Mass Blender Operation Panel

JCW2 – i – 05

INSTRUCTION MANUAL

WARNING

Thank you very much for purchasing our product.
Please carefully read this instruction manual for correct use.
During operation, keep this manual close at hand so that it can be referred to whenever necessary.

MATSUI

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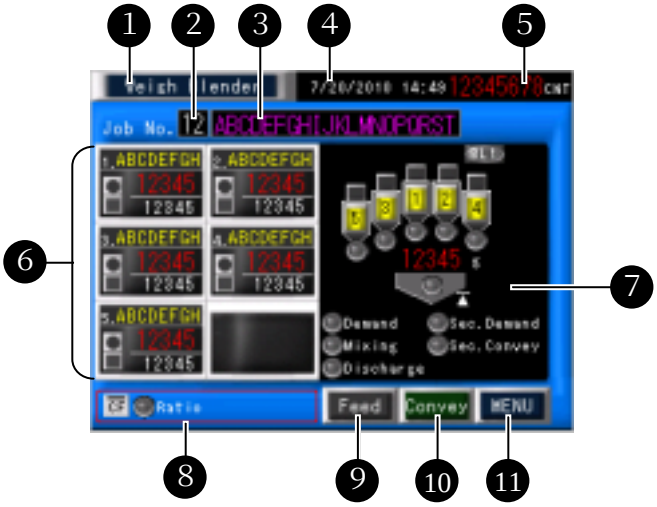
CONTENTS

Chapter 1 Main Screen

1-1. Name and function of each part



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1 Device name display part

Displays name of device and name of setup screen. When any alarm occurs in the equipment, this part changes to red flashing “Alarm occurrence” display, and buzzer warns that alarm occurs. When this is pressed, the screen changes to an “Alarm screen” and the buzzer stops sounding.
(Refer to Chapter 12 Alarm Screen.)

2 Job No. display part

Presently selected Job No. is displayed.
When this is pressed, a “Job No. change window” is displayed and operation Job No. can be changed.
(Refer to Chapter 5 Job No. Change Window.)

3 Blending name display part

Name of the presently selected Job No. is displayed.
(Refer to Chapter 6 Parameter Setting)

4 Date and time display part

Present date and time are displayed.
When this is pressed, the screen changes to a “Time setting screen.”
(Refer to Chapter 11 Time Setting Screen.)

5 Weighing completed times displaying

Number of weighing completed times are accumulated and displayed.
(Refer to Chapter 7 Usage Confirmation Displaying Screen.)

6 Blending material display part

Each operation of the presently selected Job No. is displayed.
(Refer to 1-2. Graphic display part.)

7 Operation graphic part

Operating status of the equipment is displayed.
(Refer to 1-2. Graphic display part.)

8 Function selecting status display part

When each function setup is selected, this is displayed in red. (Refer to 1-2. Graphic display part.)

9 Weighing touch key

When this is pressed, an “Operation mode select” window is displayed. The weighing machine is operated.
(Refer to windows of Chapter 3 Automatic Operation, and Chapter 4 Manual Operation, respectively.)

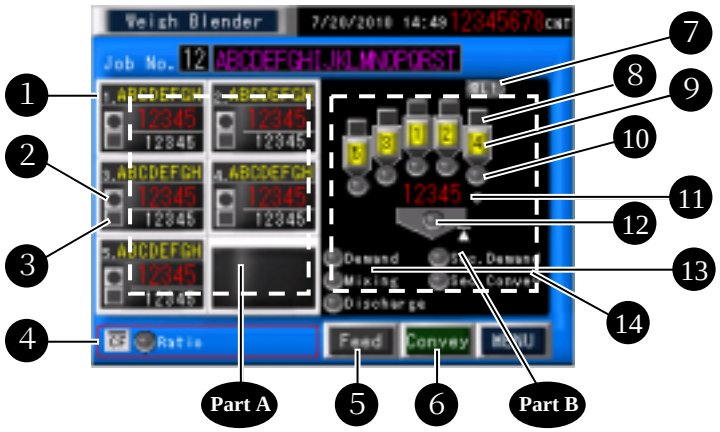
10 Convey touch key

When this is pressed, a “Convey select” window is displayed. Convey is operated.
(Refer to Chapter 3 Automatic Operation Window.)

11 MENU touch key

When this is pressed, a “Menu window” is displayed. Various setups are performed.
(Refer to Chapter 2 Screen Operation Method.)

1-2. Graphic display part



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

❶ Blending material display

"Each blending material name," "Weighing result (upper stage)" and "Weighing set value (lower stage)" of the presently selected Job No. are displayed.

❷ Weighing operation displaying

When this part is red, large weighing is being performed, when it is purple, middle weighing is being performed, when it is green, small weighing is being performed, when this part turns off, weighing stops, and when this part is blue, weighing stops halfway. (This displaying interlocks with operations of each screw feeder and each auto shutter.)

❸ Weighing pass displaying

This part lights up in white when weighing pass is selected. When this part turns off, it is shown that weighing pass is not selected.

❹ Function selected status displaying

This is displayed in red when each function is selected.
When a CF card is inserted, the upper part of the "CF" lights up in red.

❺ Weighing operation displaying

"Auto" is displayed during automatic operation.
"Auto" flashes during cycle stop.

❻ Convey operation display part

"Convey" lights up in green during automatic operation of Convey. Material is conveyed to the selected hopper.

❼ Convey blower displaying

"BL1" means Convey blower 1.
This lights up in red when the Convey blower is operating.

❽ Primary convey select displaying

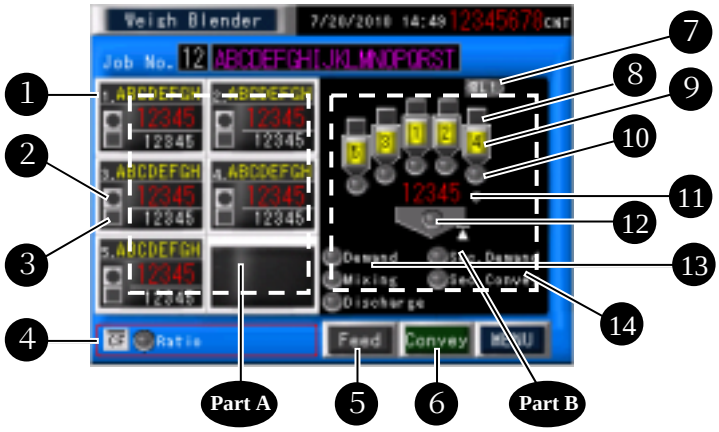
Blue means selection of directional valve for primary convey. Red means that the directional valve is operating and conveying.

❾ Primary material demand displaying

When this is yellow, it means demanding, and when this turns off, it means full. When material decrease alarm occurs, this flashes in red.
However, demand (yellow) is displayed only on primary convey selected location during automatic operation.

❿ Weighing operation displaying

When this is red, it means that weighing is being operated, and when this is blue, it means that weighing is completed.



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

11 Weighing hopper mass displaying

Displays mass value in the weighing hopper.

12 Weighing completed, weighing discharge damper operation displaying

When this is blue, it means weighing completed standby status.

When this is red, it means that weighing discharge is being performed, and when this turns off, it means stop status.

13 Blending part operation display part

Blending material demand:

When this is yellow, it means that material is being demanded, and when this turns off, it means that material is full.

Mixing:

When this is red, it means that mixing is being performed, and when this is blue, it means mixing operation standby status.

Mixing discharge:

When this is red, it means that mixing discharge is being operated, and when this turns off, it means stop.

This displays the above statuses respectively.

14 Secondary convey operation display part

Secondary convey demand:

When this is yellow, it means that material is being demanded, and when this turns off, it means that material is full.

Secondary convey:

Red means that the directional valve is operating and conveying.

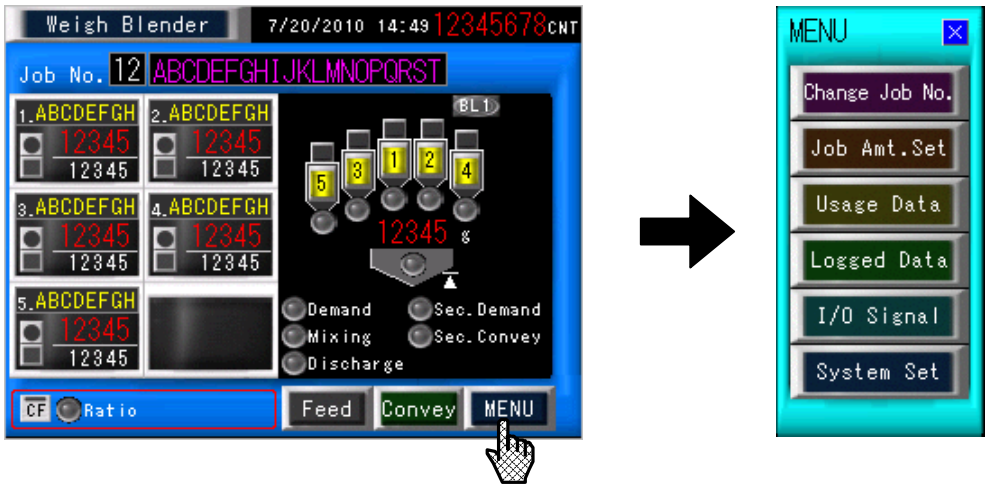
Part A Parameter setup screen change shortcut part

When this part is pressed, the screen changes to the "Parameter Set" screen.

Part B Logged Data screen change shortcut part

When this part is pressed, the screen changes to the "Logged Data" screen.

2-1. Menu window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. Window displaying method

When the MENU touch key on the main screen is pressed, this window is overlap-displayed.

2. Window application

This operation window changes to various screens.

