

FINE Check Weigher Sales Manuals.

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<FINE check weigher Features>

- ◇ Voluntary setting up Function by a weighing system of absolute value
- ◇ **CALIBRATION** is protected by password not to be accessible to the operator
And only can be carried out by qualified personnel(OPTION)
Also, **Engineer Control Mode** is protected by password.
- ◇ Available to control **a weighing time and weighing interval** according to
Product conditions in production lines.
- ◇ **Dynamic Adjust function** can make a weight in-motion same with
An actual weight weighed by a general scale.
- ◇ Max.50 products memory
- ◇ Data back-up during power down or other electrical supply interruption
- ◇ **Auto calibration of ZERO and SPAN**
- ◇ Remote Control Mode Function
- It can drive C/W by two type's Remote Control Mode in the controller cabinet.
- ◇ **Auto Zero tracking Function** for every product in production lines
- ◇ Temperature stabilization and Noise Compensation Circuits built in
- ◇ Overweight or Underweight setting Memory Function
The user easily can call and use all data already set up until 50Items.
- ◇ FINE **Special Electrical noise filter**
- ◇ Continuous N.G Signal transmitting for a previous production lines troubles
According to the user's setting.(option)

- ◇ Multi mode **LCD graphical display**
 - Standard Display for the user easy checking
 - Level Bar Type Display
 - X Bar Graph Display
 - Histogram showing all distribution chart of production.
 - Can show count No & percentage for **Over,Under,Pass,Metal Error,N.G total** in the Histogram display

- ◇ Data communication to printer or computer
 - Can print **all data** showed in the controller display.
 - Can print **each product** data in weighing each product.
 - Can transmit **all sample data** to computer according to the user setting.

- ◇ Control Function for External equipments(option)
Available to control External Equipment by Input & output Interface.
(Barcode scanner,Inkjet Printer,Metal Detector,Filling Machine.so on)

- ◇ **A various controlling system(option)**
 - Feedback Control System.
 - Auto Tracking System.
 - Random Checking System.
 - B-A Type(Tare) Accumulated Weight Control System.
 - Available to control the above 2control system at the same
(Feedback Control System + B-A Type(Tare).

- ◇ A convenient **HARDWARE** System for A/S & replacing Conveyor Belt
 - Available to install and replace **HARDWARE** System easily.
 - Available to install C/W with a simple connector.

- ◇ A compatible spare parts price & a prompt A/S effect
 - It can replace all spare parts easily in the controller cabinet.
 - It can fix A/S troubles with a simple board replacement.

1. Model Configuration Guide(1)

a. FAC 5300 Controller

- **53** : Standard Version / **00** : Standard Cabinet
- **58** : Special Version / **20** : Isolated Cabinet

b. Weight Capacity

- **W313/323/333/343/353/363/373**
- **W** means Max. Loadcell Capacity Weight
- **W** means INFEED Conveyor system.
 - + **WEIGHING** Conveyor system
 - + **Main Construction Frame.**

