** of weights.
NORMAL OPERATION:	as a DISPENSE system.

PROCEED TO: The Blender Instruction Manual, SECTION 1 – BLENDER STARTUP

After reading the BLENDER STARTUP section to the LOAD CELL CALIBRATION in that manual return to this manual,

PROCEED TO: CONFIRM SOFTWARE SETUP NEXT PAGE

CONFIRM SOFTWARE SETUP

Accuracy is the primary goal of a dispense system. To accomplish this TWO dispenses are made, the FIRST targeting 90 percent of the total, the SECOND programmed to make up the difference.

When set up properly, standard DISPENSE SYSTEMS have components 1 and 2 "turned on" with settings of (90.0) for component 1, and (100) for component 2.

NOTE: To understand how components are "turned on" and how settings effect the math of each dispense, read the TWELVE SOFTWARE INSTRUCTION MANUAL, "Setting TYPES".

To **CONFIRM** that your unit is set up properly:

Press:	SET	Display should say (1 R 090)
Press:	SET	Display should say (2 N 100)

Repeatedly pressing the SET key should repeat the above sequence.

Press:	EXIT	to exit this routine.

If your unit **DOES NOT** show these entries:

1. See page 18 of this manual and page 22 of the BLENDER manual for the proper procedure to make these entries.
2. See page 15 of this manual for the list of parameter changes that you need for your system to work correctly.

PROCEED TO: SELECTING DISPENSE WEIGHT NEXT PAGE

SELECTING DISPENSE WEIGHT

Dispense weight is determined by a 3 digit number, 00.1 to 99.9.

A function is available to shift the decimal point allowing the range of weights to be (001 to 999) or (0.01 to 9.99) (pounds or kilos). See page 8 (*47).

The capacity of the weigh bin is determined by the MAX parameter which is set to 3000 grams for model 220, and 13,500 grams for model 920.

If you request a dispense weight that exceeds this MAX weight, the unit will automatically make multiple dispenses until the requested weight is dispensed.

Three modes of selecting the dispense weight are available:

1. **DIRECT ENTRY** of a **SINGLE** dispense weight, using the TOP thumbwheel switches.

2. **RECIPE** selection of **SINGLE** weights, retrieved from the recipe file, using the MIDDLE switches for recipe selection.

3. **RECIPE** selection of a **SERIES** of dispense weights, retrieved from the recipe file, using the MIDDLE switches for recipe series selection.

Note: the MIDDLE switch entry will override the TOP switch entry.

DIRECT ENTRY:

This is the simplest mode. SINGLE dispense weights can be specified using the TOP thumbwheel switches for direct entry of the weight.

You simply enter the weight you want from 00.1 to 99.9 pounds.

For example: For a dispense of 5.6 pounds, enter (05.6).
For a dispense of 10 pounds, enter (10.0).

RECIPE retrieval of a SINGLE weight:

SINGLE dispense weights may be called up from the recipe file using the MIDDLE thumbwheel switches to specify a recipe number. Up to 99 single weight selections may be retrieved in this way. Enter the recipe number on the MIDDLE switches, 001 to 099.

For example: To retrieve the weight stored in recipe 11, enter (011).

Note: If the MIDDLE switch is set, the TOP switch is ignored.

RECIPE retrieval of a SERIES of WEIGHTS:

In this mode, a series of different weights may be retrieved in their order of entry and dispensed consecutively. The series will automatically repeat over and over. The MIDDLE thumbwheel switches specify the starting point in the recipe file.

Up to 99 different groups or sequences may be stored, with no limit on the number of weights in any single sequence, except that an overall limit of about 1000 weights can be stored.

Enter the recipe file start point on the MIDDLE switches.

A nine must be entered as the first digit of the thumbwheel switch setting (9xx) to signal the unit to retrieve a series of weights rather then just a single weight.
Enter a thumbwheel switch number from 901 to 999.

An entry of "999" in the recipe file is necessary to mark the end of each series of weights.

For example: To retrieve a series of weights that start at recipe location 16, enter (916). At the end of this series a retrieval of "999" will occur to signal the end of the series and to pass control back to the start point.

POWER OFF will always reset a recipe sequence back to its beginning point.