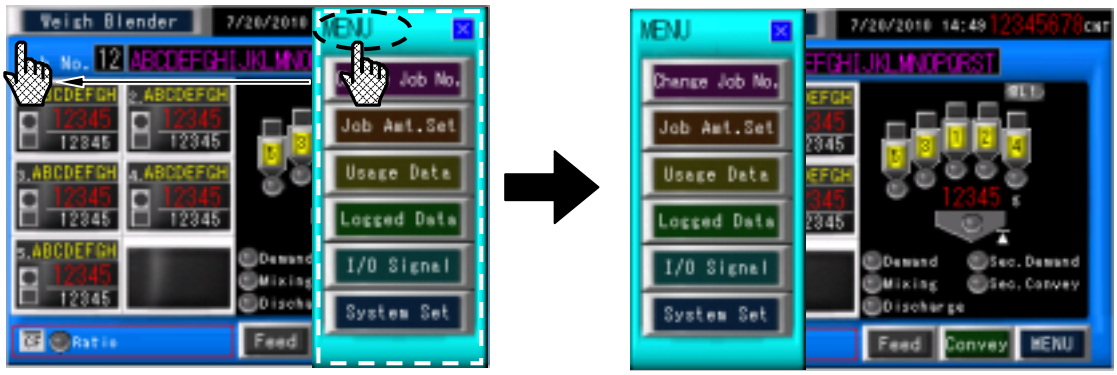
3. Screen change operation

Touch key name	Screen displaying operation
Change Job No.	When this touch key is pressed, Job No. change window is overlap-displayed, and Job No. can be changed. (Refer to pages of Chapter 5 Job No. Change Window.)
Job Amt. Set	When this touch key is pressed, the screen changes to Parameter setup screen. Performs various setups of equipment operation. (Refer to pages of Chapter 6 Parameter Setting.)
Usage Data	When this touch key is pressed, the screen changes to Usage Data displaying screen. Displays usage values of each material. (Refer to pages of Chapter 7 Usage Data Displaying Screen.)

Touch key name	Screen displaying operation
Logged Data	When this touch key is pressed, the screen changes to Logged Data screen. (Refer to pages of Chapter 8 Logged Data Screen.)
I/O Signal	When this touch key is pressed, the screen changes to I/O Signal screen. (Refer to pages of Chapter 9 I/O Signal Screen.)
System Set	When this touch key is pressed, password input window is overlap-displayed. (Refer to pages of Chapter 10 Various System Settings.)
✕	When this touch key is pressed, the MENU window closes.

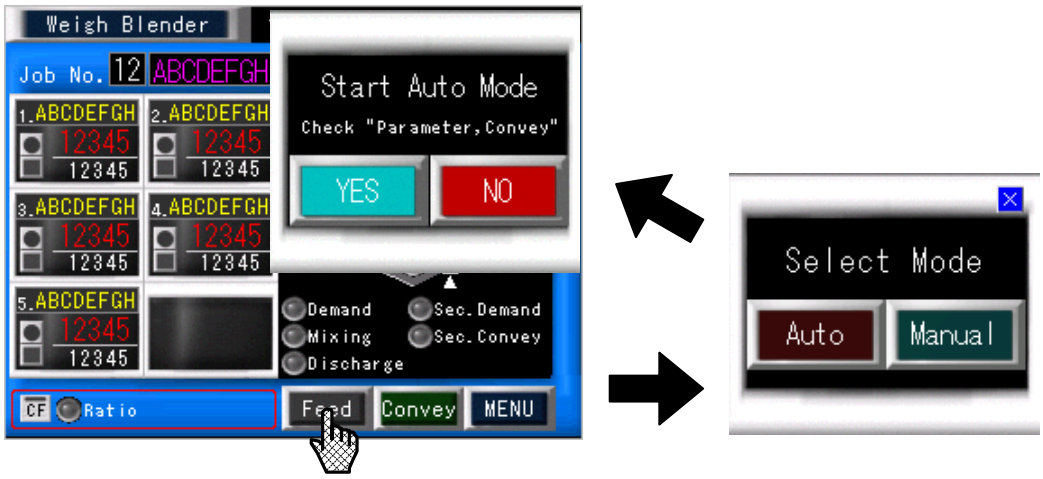
2-2. How to move window screen

Upper part (example: MENU) of window overlapped on each screen is pressed, periphery of the overlapped screen window flashes in white, and when touching a place you want to move to, you can move the screen.



* Configuration of operation screen depends on the specification.For this reason, some parts are not displayed.

3-1. Automatic weighing start window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When the Feed touch key on the main screen is pressed during stop of automatic operation, “Select Mode” window is overlap-displayed.

When the Auto touch key on the “Select Mode” window is pressed, “Start Auto Mode” window is overlap-displayed.

During automatic operation, the Feed touch key on the main screen changes to the Auto touch key lighting up in red.

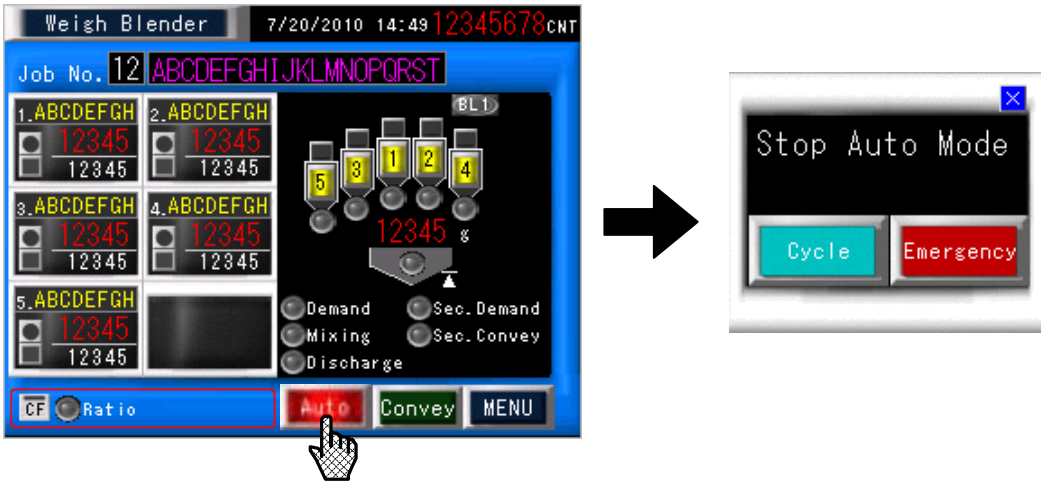
2. Window application

This operation window starts automatic operation.

3. Touch key operation

Touch key name	Content of operation/equipment operation
YES	When this touch key is pressed, automatic operation starts. Depending on the demand signal from the blending material receiver level gauge, cycle operation of weighing → Secondary convey (for APH,SB specification) → Mixing operation → Mixing discharge is repeated.
N O	When this touch key is pressed, the Start Auto Mode window closes without starting automatic weighing.

3-2. Automatic weighing stop window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When the [Auto] touch key on the main screen is pressed during automatic operation (the "Feed" touch key changes to "Auto" touch key and lights up in red during automatic operation), this window is overlap-displayed.

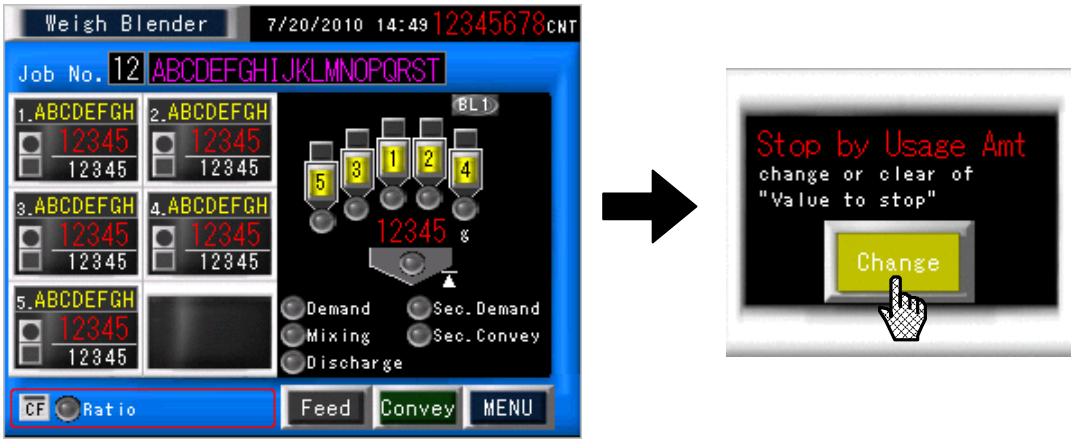
2. Window application

This operation window stops automatic operation.

3. Touch key operation

Touch key name	Content of operation/equipment operation
[Cycle]	When this touch key is pressed, cycle of automatic operation stops under the following conditions. <JB specification> Auto stop at the time when the mixing drum under the weighing hopper has completed mixing discharge operation. <APH specification> Auto stop at the time when the secondary receiver collector (aero power hopper) has completed mixing discharge operation. At this time, the weighing hopper of the blending device stops in empty status. The [Auto] touch key on the screen flashes during cycle stop operation.
[Emergency]	When this touch key is pressed, automatic operation immediately stops.
[×]	When this touch key is pressed, the Stop Auto Mode window closes.

3-3. Usage stop window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

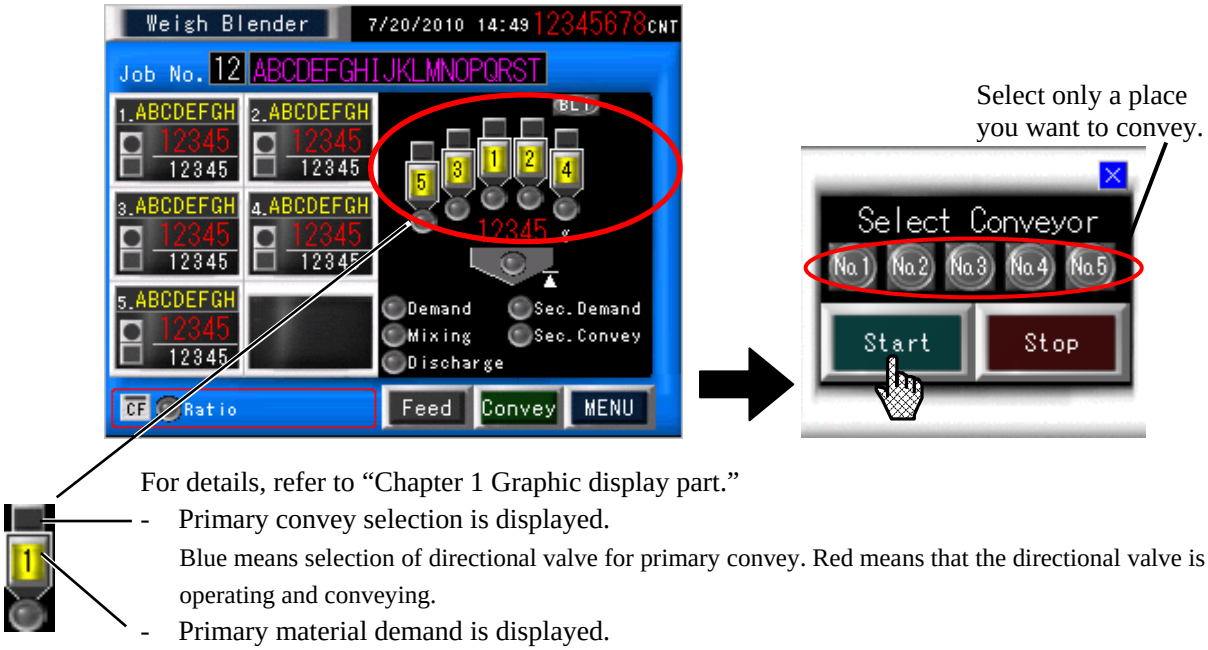
1. Window application

If usage stopped in the previous automatic operation, it is displayed at the next operation start.
If the usage set value is changed after usage stop, normal automatic operation screen is overlapped.