c. Rejector system

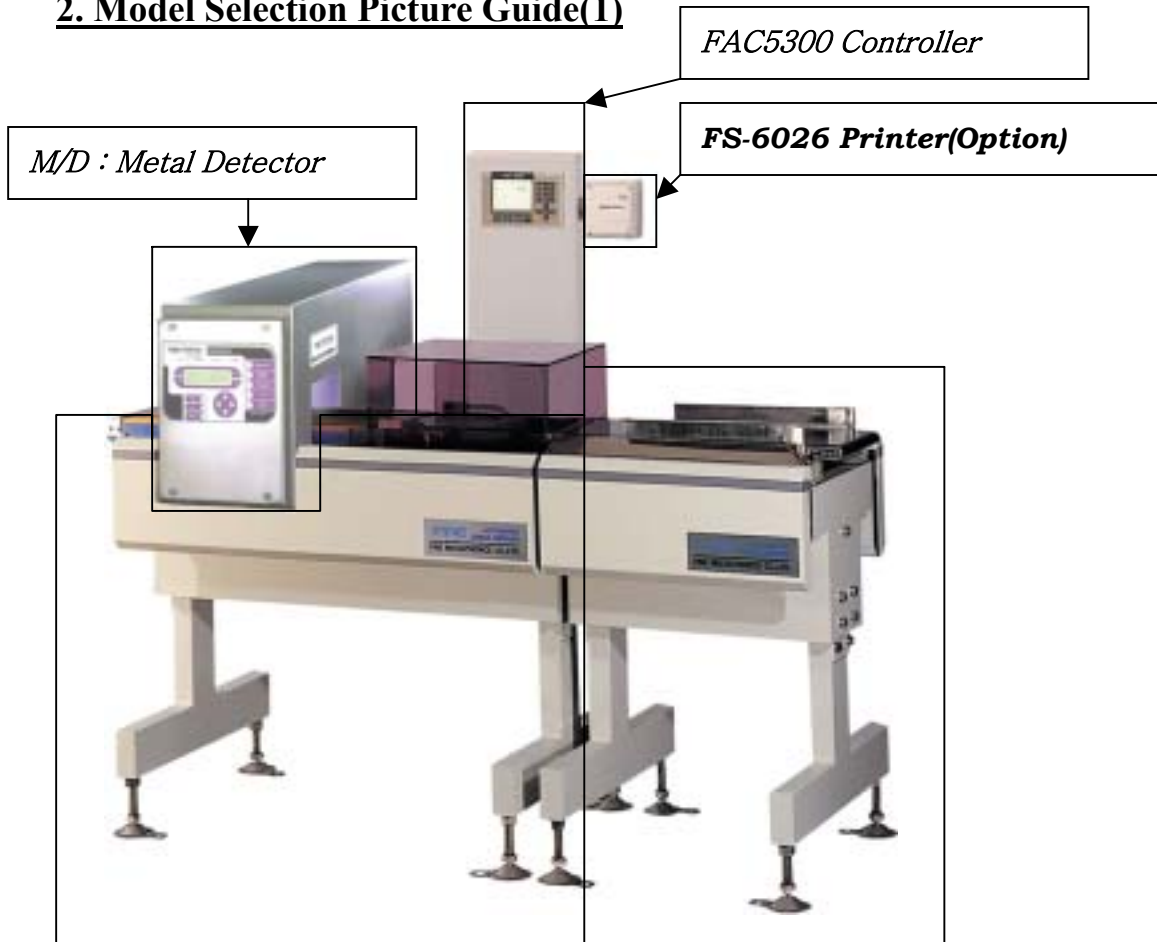
- **R** means Rejector system.
- **W313 Model rejector : R113/213/313/413**
- **W323 Model rejector : R123/223/323/423/523/R723**
- **W333 Model rejector : R233/533**
- **W343 Model rejector : R243/543**
- **W353 Model rejector : R653**
- **W363 Model rejector : R663**
- **W373 Model rejector : R673**

- **R1** : Drop Belt Type
- **R2** : Flip Bar Type
- **R3** : Slide Carrier Type
- **R4** : Air Jet Type
- **R5** : Pusher Belt Type
- **R6** : Pusher On Roller

d. Equipment for a dynamic check weigher system.

- **SC730** : Side Grip Conveyor
- **M/D** : Metal Detector
- **C1** : Collection Conveyor For R653
- **C2** : Collection Conveyor For R663
- **C3** : Collection Conveyor For R673

2. Model Selection Picture Guide(1)



*The classification
According to Weight Capacity*

- W313 Model(600g)*
- W323 Model(1200g)*
- W333 Model(3000g)*
- W343 Model(6000g)*
- W353 Model(18,000g)*
- W363 Model(30,000g)*
- W373 Model(60,000g)*

*The classification
According to Rejector system*

- R1 : DropBelt Type*
- R2 : Flip Bar Type*
- R3 : Slide Carrier Type*
- R4 : Air Jet Type*
- R5 : Pusher Belt Type*
- R6 : Pusher On Roller*