REMEMBER:

The TOP set of thumbwheel switches indicate a WEIGHT for DIRECT entry of a dispense weight.

The SECOND set of switches indicate a RECIPE number for retrieval of a single weight or a series of weights from the recipe file.

If the MIDDLE switch is set, the TOP switch is ignored.

When no RECIPE number is set, entry is (000), control reverts back to the TOP switches, which are then read as a direct weight.

NOTE:

The recipe function will not operate until this function is turned on and entries are made. This is explained next.

PROCEED TO:	RECIPE FILE	NEXT PAGE

THE RECIPE FILE:

RECIPE number ENTRY is explained on the NEXT PAGE. Before making entries, read the following example of how they are handled.

Example:
Recipe file, recipes 01 to 99:

	< - - - - - - - - - Up to 12 entries per recipe number. - - - - - - - - - >											
1	100	035	225	999								
2												
3	025	051	240	330	120	220	110	030	065	020	200	200
4	165	185	063	999								
5												
6	105	108		040	133							
7	200	222	010	999								
8												
9												

and so on up to:

99												

Requesting recipe 001 brings only one weight; 10.0 pounds.

Requesting recipe 901 brings up three weights. The first dispense will be 10.0 pounds, the next will be 03.5 pounds, the third 22.5 pounds. "999" ends the sequence which means the forth dispense will start the sequence over again at 10.0 pounds.

Requesting recipe 002 or 902 runs nothing since recipe 2 starts with a zero or blank entry. No recipe is run. No dispenses occur.

Requesting recipe 003 brings up one weight; 02.5 pounds.

Requesting recipe 903 runs a sequence of 15 weights, starting with 2.5 pounds and ending with 6.3. Notice the sequence does not stop after 12 entries, but continues until "999" is encountered.

Requesting recipe 006 brings up one weight; 10.5 pounds.

Requesting recipe 906 runs a sequence starting with 10.5 and ending with 1.0. A total of 7 different weights are dispensed before being repeated. Blank fields or fields with 000 are skipped. Only the "999" stops the forward scan and returns the selection to the starting point.

ENTRY of RECIPES

To use the RECIPE features, follow the procedures outlined here to make all entries and changes to the recipe file.

You must first be in the PROGRAM mode:

PRESS	*	Display will say:	PASSWORD
PRESS	2 2 2 2 2	Display will say:	P x.x

If pressing the RECIPE (RCP) key brings up a display of (INVALID), then the RECIPE key must be enabled in the FLG parameter.
To do so:

PRESS	PARA	Display will say:	FLG 00000
PRESS	0 0 1 0 0	Display will say:	FLG 00100
PRESS	EXIT	Display will say:	P x.x

To view, enter, or change a RECIPE:

PRESS	RECP	Display will say:	01 EMPTY

We call this display the recipe "ID and status" or "title". If data resides in recipe 01, the title will say: (01 DATA).

Press: RCP repeatedly to scan forward thought all 99 recipes.
OR: ENTER a two digit recipe number to jump to the recipe you want.

When the recipe "title" you want is displayed:

PRESS	*	Display will say:	01-1=000 This is recipe 1, component 1, setting of 000.
PRESS	*	Display will say:	01-2=000 This is recipe 1, component 1, setting of 000.
PRESS	*	repeatedly	to scan forward through the entries.

At any point,
Enter: The correct dispense weight you wish to store.
For example; if the dispense is to be 18.5 pounds,
enter 185.

Press: "CE" to clear any entry to 000.

ALWAYS:
Enter: 999 to indicate the end of a series.
Press: EXIT when done

To retrieve only SINGLE weights from the recipe file, enter these weights only in position 1 of each recipe string. Position 1 entries are the only recipe entries that can be retrieved singly.

To retrieve a SERIES of weights, always START the series in position 1 of a recipe string and end the series with the entry of 999.

A series may exceed the 12 entries of a single recipe string. The system automatically scans forward through succeeding recipe strings until a "999" is encountered. It then returns to its start point.

A series may include blank or zero entries, which will be skipped automatically.

SPECIAL STAR FUNCTIONS:

These functions are available in the PROGRAM mode only.