2. Touch key operation

Touch key name	Content of operation/equipment operation
Change	Press this touch key to change to the “Usage DATA screen,” and clear the usage value or change the set value, and then restart operation.

3-4. Automatic convey operation window



For details, refer to “Chapter 1 Graphic display part.”

- Primary convey selection is displayed.
  Blue means selection of directional valve for primary convey. Red means that the directional valve is operating and conveying.
- Primary material demand is displayed.
  When this is yellow, it means in demanding, and when this turns off, it means full. When material decrease alarm occurs, this flashes in red.
  However, during automatic operation, demand (yellow) is displayed only on the primary convey selected place.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When the [Convey] on the main screen is pressed during automatic operation, “Select Convey” window is overlap-displayed.

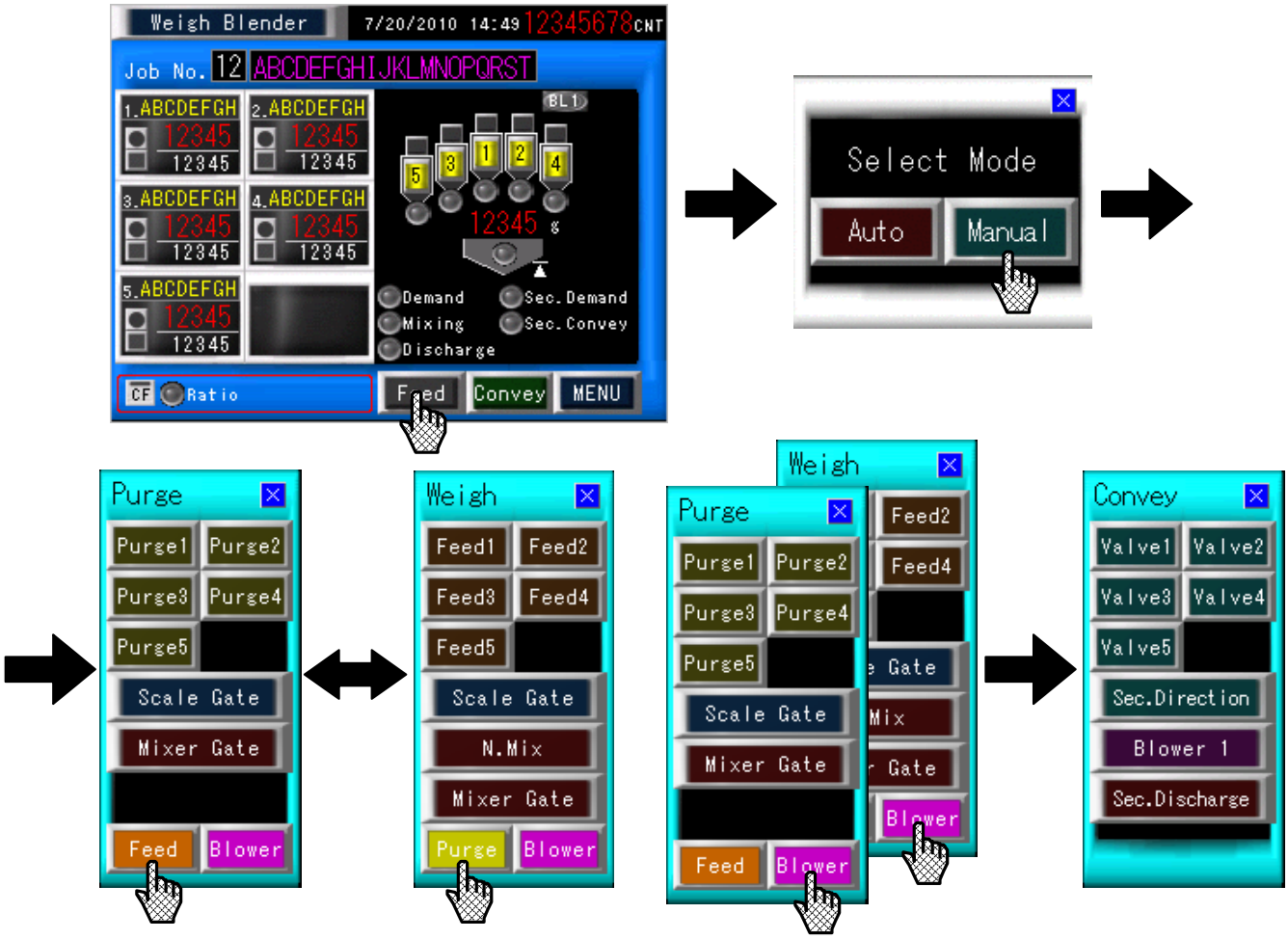
2. Window application

This operation window starts automatic conveying of primary material.

3. Touch key operation

Touch key name	Content of operation/equipment operation
[Start]	When this touch key is pressed, automatic operation of primary conveying is started. [Convey] touch key on the main screen changes to lighting in green. Depending on the demand signal from the level gauge in the primary convey hopper, operation of conveying → discharge is repeated. If there are some, conveying operation is repeated sequentially from the hopper which demanded first.
[Stop]	When this touch key is pressed, the Select Convey window is closed without performing primary conveying operation. [Convey] touch key on the main screen turns off.

4-1. Manual operation window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When the Feed touch key on the main screen is pressed, “Select Mode” window is overlap-displayed.
When the Manual touch key on the “Select Mode” window is pressed, “Purge port” window is overlap-displayed.
When the Feed at the lower part of the “Purge port” window is pressed, the window changes to a “Weigh” window. When Purge at the lower part of the “Weigh” window is pressed, the window changes to the “Purge port” window. When Blower touch key on the “Purge port” window or “Weigh” window is pressed, a “Conveyor” window is overlapped.

2. Window application

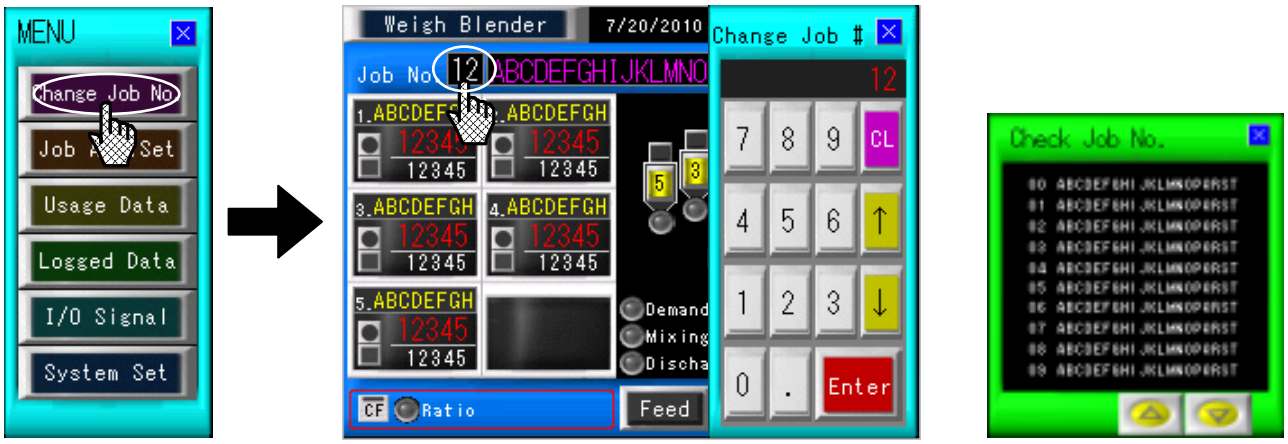
The “Purge port” window performs manual operations related to material removal operation.
The “Weigh” window performs manual operation related to manual weighing operation.
The “Conveyor” window performs manual operation related to manual conveying operation.

4-2. Manual material removal, manual weighing operation window

Touch key name	Content of operation/equipment operation
Purge 1 Purge 2 Purge 3 Purge 4 Purge 5 Feed 1 Feed 2 Feed 3 Feed 4 Feed 5	[Residual material removal] When “Purge 1” to “Purge 5” touch keys are pressed, each screw feeder or each auto shutter performs residual material removal operation. When the touch key is pressed again, the operation stops. [Weighing operation] When “Feed 1” to “Feed 5” touch keys are pressed, each screw feeder or each auto shutter starts weighing. When weighing (constant value for one batch) of weigh set value for the presently selected Job No. is completed, weighing automatically stops (the screw feeder stops).
Scale Gate	When this touch key is pressed, the discharge damper for the weighing hopper opens. When this is pressed again, it closes.
N. Mix	When “N. Mix” touch key is pressed, the mixing motor starts normal rotation.
Mixer Gate	When this touch key is pressed, the mixing discharge damper opens. When this touch key is pressed again, the damper closes. * Only the specified batch quantity can be fed into the mixing drum. When the specified batch quantity is exceeded, the mixing blades may be damaged. When performing the “Scale” and “Sec. Blower,” be sure to confirm that the inside of the mixing drum is empty.
⊠	When this touch key is pressed, the manual weighing operation window closes.

4-3. Manual convey operation window

Touch key name	Content of operation/equipment operation
Valve 1 Valve 2 Valve 3 Valve 4 Valve 5	When “Valve 1” to “Valve 5” touch keys are pressed, primary conveying direction valve for each material opens. When the touch key is pressed again, the valve closes.
Sec. Direction	When “Sec. Direction” touch key are pressed, secondary conveying direction valve opens. When the touch key is pressed again, the valve closes.
Blower 1	When “Blower 1” touch key is pressed, the conveying blower starts. When the touch key is pressed again, the blower stops.
Sec. Discharge	When “Sec. Discharge” touch keys are pressed, secondary conveying discharge damper operates. When the touch key is pressed again, the damper returns to original position. *Configuration of manual operation depends on the specification. For this reason, some parts are not displayed.
⊠	When this touch key is pressed, the manual convey operation window closes.



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

◇ When [Change Job No.] touch key on the MENU window is pressed, this window is overlap-displayed.
Or, when Job No. display part on the main screen is pressed, this window is overlap-displayed.

* When character part of the "Job No." on the main screen is pressed, "Check Job No." window is overlap-displayed. The title of each Job No. can be checked.

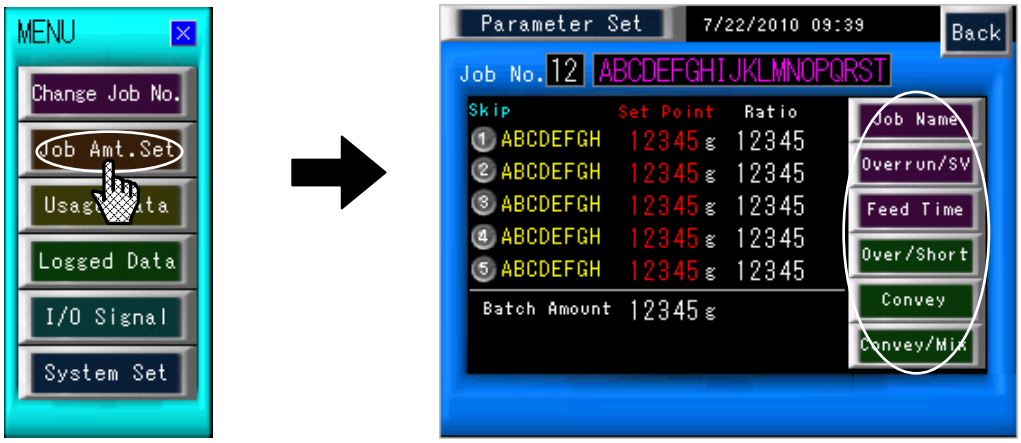
2. Window application

This operation window changes the presently selected Job No.

3. Job No. change operation

Step	Operation item	Procedures/Operation
1	Enter Job No.	Press [0] to [9] touch keys to enter Job No. * When the [CL] touch key is pressed, the entered numerical value is cleared (deleted).
2	Write entered numerical value	Press [Enter] touch key. The entered numerical value is written into the Job No. display part on the main screen.
3	Close window	When [X] touch key is pressed, the Job No. change window closes.

6-1. Screen display, operation method and various setup method



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. Screen displaying, operation method

◇ When [Job Amt. Set] on the MENU window is pressed, this screen is displayed.
Or, when Job material display part on the main screen is pressed, this screen is displayed.

◇ For setting other than the Parameter Set, press each touch key on the right side of the Parameter setup screen.

◇ When [Back] touch key on the right upper part of the screen is pressed, the “Parameter Set” screen changes to the “Main screen.” The other setting screen returns to the “Parameter Set” screen.

2. Setting operation

Step	Operation item	Procedures/Operation
1	Select Job No.	Check whether Job No. to be set is Job No. presently displayed on the screen. When performing weighing setting of the other Job No., press the Job No. display part to display the “Job No. change window,” and change the Job No.
2	Select item to be set	Select item to be set by either one of the following operations. ◇ Press the set value display part on the screen. ◇ Press [↑] [↓] to select item.
3	Enter set numerical value	Press [0] to [9] touch key to enter the set numerical value. * When the CL touch key is pressed, the entered numerical value is cleared (deleted).
4	Write entered numerical value	Press [Enter] touch key. The entered numerical value is written.

6-2. Parameter setup screen

1. How to display screen

When the "Job Amt. Set" touch key on the MENU window is pressed, this screen is displayed.

2. Screen application

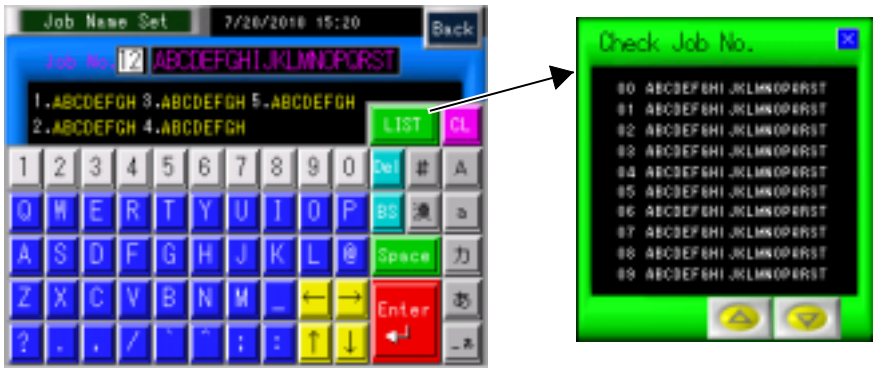
◇ Screen to set one batch amount and blending ratio of each material.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Batch amount	Set one batch weighing mass in automatic operation. Set one batch amount for secondary receiver collector (aero hopper or mixing drum). When numerical value of the batch amount is changed, each SV is automatically calculated according to the blending ratio and the SV value is changed.
Blending ratio	Set blending ratio of each material for the batch amount. If any numerical value is entered, a value obtained by adding all numbers is used as a denominator and SV value is calculated as a ratio to the batch amount. For example, there are some available input methods such as directly inputting a blending amount of each material in one shot weight of a molded product, and setting a blending ratio of MB material to "1" and blending ratio of main material to "20" (when there is no crushed material) if the MB material (coloring material) is 20 times the product.
SV value	SV value of each material to batch amount and blending ratio is displayed. * Automatic calculation is carried out according to the set value for each blending ratio and batch amount.

6-3. Job name setup screen



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display screen

When “Job Name” touch key on the “Parameter Set” screen is pressed, this screen is displayed.

2. Screen application

This screen sets the name of the presently displayed Job No. and name of each Job material.

3. How to use name setting and touch key

- Types of characters are displayed in gray on right side of the touch keys.

  “A”: Uppercase English, number, symbol.
  “a”: Lowercase English, number, symbol.
  “カ”: KATAKANA one-byte character, number, symbol.
  “あ”: HIRAGANA double-byte character, number, symbol.
  “_ぁ”: HIRAGANA and KATAKANA lower case character, number, symbol.
  “#”: Symbol, number.
  “（漢）Kan”: Kanji (JIS level-1 only) can be inputted.

  Select the “（漢）Kan,” and after confirming that the name part becomes “*******,” then select “KANA.” Enter head character of characters you want to enter in “Chinese reading.”
  Characters corresponding to Chinese reading of the entered head character are displayed instead of the “*******.”
  If there are any other characters, display it with ten keys of [↑] and [↓]. Select the displayed characters with ten keys of [←] [→]. When selection is completed, confirm with the [Enter].
  When you want to cancel Kanji mode, re-press the “（漢）Kan.” The “*******” is canceled.

6-4. Overrun/SV setup screen

1. How to display screen

When “Overrun/SV” touch key on the “Parameter Set” screen is pressed, this screen is displayed.

2. Screen application

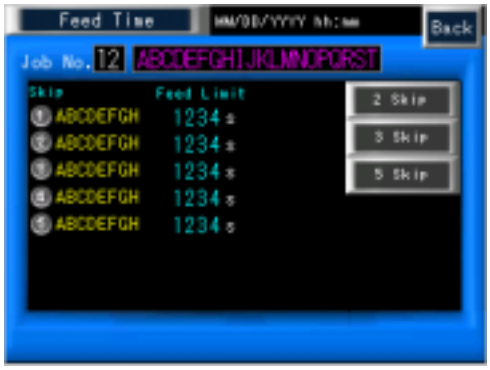
◇ This screen sets operations (overrun, Slow 1, Slow 2) of each feeder.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Overrun	Set overrun value derived at weighing check for each material. Material supply (weighing) is stopped by detection of SV value, however, material during overrun is added for real weighing value. If the over mass (overrun value) is set, weighing stops when a value obtained by subtracting overrun from the SV value is reached. If calculation is made with overrun value set to zero, the weighing value (real value) is a value for which the overrun value is added to the SV value. * Overrun setting is automatically calculated. * Note that overrun value varies with apparent specific gravity of weighing material.
Slow 1	Each feeder reaches the SV value by flow rate adjustment of large flow rate, medium flow rate and small flow rate. Enter a value to switch from a medium flow rate to small flow rate.
Slow 2	Each feeder reaches the SV value by flow rate adjustment of large flow rate, medium flow rate and small flow rate. Enter a value to switch from a large flow rate to medium flow rate.
Auto Slow Set	When “Auto Slow Set” turns off, operation is performed based on the entered value. When “Auto Slow Set” lights up, internal calculation is performed so that the Slow 1 and Slow 2 values become optimal values, and operation is performed based on the values. * The “Auto Slow Set” enables the Slow 1 and Slow 2 setting. If the weighing value is not stabilized, set by manual setting.

6-5. Feed time setup screen



1. How to display screen

When "Feed Time" touch key on the "Parameter Set" screen is pressed, this screen is displayed.

2. Screen application

◇ This screen sets monitor time of one batch weighing operation for each material.
Unless one batch weighing operation has been completed within this feed time, "Feed time alarm" occurs.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Feed Limit	Set monitor time (seconds) of one batch weighing operation for each material.
Skip	Every time when this touch key is pressed, the touch key is switched to lighting off and up. * If the Feed Time has elapsed in the selected weighing machine, weighing is stopped even during halfway, and the next weighing operation is performed.

6-6. Over/short setup screen

1. How to display screen

When "Over/Short" touch key on the "Parameter Set" screen is pressed, this screen is displayed.