Press (*,4,7) to alter the range of available dispense weights by a factor of ten. The system normally accepts entries from 00.1 to 99.9 pounds or kilos. This function alters this range so entries are now read as 001 to 999 or 0.01 to 9.99.

Press *47 and use the * key to toggle between a display of (MAX 99.9) and (MAX 999). When the range you want is displayed, press EXIT.

OPERATION

Turn power on.

Turn both STOP switches, on left side of controller, UP.

If recipe function is NOT being used:

Set the top thumbwheel switches to the weight you want.
Leave the middle switches set to 000.

If recipe function IS being used:

to select ONE recipe, set the middle switch to a single Recipe number (001 to 099).

to scan a series of recipes; set the middle thumbwheel switch to 9 plus the starting recipe number (901 to 999).

to directly enter a weight, set the middle switches to 000; and set the TOP thumbwheel switches to the weight you want.

Position the container under the dispense station.

Press and hold the START button long enough to start the process, about 3 seconds.

MODEL WSD - WEIGH SCALE DISPENSE SYSTEM

OVERVIEW

MAGUIRE WEIGH SCALE DISPENSE systems are designed to meet the needs of the ROTATIONAL MOLDING industry where obtaining pre-weighed batches of material is an important part of the process.

These systems allow you to dispense pre-selected weights ranging from 00.1 to 99.9 pounds or kilos, or optionally, from 1 to 999 pounds or kilos.

Accuracy is the primary goal of a dispense system. To accomplish this, without sacrificing speed, TWO dispenses are made, the FIRST targeting 90 percent of the total, the SECOND programmed to make up the difference.

EQUIPMENT CONFIGURATION

MAGUIRE model WSD DISPENSE systems are very similar to our Weigh Scale Blenders. All mechanical components are the same except the mix chamber is removed and replaced with a funnel to divert all material out the bottom.

The controller is identical, with certain parameters changed to meet the special requirements of a DISPENSE station. In other words, Weigh Scale Blenders and Weigh Scale Dispense stations share the same controller and same software. A few simple entries using the keypad change the function of the controller from one unit to the other.

Since material is not held in a mix chamber, the high level sensor normally provided on a blender is not present. A push button replaces the sensor to start the dispense cycle. Any other type of external contact closure may be substituted for this push button.

MODELS - Two systems are offered as standard:

WSD 220

- 420 frame.
- 3 K load cells.
- 4 K weigh bin. (holds about 5 pounds at 20 #/cu ft)
- Qty. 2 - 3" round valves for 1st. and 2nd dispense.
- Optional flow restrictor on 2nd dispense valve.
- Dispense hopper, single compartment.
- 12 software - DISPENSE mode selected.
- Sensor replaced with Push button to start cycle.
- Optional hopper vibrator added for consistent flow.

WSD 920

- 940 frame, modified for 1800 weigh bin.
- 10 K load cells.
- 18 K weigh bin. (holds about 25 pounds @ 20 #/ft)
- (2) 3"x 6" valves with 940 hopper, partitions removed.
  or 2"x 3" valves with 220 hopper, partition removed.
- optional flow restrictor on 2nd dispense valve.
- mix chamber replaced with fabricated funnel.
- 12 software - DISPENSE mode selected.
- Sensor replaced with Push button to start cycle.
- Optional hopper vibrator added for consistent flow.

FEATURES

Dispense preselected weights accurate to 0.1 of pounds.

Four weight ranges available:

0.1 to 99.9 pounds
0.1 to 99.9 kilos
1 to 999 pounds
1 to 999 kilos

Three modes of weight selection are available:

1. DIRECT ENTRY of a SINGLE dispense weight using thumbwheel switches to enter the weight.

   Simply enter the weight you want from 00.1 to 99.9 pounds, or from 1 to 999 pounds (or kilos) directly on the switches.

2. RECIPE selection of SINGLE weights retrieved from the recipe file, using thumbwheel switches to enter the recipe number.

   Thumbwheel switches are used to specify a recipe number. Up to 99 single weight selections may be retrieved in this way.

3. RECIPE selection of a SERIES of dispense weights, retrieved from the recipe file, using a thumbwheel switch to select the desired series.