2. Screen application

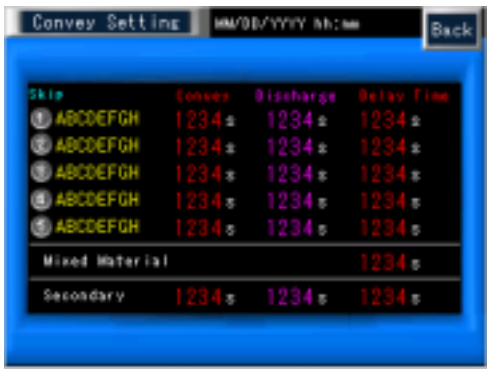
◇ This screen sets allowable over and short value for each material.
When weighing result exceeds this set range, "Over amount alarm" or "Short amount alarm" occurs.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Over amount	Set mass value in over amount range allowable to the SV set value. * Note that "Over amount alarm" frequently occurs if the allowable range of the over amount is narrow or is zero.
Short amount	Set mass value in short amount range allowable to the SV set value. * Note that "Short amount alarm" frequently occurs if the allowable range of the short amount is narrow or is zero.
Zero Band	Weighing operation is performed if the set value is within the set range at weighing start. * Note that "Zero Band alarm" frequently occurs if the set value is small.

6-7. Convey setup screen



1. How to display screen

When “Convey” touch key on the “Parameter Set” screen is pressed, this screen is displayed.

2. Screen application

◇ This screen sets each control of onveying operation.

◇ Primary and secondary material set material monitor time.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Conveying time	Set one batch conveying time for each material. Set a time which allows approximately 70 to 80% of the receiver collector (Jet Clone) volume to be conveyed in one batch conveying operation.
Discharge time	Set material discharge time (time until re-conveying is allowed) from the Jet Clone to the lower tank. Set a time which allows all of the materials conveyed into the Jet Clone to be discharged into the lower tank.
Low Resin Mixed Material	“Primary material monitor” and “Weigh mixed material” set material monitor time (seconds) of each primary material tank (full signal) of blender and weigh mixed material receiver. Unless material is filled in this set time, “material decrease alarm” occurs.

6-8. Mixer gate, secondary convey setup screen

1. How to display screen

When “Mixer Gate” touch key (for JB specification), “Sec. Convey Set” touch key (for SB and APH specification) on the “Parameter Set” screen is pressed, this screen is displayed.

2. Screen application

◇ This screen sets each control time of secondary conveying operation or mixing operation.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

3. Setting content

Setting item	Setting content
Demand Delay	Set a demand level check time from a time when the blending material receiver level gauge detects demand level to a time when mixing operation (for JB specification) or secondary conveying operation (for APH specifications) is started.
Scale Gate	Set a time to purge material from weighing hopper to the lower suction box. * If the Scale Gate time is set to an improper time, throughput is caused to be reduced or alarm is caused.
Purge	Set a time which allows the material in the lower suction box to be completely purged to the receiver. (Effective only for SB and APH specifications) * If the Purge time is set to an improper time, throughput is caused to be reduced or alarm is caused.
Mixing Time	Set a time of mixing time in the mixing drum from a time when the Scale Gate is completed (for JB specification) or a time when the Purge is time-up (for SB, APH specifications). * If the Mixing Time is set to an improper time, throughput is caused to be reduced or alarm is caused.

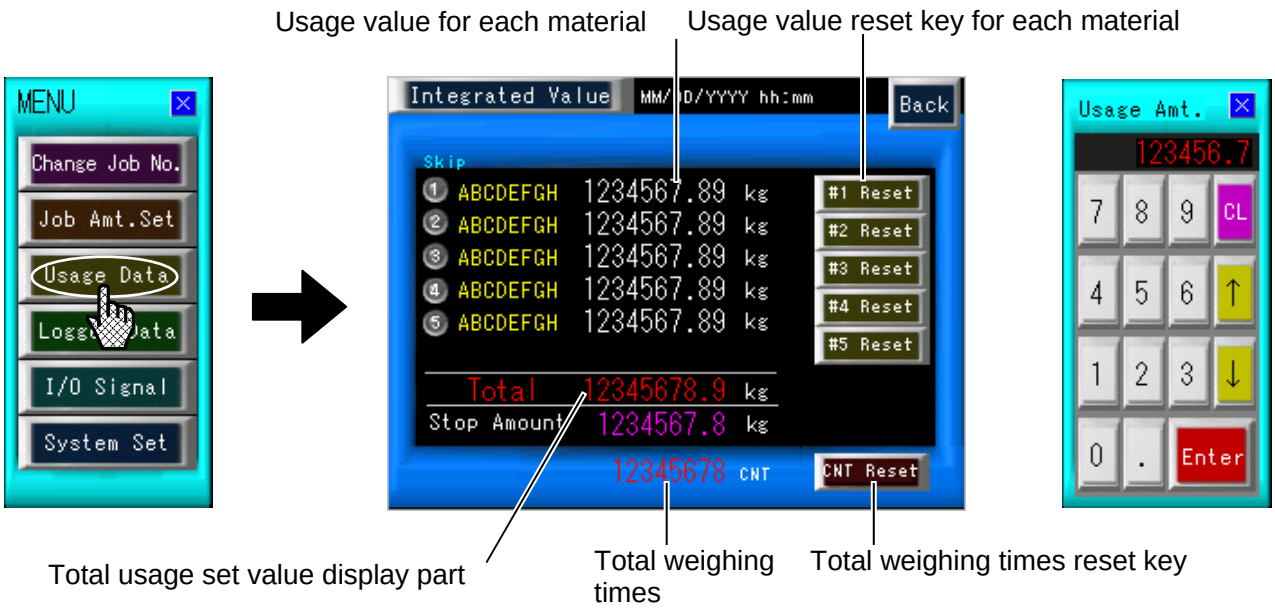
Setting item	Setting content
Gate Delay	Set a delay time until Mixer Gate is completed after the Mixing Time is completed. Mixer Gate is performed after the set time is completed. (Effective only for APH specification) * Unless the secondary conveying blower has completely stopped after the Mixing Time was completed, weighing material may be suctioned when Mixer Gate is performed. Confirm the status for setting. (Zero is normally allowed.)
Mixer Gate	Set a time which allows all of the material to be fed to the lower receiver from the mixing drum

4. Touch key selecting operation

Ratio Adjust	The touch key changes to lighting up and off every time this touch key is pressed. ◇ When the touch key lights up, the weighing correction function works. SV is automatically calculated again based on the weighing result in the weighing sequence 1, and then the SV set value and batch amount in the weighing sequence 2 and later are changed. ◇ When the touch key turns off, the weighing correction is not performed.
Batch Adjust	The touch key changes to lighting up and off every time this touch key is pressed. ◇ When the touch key lights up, the batch amount correction function works. The amount of each every batch of one measurement batch is changed. ◇ When the touch key turns off, the batch amount correction is not done. * If the supply amount is not stabilized, set by manual setting.

1. How to display screen

◇ When [Usage Data] touch key on the MENU window is pressed, this screen is displayed.



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

2. Screen application

This screen sets total usage value when automatic operation is automatically stopped at a specific supply amount. When supplying of the total usage value set on this screen is completed, automatic operation is stopped.

In addition, when the usage value is set to zero, usage stop is not performed.

3. Usage data displayed for each material

The usage data displayed on the screen is a total mass measured with a ratio of each material during automatic operation.

4. Usage data reset key for each material

Touch key name	Screen displaying operation
1 RST 2 RST 3 RST 4 RST 5 RST	When these touch keys are pressed for a long time, the usage data for each material is reset. Operate these keys when automatic operation stops by usage data.
CNT RST	When this touch key is pressed for a long time, value of weighing times is reset.

5. Setting operation for total usage value

Step	Operation item	Procedures/Operation
1	Displaying Usage Amt. setting window	Press a Total usage set value display part on the screen. "Usage Amt." Touch key is overlap-displayed on the screen.
2	Entering the total usage value	Press 0–9, . touch keys to enter the numerical value into the set value display part on the Usage Amt. setting window. * When the CL touch key is pressed, the entered numerical value is cleared (deleted).
3	Writing the entered numerical value	Press the Enter touch key. The set numerical value is written into the usage set value display part on the Usage DATA screen.
4	Closing the window	When the X touch key is pressed, the Usage Amt. setting window closes.

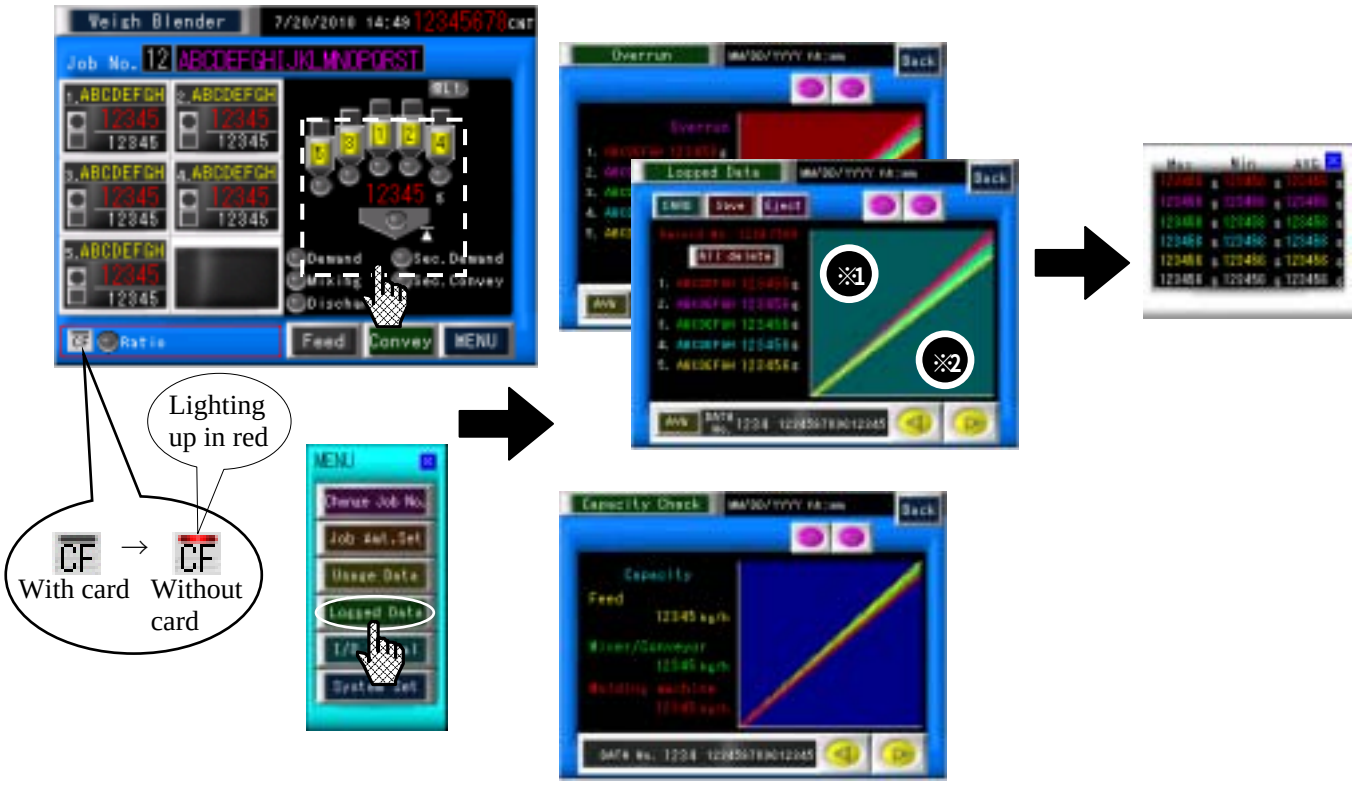
6. Screen switching operation

Touch key name	Screen displaying operation
Back	When this touch key is pressed, the screen switches to the "Main screen."

1. How to display screen

◇ When Logged Data touch key on the MENU window is pressed, this screen is displayed.

◇ When the operation display part on the main screen is pressed, this screen is displayed.



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

2. Screen application

This is a screen on which “Weighing result,” “Overrun” and “Each capacity” of each data up to the past 01 to 500 times for each material can be checked. The latest data is displayed at the start of displaying.

When the weighing times exceed 500 times, older data sequentially from the first is deleted and the data is overwritten. While the CF card is inserted in the CF card corresponding model, CARD is displayed in red.

3. Screen switching operation

Touch key name	Screen displaying operation
◀ ▶	When this touch key is pressed, completed mass value and data No., data are switched for every one piece of data. When ※1 is touched, the data moves to a data on the previous page from the page displayed on the screen, and when ※2 is touched, the data moves to a data on the next page.
AVG	When this touch key is pressed, a check window for “Max,” “Min” and “AVG” of the accumulated data is overlap-displayed.

Touch key name	Screen displaying operation
Back	When this touch key is pressed, the screen changes to the "Main screen."
All delete	When this touch key is kept pressed for two seconds, all weighing data is deleted.
CARD	This lights up when CF card is inserted into the terminal USB. The upper part of CF on the main screen lamp lights up in red. * Only the CF card corresponding model
Save	When this touch key is kept pressed for two seconds, the indication changes to "Save OK," and the accumulated data is transmitted to the CF card. (Note 1) * Only the CF card corresponding model
Eject	Press this touch key to change the indication to Eject OK, and then eject the CF card. (Note 1) * Only the CF card corresponding model

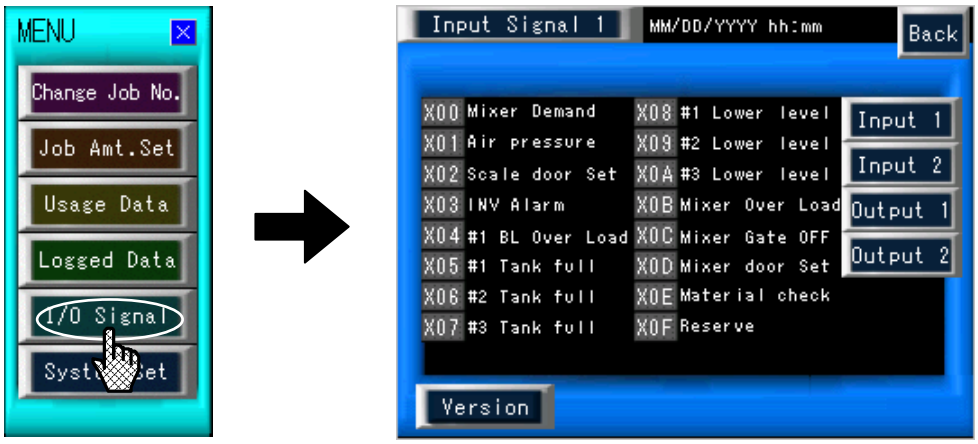
4. CF card saving content

Weighing result for every 500 batches in the CF card corresponding model is automatically transmitted and saved into the CF card in CSV format. (Note 1)

Note 1: This is effective when CF card media is installed.
The CF card media might not be able to be recognized according to the model, the model, and the capacity used.

5. CF card saving and storing destination folder detail

Fit a CF card into your personal computer. The data is stored in a sequence of My computer → Removable disk → JCW2DATA → Sample → Folder of stored date → SMP0001.CSV.



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display screen

◇ When [I/O Signal] touch key on the MENU window is pressed, this screen is displayed.

2. Screen application

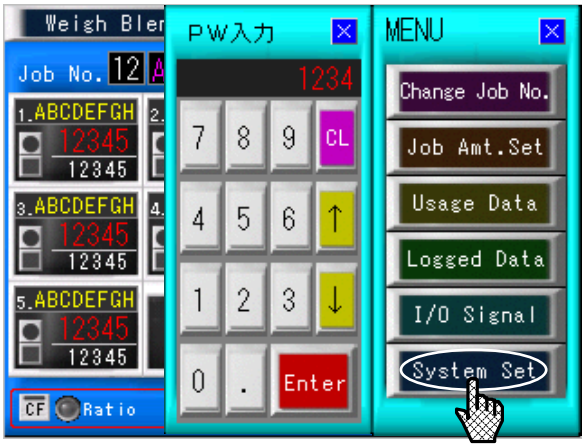
This screen checks the ON/OFF status of various input and output signals in equipment operation.

3. Screen switching operation

Touch key name	Screen displaying operation
[Version]	Checks software version of the equipment.
[Input 1] [Input 2]	When this touch key is pressed, the screen changes to the “Input signal screen.”
[Output 1] [Output 2]	When this touch key is pressed, the screen changes to the “Output signal screen.”
[Back]	When this touch key is pressed, the screen changes to the “Main screen.”

10-1. Password input window

Password input window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When [System Set] touch key on the MENU window is pressed, "PW input window" is overlap-displayed.

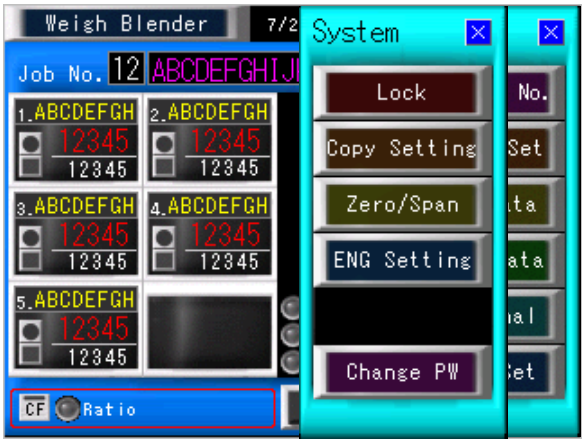
2. Window application

This window inputs a password to permit various system settings.
When the [X] touch key is pressed, the window closes.

3. Password input operation

Step	Operation item	Procedures/Operation
1	Entering password	Press [0] to [9] touch keys to enter the preset password (default: 0000). * When the [CL] touch key is pressed, the entered numerical value is cleared (deleted).
2	Writing the password	Press the [Enter] touch key. If the entered password is correct, a "System window" is displayed.

10-2. System window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When the password is entered in the password input window, a “System window” is displayed.

2. Window application

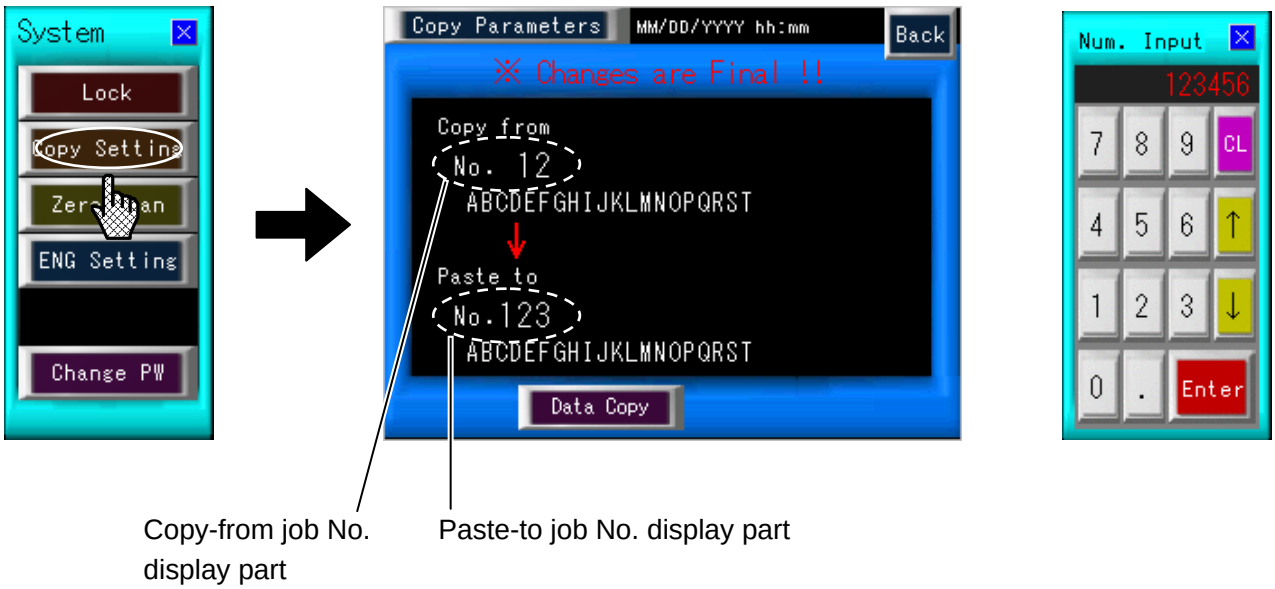
This window displays various system setting screens.
When the [X] touch key is pressed, the window closes.