   In this mode, a series of different weights may be retrieved in their order of entry and dispensed consecutively. The series automatically repeats over and over. Thumbwheel switches specify the starting point in the recipe file.

   Up to 99 different groups or sequences may be stored, with no limit on the number of weights in any single sequence. An overall limit of about 1000 weights can be stored.

The system may be cycled manually by pressing a start button, or automatically controlled from a remote relay closure provided by a PLC.

For automated systems, a "cycle complete" signal is available.
Automated processes controlled by a PLC can use this signal.

CYCLE START

Maguire Blenders begin the dispense cycle when a signal is received from a level sensor. Since DISPENSE systems don't require level sensors, we provide a START button that plugs into the "level sensor" receptacle on the right side of the controller. The system will then cycle when the button is pressed.

You may also wire this start signal to a relay contact that can provide the same start signal by automatic control.

The START signal must be a minimum of TWO SECONDS long.

CYCLE COMPLETE

If this system is part of an automated material delivery system, a "cycle complete" signal may be necessary. This is available through the MIX MOTOR output, on the right side of the controller.

All Maguire WSB controllers provide a 110 volt (or 230v) mix motor output normally used to drive a mixer motor. This signal is programmed to begin exactly when the weigh bin dump valve opens and dumping begins. The signal continues for 10 seconds. It is further programmed to jog the mix motor for one second every 30 seconds thereafter.

Dispense stations do not have mix motors, so this voltage output serves no purpose. However, this signal does provide an excellent way to signal the end of the cycle. Automated processes controlled by a PLC can use this signal.

This is a 110 volt (or 230v) signal. A relay will be required if you prefer a dry contact closure.

If you are going to use this output, the MIX parameter must be changed to eliminate the JOG signals that normally occur every 30 seconds. You must change this parameter from (MIX 03010) to (MIX 00010) so that NO jogs occur.

If the receiving container is to be moved away automatically, then, when the signal is detected, meaning the weigh bin has begun to empty, a delay of adequate duration should be programmed (at the PLC) so that the receiving container will remain in place long enough for the weigh bin to completely empty.

The MIX MOTOR switch must be down, in the TIMED position, for this signal to work as described.

If you require the signal to be shorter or longer then 10 seconds, you may change the MIX parameter to another number. Read more about the MIX parameter in the Standard Blender Instruction Manual.

PARAMETER TABLE

DISPENSE systems use TWELVE component software as a base. To program this unit to properly operate as a DISPENSE system, we have already made a number of changes to the normal "default" numbers in the PARAMETER table stored in the controller's memory. These changes were entered through the keypad.

We explain them here because you may want to change them further.

The changes are as follows:

FLG 00100 **Change from 00000 to 00100 ONLY if you plan to use the RECIPE function.**

This flag enables the RECIPE key to function. This will allow the selection of a dispense weight or a series of weights from the recipe file.

JOG 00030 **Change to 00000 ONLY if you are automating your system for control from a PLC.**

This parameter controls JOG function. A PLC may use the MIXER signal to indicate the end of the dispense sequence. Changing 00030 to 00000 prevents the JOG function from operating.

NOTE: This feature requires that you have specified our full feature controller, which includes the mixer motor solid state relay output. This is optional.

DTI 00005 **Change ONLY if you feel the time allowed to empty the weigh bin is too long.**

This is the time, in SECONDS, that the weigh bin valve will open to empty the weigh bin. This time adds to overall cycle time so it should be short, but not too short.

BER 00000 **ALWAYS change this parameter to 00000.**

This is a "bailout" weight. A zero setting is the most sensitive. This ensures minimum overshooting of a dispense should such an error occur.

FUL 00001 **ALWAYS change this parameter.**

This is the PRIMARY indication to the controller that this system is a DISPENSE system.

The options are:
FUL = 00001; read weight in pounds (xx.x).
FUL = 00002; read weight in kilos (xx.x).

These settings instruct the software to use the top row of switches for direct entry of the weight of the dispense or, if the RECIPE function is on (FLG=00100), then the 2nd thumbwheels will indicate the recipe where the correct weight will be found.