3. Operations of various system setting screen

Touch key name	Operating content/Functional description
[Lock]	Each time this touch key is pressed, indication of the touch key switches to turning on and off. ◇ When the indication of the “Unlock” touch key turns off, various system settings can be performed. ◇ When the indication of the “Unlock” touch key lights up, various system settings cannot be performed.
[Copy Setting]	When this touch key is pressed, the screen changes to the “Copy Parameter screen.” This screen copies data of a Job No. to another Job No. (Refer to 10-3. Copy setup screen in this chapter.)

Touch key name	Operating content/Functional description
Zero/Span	When this touch key is pressed, the screen changes to the “Zero Setting, AMP calibration window.” This screen calibrates blender load cell. (Refer to 10-4. Zero/span calibration screen in this chapter.)
ENG setting	When this touch key is pressed, the screen changes to the “ENG setting screen.” This screen is to set various specifications. (Refer to 10-5. ENG setting screen in this chapter.)
Change PW	When this touch key is pressed, the screen changes to the “Change PW window.” This operation window changes the password. (Refer to 10-6. Change PW window in this chapter.)

10-3. Copy setup screen



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display screen

When [Copy Setup] touch key on the System window is pressed, this screen is displayed.

2. Screen application

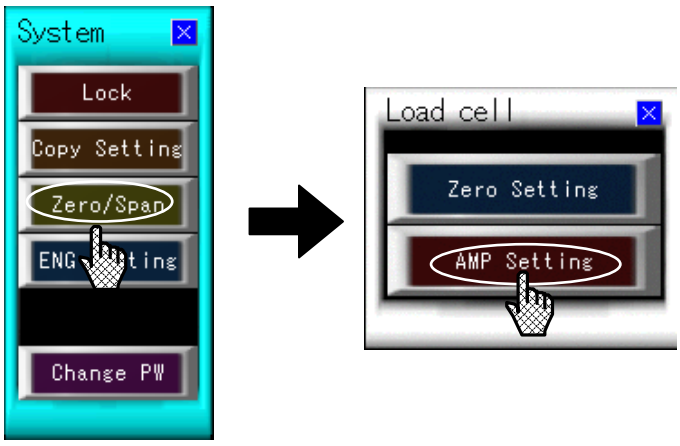
This screen copies data of a Job No. to another Job No.

3. Copying operation

Step	Operation item	Procedures/Operation
1	Copy-from Job No. setting	When copy-from Job No. display part on the screen is pressed, a Num. Input window is displayed. ↓ Press [0]–[9] touch keys to enter the copy-from Job No. ↓ Press the [Enter] touch key to write the inputted value. ↓ The name of the set Job No. is displayed on the copy-from Job name display part.

Step	Operation item	Procedures/Operation
2	Paste-to Job No. setting	Press the paste-to Job No. display part, or press [↑] [↓] to paste-to Job No. in a permitted status. ⬇ Press [0]–[9] touch keys to enter the paste-to Job No. ⬇ Press the [Enter] touch key to write the inputted value. ⬇ The name of the set Job No. is displayed on the paste-to Job name display part. * Enter [999] on the paste-to Job No. display part and write, then the same data is copied to all patterns.
3	Copying	Press [DATA Copy] on the screen for a long time. "DATA Copy" changes to "Copy completed" and lights up. Data of copy-from job No. is copied to paste-to Job No.

10-4. Zero/span calibration screen



- When “Zero setting” touch key is pressed for a long time, the present status of the weighing hopper is set to “Zero.”

* Note that zero setting sets weight indication on the main screen to zero, however, it is not a calibration of a load cell.

- When “AMP setting” touch key is pressed, the proofreading of the load cell begins. Please follow the procedure and begin proofreading.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

[Various setting and registration operation]

Step	Operation item	Procedures/Operation
1	Setting each displayed value	Press indication setting part on each screen to put into settable status (displaying ten keys). ↓ Press [0]–[9] touch keys to enter the set value. ↓ Press the [Enter] touch key to write the inputted value.
2	Registering each set value	Press “Registration” or “XXX adjustment” touch key on each screen. The set value is registered, or adjustment is started, then the screen changes to the next setting screen.

1. Minimum scale value register screen

This screen is displayed first when AMP Setting touch key on the load cell is pressed.
This sets and registers the minimum scale value of the blender load cell.
After writing the set value, press “Registration” touch key. The screen changes to “Maximum displayed value register screen.”

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

Minimum displayed value setting part

2. Maximum displayed value register screen

This is automatically displayed when registration operation of minimum scale value is completed. This screen sets and registers the maximum displayed value of the blender load cell. After writing the set value, press “Registration” touch key. The screen changes to “Real load value register screen.”

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

Maximum displayed value setting part

3. Real load value register screen

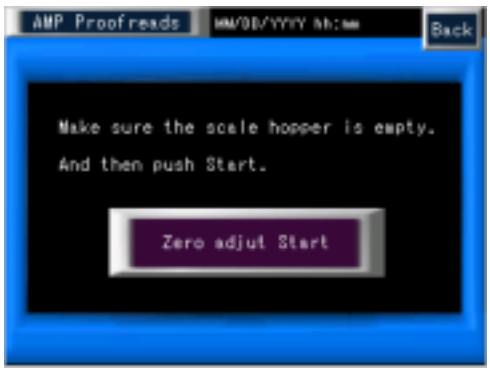
This screen is automatically displayed when registration operation of maximum displayed value is completed. This screen sets and registers the real load value (weight mass value) when span adjustment of blender load cell is performed.

After writing the set value, press “Registration” touch key. The screen changes to “Zero point adjustment start screen.”

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

Real load value setting part

4. Zero point adjustment start screen



This screen is automatically displayed when registration operation of real load value is completed. This operation screen starts zero point adjustment of blender load cell.

Confirm that the weighing hopper is empty, and press [Zero point adjustment] touch key, then zero point adjustment starts.
When zero point adjustment is completed, the screen changes to "Span adjustment start screen."

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

5. Span adjustment start screen

This screen is automatically displayed when zero adjustment is completed.
This operation screen is to start span adjustment of blender load cell.
Place weight of real load value on weight placing plate of the load cell, press [Span adjustment] touch key, then span adjustment starts.
When span adjustment is completed, the screen changes to "Re-zero point adjustment."

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

6. Re-zero point adjustment screen

This screen is automatically displayed when span adjustment is completed.
This operation screen is to start re-zero point adjustment of blender load cell.

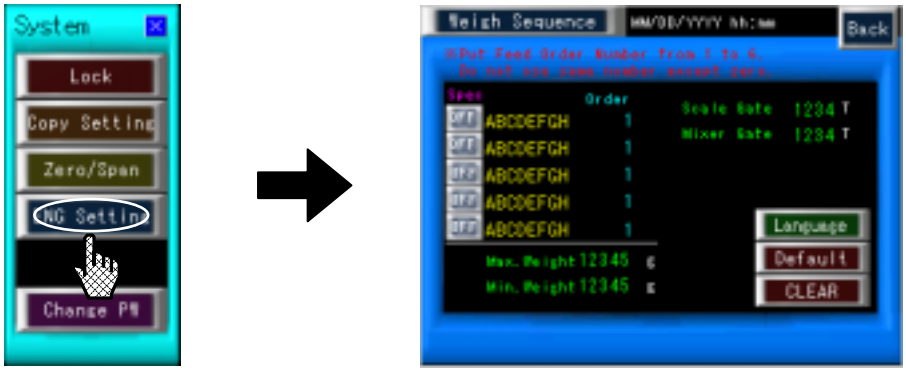
After removing weight placed on the load cell, press [Zero Point Adjustment] touch key on the screen.
When re-zero point adjustment is completed, the screen automatically changes to the setting screen, and then zero/span adjustment ends.

* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

10-5. ENG setting screen

1. Screen display method and setup operation method

When “ENG setting” touch key on the “System” window is pressed, “SF Setting” screen is displayed.
When “△” or “▽” at the lower part of the “SF setting” screen is pressed, the screen changes to “Material monitor setting” or “Weighing sequence.”



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

2. Screen application

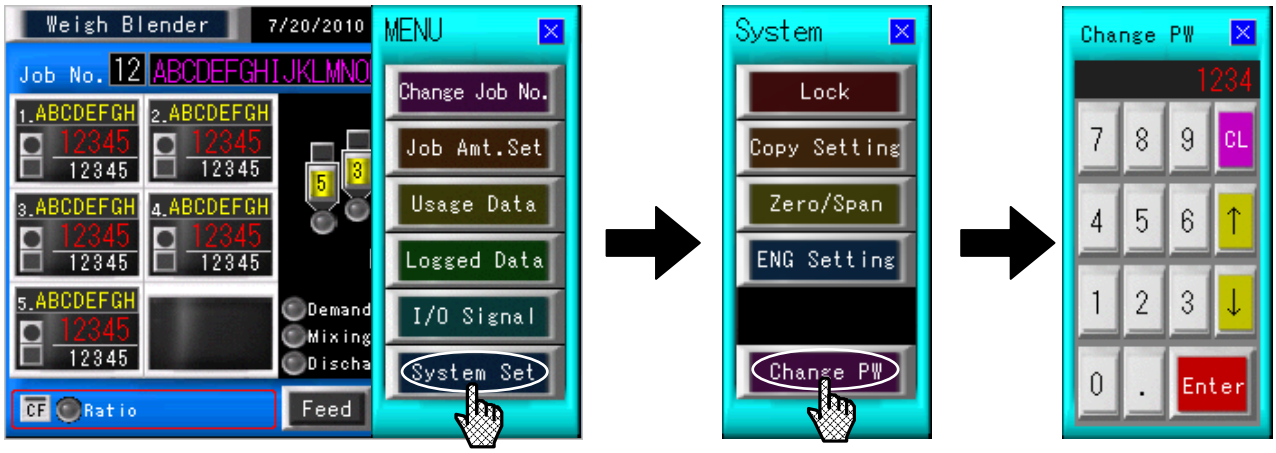
- Set a sequence to weigh 5 types of materials.
- Set allowable maximum/minimum batch amount.
- Set number of times to open/close the damper.
- The setting is returned to an initial value.