DLY 00000 **ALWAYS change this parameter to 00000.**

This keeps the time you must hold the start button as short as possible. A start signal must be held for a least two seconds while a valid tare weight is taken. DLY time (seconds) is then added to tare weight time. Since no added delay is desirable, we set this to 0.

MAX 13500 **This parameter is set automatically according to model.**

It signals the maximum weight the bin can safely hold without risk of overflowing. It is based on rotational molding powder, about 20 pounds per cu. ft.

When dispense weight you request exceeds the amount specified in the MAX parameter, the unit will automatically make multiple dispenses that will add up to the requested amount. When multiple dispenses are made, each dispense is targeted at 2/3 of the MAX setting until the remainder is less then MAX.

The default values MAX=6000 for a model 220 and MAX=13500 for a model 920.

DS1 00000
DS2 00000

These parameters override the top and middle thumbwheel switch settings. Use them if you are using the MLAN Protocol.

If either DS1 or DS2 is set to any value greater then zero, DS1 will be substituted for the TOP switch settings, and DS2 for the MIDDLE switch settings.

These two parameters allow MLAN to download the dispense weight amount or recipe number. They also allow entry of a "locked in" amount or recipe.

If both are set to 00000, then nothing changes.

Note: The middle thumbwheel switch setting for a recipe will override the top switch setting. When using MLAN to load a weight into DS1, load 00000 into DS2 to be sure DS1 will control.

BCR 00000 **Number of bar code reads required before start.**

If you know ONE bar code input is required before a new cycle is initiated, set this parameter to 00001. The blender is then prevented from operating until one single valid input is received. If two inputs are expected, set this parameter to 00002, etc. Repeated identical readings will not be counted.

All of these parameters are more thoroughly described in our WEIGH SCALE BLENDER INSTRUCTION MANUAL. If you make changes, use the *23 function to save the new corrected information. The *23 function is described on a label on the controller.

CHANGING PARAMETERS

To change a PARAMETER, the sequence of keystrokes is as follows:

PRESS	*	Display will say:	`PASSWORD`
PRESS	2 2 2 2 2	Display will say:	`P x.x`
PRESS	PARA	Display will say:	`FLG xxxxx`
PRESS	PARA	Press again to walk FORWARD through list.	
PRESS	*	to BACK UP in the list.	

When the PARAMETER you want is displayed, enter a new setting using the number keys. You must enter 5 digits. Use leading zeros.

PRESS	EXIT	Display will say:	`P x.x`

SAVING PARAMETERS in EEPROM

If the changes you have made are PERMANENT, SAVE them in EEPROM.

Sometimes during normal operation, electrical noise or RF (Radio Frequency) noise will corrupt the processor memory. It may be necessary to do a CLEAR to fix this problem.

A "CLEAR" will clear all data from memory and replace it with information stored in the EEPROM.

So it is a good idea to have an exact copy of RAM stored in the EEPROM for just such an emergency.

To copy ALL PARAMETERS into the EEPROM, the sequence of keystrokes is as follows:

PRESS	*	Display will say:	`PASSWORD`
PRESS	2 2 2 2 2	Display will say:	`P x.x`
PRESS	*	Display will say:	`INSTR --`
PRESS	2 3	Display will say:	`SAVING`
WAIT …	**When Done**	Display will say:	`P x.x`
PRESS	EXIT	Display will say:	`x.x`

With this done, all correct Parameters may be restored from EEPROM to RAM at any time by doing a CLEAR.

To do a CLEAR, hold the "CE" key down when turning on power.

PERCENTAGE SETTINGS

Accuracy is the primary goal of a dispense system. To accomplish this, without sacrificing speed, we have found that TWO dispenses are best, the FIRST targeting 90 percent of the total, the SECOND programmed to make up the difference.

"PERCENTAGE SETTINGS" are entered to tell the unit what to do.

Dispense systems use our "TWELVE" component software, which means up to twelve components could be controlled. But we use only two.

We have "turned on" components 1 and 2, setting component 1 to "REGRIND" and component 2 to "NATURAL". This instructs the software to handle the math the way we want; specifically "regrind" components are handled as a percentage of the batch weight, and "natural" components are programmed to target just enough material to make up the short-fall from the first dispense.