3. Setting content

Setting item	Setting content
Scale Gate Mixer Gate	Set number of times to open/close the damper from a time when scale purge or mixing purge is completed for “Scale Gate” and “Mixer Gate.” Set it depending on the situation if there are any adherents.
Oder	Set a sequence to weigh 5 types of materials in one batch weighing operation. *Enter numerical value of “1” to “5” for weigh sequence. If numerical values other than these values are set or values are duplicated (excluding 0), normal operation is not performed. And if “0” is inputted, the blender of the No. cannot be used.
Max. Weight	Set “Max. Weight” (allowable maximum batch amount). If the result of one batch amount exceeds the set value of Max. Weight, “weigh batch amount alarm” occurs.
Min. Weight	Set “Min. Weight” (allowable minimum batch amount).
Language	The language can be selected on the language setting screen.
Default SRAM	“Default” returns all settings except for sequence setting screen to the initial set value. “SRAM” clears DATA of “Alarm history” and “Logged DATA.”

10-6. Change PW window

Change PW window



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display window

When [Change PW] touch key on the System window is pressed, "Change PW window" is displayed.

2. Window application

This window is for inputting a password into the PW input window.
When the [X] touch key is pressed, the window closes.

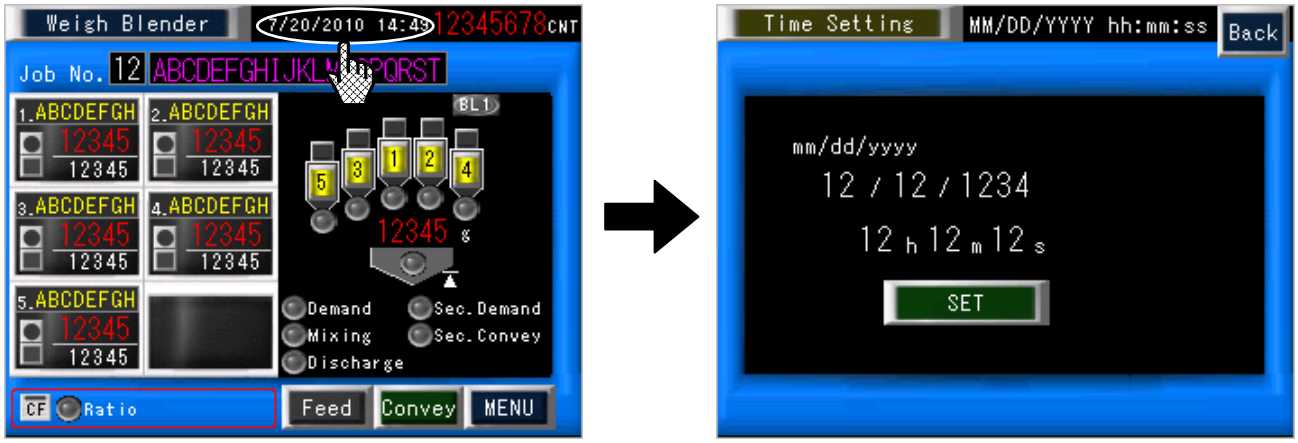
3. Password change operation

Step	Operation item	Procedures/Operation
1	Enter password to be changed	Press [0] to [9] touch keys to enter the password to be changed. * When the [CL] touch key is pressed, the entered numerical value is cleared (deleted).
2	Write changed password	Press the [Enter] touch key. The password has been changed.

Chapter 11　Time Setting Screen

1.　How to display screen

When date and time display part on the main screen is pressed, “Calendar setting screen” is displayed.



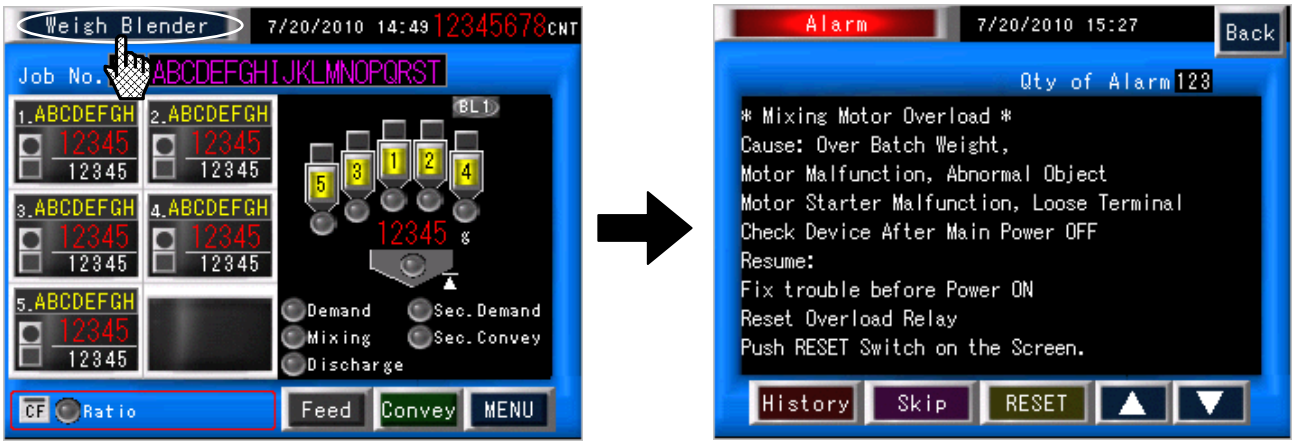
2.　Screen application

This screen adjusts and changes the date and time displayed on the screen.
Adjust the displayed date and time if they are incorrect.

3.　Setting operation

Step	Operation item	Procedures/Operation
1	Select items to be set	Select items to be set by any one of the following operations. ◇ Press set value display part on the screen. ◇ Press [↑] [↓] touch key to select item.
2	Enter date and time to be changed	Press [0] to [9] touch keys to enter the numerical value to be changed. * When the [CL] touch key is pressed, the entered numerical value is cleared (deleted).
2	Write changed password	Press the [Enter] key.
4	Renewal of set value	Press the [Set] touch key.

Alarm screen



* Configuration of operation screen depends on the specification. For this reason, some parts are not displayed.

1. How to display screen

When any alarm occurs and [Alarm] display part on the main screen is pressed, this screen is displayed.

2. Screen application

This screen checks the content of occurring alarm and number of occurrence. And to perform alarm reset operation after the cause of an alarm is eliminated.

3. Screen displaying scroll operation

When [▲] [▼] touch keys are pressed, the displayed message is scrolled up and down. Operate these keys if there are many occurrences.

4. Alarm reset operation

Touch key name	Screen displaying operation
[Skip]	When this touch key is pressed for a long time only in the case that over alarm, short alarm and feed time alarm occur, alarm status is ignored (weighing is completed) and recovery is made.

5. Alarm reset operation

Touch key name	Screen displaying operation
[RESET]	When this touch key is pressed after the cause of an alarm is eliminated, alarm indication is reset and recovery is made.

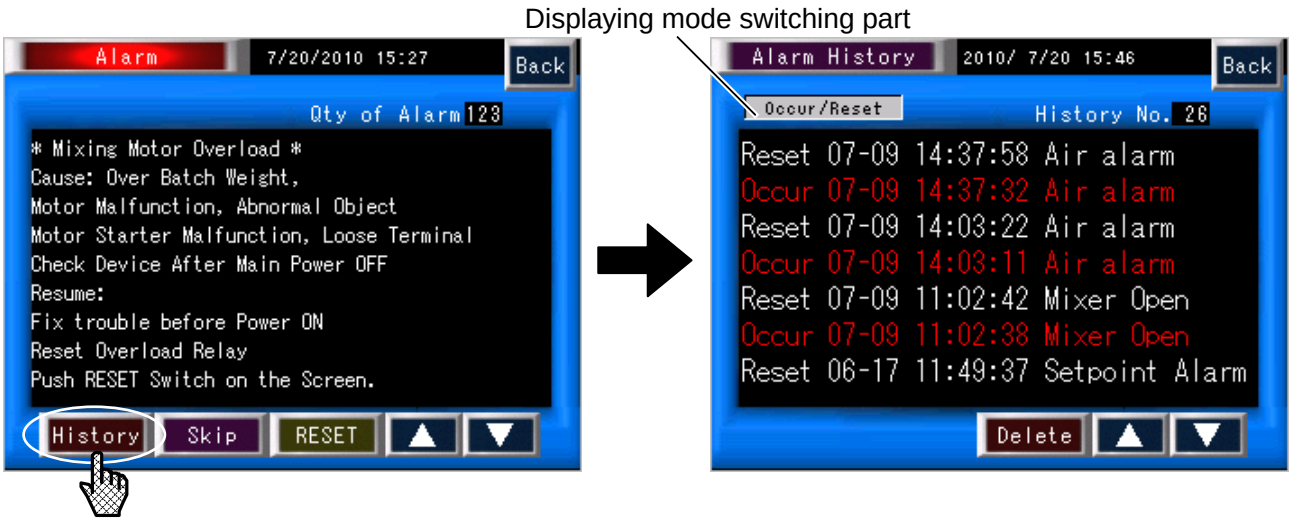
6. Screen switching operation

Touch key name	Screen displaying operation
[History]	When this touch key is pressed, the screen changes to “Alarm History screen.”
[Back]	When this touch key is pressed, the screen changes to the “Main screen.”

Chapter 13　Alarm History Screen

1. How to display screen

When [History] touch key on the Alarm screen is pressed, this screen is displayed.



2. Screen application

This screen checks the history of alarms which occurred up to the present.

3. Screen displaying scroll operation

When [▲] [▼] touch keys are pressed, the displayed history is scrolled up and down

4. Displaying mode switching operation

Every time when the displaying mode switching part on the screen is pressed, the displaying mode is switched.

There are three types of alarm occurrence displaying mode, alarm release displaying mode, alarm occurrence and release displaying mode as displaying modes.

5. History data delete operation

When [Delete] touch key is pressed, the touch key changes to be indicated as [Delete OK], and all of the history data are deleted if it is pressed again.

6. Screen switching operation

Touch key name	Screen displaying operation
[Alarm]	When this touch key is pressed, the screen changes to the “Alarm screen.”
[Back]	When this touch key is pressed, the screen changes to the “Main screen.”