The meaning of the designations "natural" and "regrind" will be clearer if you read our TWELVE SOFTWARE INSTRUCTION MANUAL, "Setting TYPES".

The settings that we enter are 90.0 (90 percent) for component 1, and 100 for component 2. (The value 100 has no significance) Again, this will be clearer if you read the INSTRUCTION MANUAL section on "Settings".

The first dispense, component 1, is 90 percent of requested amount.

The second dispense, component 2, fills the balance of the bin to full requested amount.

We already set the unit up properly and entered these settings.
The INSTRUCTION MANUAL covers the procedure for making these entries.

INSTRUCTIONS FOR SYSTEMS EQUIPPED WITH BAR CODE READERS

Principle of Operation

All blenders produce blends according to PERCENTAGES entered either manually using the keypad, or by MLAN command.

In a Dispense System, the DISPENSE AMOUNT is entered by either setting the top thumbwheel switch, or by MLAN command.

BLEND PERCENTAGES and the DISPENSE AMOUNT remain unchanged unless or until new entries are made.

By connecting a BAR CODE scanner to the MLAN port, all MLAN commands may be entered by use of this BAR CODE scanner. By constructing the correct bar code sequence, all settings may be "scanned" into the controller.

A CYCLE START bottom begins the Blend / Dispense cycle. This batch drops into a holding hopper, below.

Tubing connects the holding hopper to the mold to be filled.

A FILL START button allows this batch to flow to the mold.

All flow is by gravity.

BAR CODE SCAN

The operator has the ability to scan new data into the controller before starting the cycle. Generally this data is related to mold size and the bar code is affixed to the mold.

Blend data may also be scanned.

CYCLE START

The cycle is initiated by pressing the CYCLE START button provided with all dispense systems. This button replaces the level sensor input normally associated with a blender. Standard blenders use a low level signal to start a cycle. Dispense systems require the press of a CYCLE START button to initiate the cycle.

The entire dispense amount (up to 200 pounds) is dispensed, and held in the hopper under the dispenser.

FILL START momentary switch.
FILL STOP push button.

FILL START
After the fill tube has been properly installed onto the mold, the FILL START button is pressed to empty the holding bin into the mold.

FILL STOP
The FILL STOP button allows you to interrupt the fill sequence at any time, if necessary.

MANUAL / BAR CODE START switch.

A "MANUAL / BAR CODE START" switch is provided.
Leave this in "MANUAL".

If your process was fully automated, using MLAN commands to start the blend cycle, then this switch would be placed in "Bar Code Start" position.

Note: It is important that the FILL valve be closed before the next cycle starts. In the Manual position, pressing the CYCLE START button forces the FILL valve to close. If the start signal is by computer or bar code signal, no one will press the START button. Without this manual press of a button, we are forced to rely on the low level sensor in the bottom of the hopper to signal the FILL valve to close. This select switch selects between the Start Button signal or Low Level signal to close the valve. "MANUAL" allows the START CYCLE button to close the FILL valve. "BAR CODE START" allows the Low Level sensor to close the valve.

Unless this is a fully automated system, keep this switch in the MANUAL position.

INITIAL SETUP

1. Set up the blender properly using the DISPENSE system Manual, and also the Blender Operation Manual for TWELVE component software. Set all required parameters and flags.

   NOTE: For your two component system, set BOTH components 1 and 2 type to NATURAL, or set both types to REGRIND. If REGRIND is used, settings must add up to 100. If NATURAL is used, the settings can add up to any value; they will be ratioed to each other.

BAR CODE EQUIPPED OPERATION

1. Fill the hoppers.

2. At any time, all operations may be done manually. Follow directions in your DISPENSE system manual.

3. You may optionally SCAN all date into the controller using BAR CODES. BAR CODE scans are read by the controller as MLAN inputs. See our MLAN manual for all possible commands.

4. Typically, for DISPENSE systems:

    1. You scan in a correct DISPENSE WEIGHT.
    2. You may also scan in new blend percentages.

    Note: You may scan as often as you like. You are only entering data. You will not cause additional dispenses to occur making multiple scans.

    Note: To confirm a dispense weight was scanned in correctly, check the DS1 parameter. It will contain the newly scanned data.

    To confirm blend percentage changes, press the SET key to scan through the new settings.

5. With all data scanned in:

    Confirm the GREEN LIGHT is lit.
    This tells us the holding hopper is empty and ready to receive the next batch.

6. Press START CYCLE.
    Allow the blender/dispense system to complete the entire dispense.

7. Attach the fill tube securely to the Mold.

8. Press FILL START.
    The fill valve will open. Allow the entire hopper to empty. Tap on sides of bin if necessary to assure hopper has emptied completely.

Disclaimers

Production of Faulty Product

Processing conditions and materials vary widely from customer to customer and from product to product. It is IMPOSSIBLE for us to anticipate ALL processing conditions and requirements, or to be certain that our equipment will perform properly in all instances. You, the customer, must observe and verify the performance level of our equipment in your plant as part of your overall manufacturing process.

You must verify to your own satisfaction that this level of performance meets your requirements. We CAN NOT be responsible for losses due to product that is blended incorrectly, even when due to equipment malfunction or design incorrect for your requirements; and/or for any consequential losses due to our equipment not blending to your requirements.

We will only be responsible to correct, repair, replace, or accept return for full refund if our equipment fails to perform as designed, or we have inadvertently misrepresented our equipment for your application.

Accuracy of this Manual

We make every effort to keep this manual as correct and current as possible. However, technology and product changes occur more rapidly then the reprinting of this manual. Generally, modifications made to the design of the blender or to the operation of the software are not reflected in the manual for 3 to 6 months. We always reserve the right to make these changes without notice, and we do not guarantee the manual to be entirely accurate. If you question any information in this manual, or find errors, please let us know so that we may make the required corrections. We will gladly provide you with updated manuals.

Warranty – Exclusive 5-Year

MAGUIRE PRODUCTS offers THE MOST COMPREHENSIVE WARRANTY in the plastics equipment industry. We warrant each Weigh Scale Blender manufactured by us to be free from defects in material and workmanship under normal use and service; excluding only those items listed below as 'excluded items'; our obligation under this warranty being limited to making good at our factory any Weigh Scale Blender which shall within FIVE (5) YEARS after delivery to the original purchaser be RETURNED intact to us, transportation charges PREPAID, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied
and of all other obligations or liabilities on our part, and MAGUIRE PRODUCTS neither assumes nor authorizes any other persons to assume for it any other liability in connection with the sale of its Weigh Scale Blenders.

This warranty shall not apply to any Weigh Scale Blender, which shall have been repaired or altered outside MAGUIRE PRODUCTS factory, unless such repair or alteration was, in our judgment, not responsible for the failure; nor which has been subject to misuse, negligence or accident, incorrect wiring by others, or installation or use not in accord with instructions furnished by Maguire Products.

Our liability under this warranty will extend ONLY to equipment that is returned to our factory in Aston, Pennsylvania, PREPAID.

Please note that we always strive to satisfy our customers in whatever manner is deemed most expedient to overcome any problems they may have in connection with our equipment.

EXCLUDED ITEMS:
LOAD CELLS on our WEIGH SCALE BLENDER are covered as long as they have not been damaged from improper handling. MB, 100, and 200 series units use load cells rated for 6.6 pounds (3KG) maximum load. Larger units use load cells rated for 22 pounds (10KG). DO NOT press on them manually. DO NOT disassemble them from their mounting enclosures. Do not DROP then. Do not drop the frame to which they are mounted. If the frame is dropped from a height of two feet, the load cells will most likely be damaged.

DISCLAIMER:
Processing conditions and materials vary widely from customer to customer and from product to product. Please be aware that it is IMPOSSIBLE for us to anticipate ALL processing conditions and requirements, or to be certain that our equipment will perform properly in all instances. You, the customer, must observe and verify the performance level of our equipment in your plant as part of your overall manufacturing process. You must verify to your own satisfaction that this level of performance meets your requirements. We CAN NOT be responsible for losses due to product that is blended incorrectly, even when due to equipment malfunction or design incorrect for your requirements; and/or for any consequential losses due to our equipment not blending to your requirements.

We will only be responsible to correct, repair, replace, or accept return for full refund if we have inadvertently misrepresented our equipment for your application.

Technical Support and Contact Information

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