2. Model Selection Picture Guide(2)



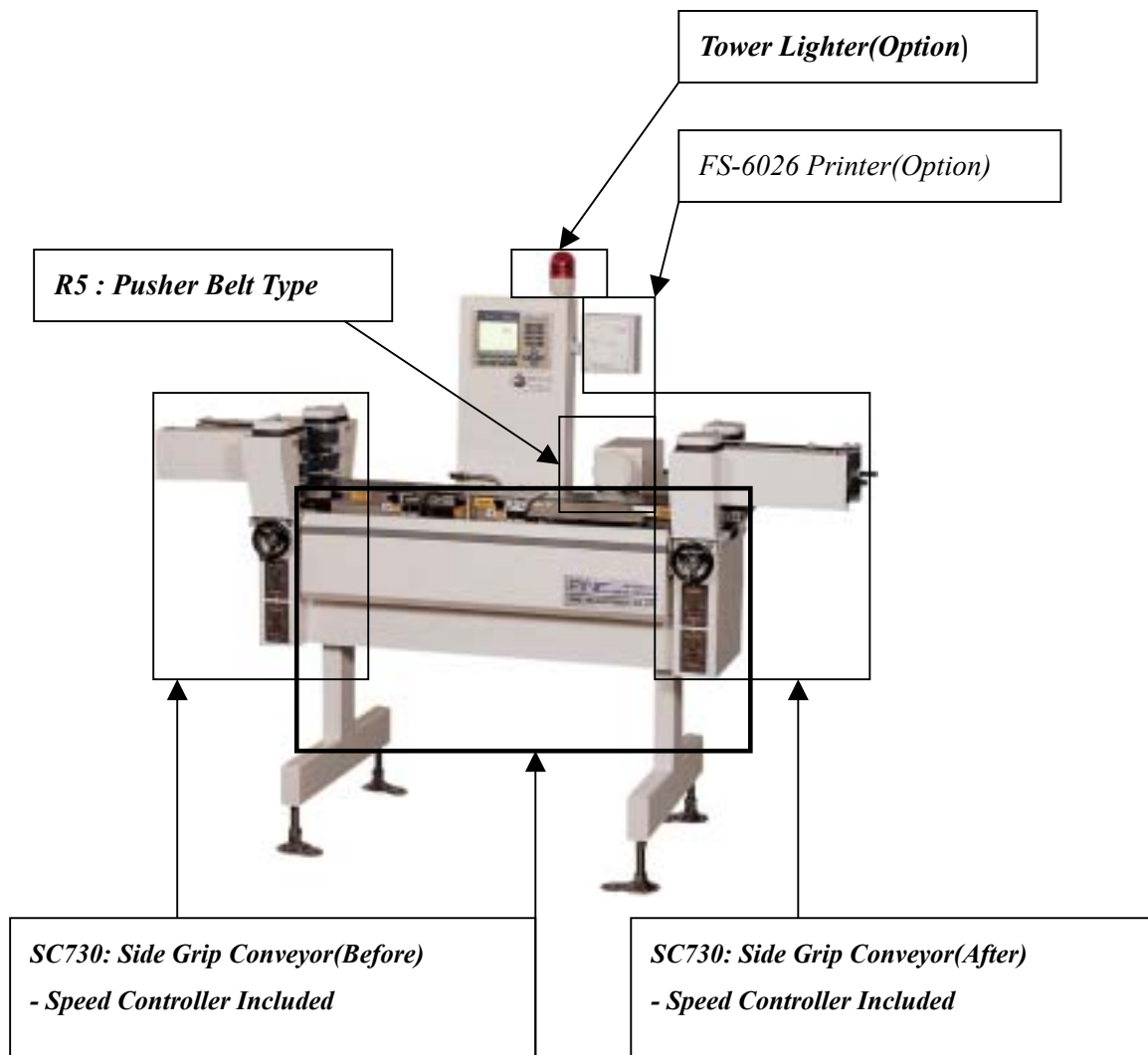
*The classification
According to Weight Capacity*

- **W313 Model(600g)**
- **W323 Model(1200g)**
- **W333 Model(3000g)**
- **W343 Model(6000g)**
- **W353 Model(18,000g)**
- **W363 Model(30,000g)**
- **W373 Model(60,000g)**

Collection Conveyor(Option)

- **C1(R653)**
- **C2(R663)**
- **C3(R673)**

3. Model Selection Picture Guide(3)



One Frame Construction Conveyor(ONE FRAME TYPE)

***Infeed Conveyor + Weighing Conveyor+ Outfeed Conveyor
(Most of check weigher has Infeed and Weighing Conveyor and
Outfeed Conveyor separately.***

***Because Drop Belt,Flip Bar Type Rejector can effect on
A digit and Accuracy of Controller in running conveyor***

However,

***As Air Jet,Pusher On belt Type Impact effecton was less than others, One Frame
Type Conveyor can be made according to the user product's specifications.***

4. Model Specifications.

(1) FAC5300-W313 Model

*** Standard Configuration**

- Product Max.Capacity : **600g.**
- Resolution : **0.1g**
- Accuracy : **± 0.2g**
- Max.Weighing Speed : **240PPM**
- Conveyor Belt Speed : 34M~ 94M/Min
- Min & Max.Package Length : 30mm ~ 330mm
- Min & Max.Package Width : 30mm ~ 150mm
- Min & Max.Package Height : 10mm ~150mm
- Loadcell : Tedia Brand,Hunter Brand of One Beam Type 1pc
- Construction : One Frame Type(Infeed and Weigh and Outfeed)(**OPTION**)
- Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms,
- rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : “ 0000 “ Password protection for Manager,Engineer
- Recommend Rejector System
- * Drop Flap Type (R113)/* Flip Bar Type(R213)/* Slide Carrier Type(R313)
- * Air Blast Type(R413)/*Side Grip Conveyor(R730 : **OPTION**)
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry,

(2) FAC5300-W323 Model

*** Standard Configuration**

- Product Max.Capacity : **1200g.**
- Resolution : **0.2g**
- Accuracy : **± 0.6g**
- Max.Weighing Speed : **195PPM**
- Conveyor Belt Speed : 18M~ 76M/Min
- Min & Max.Package Length : 30mm ~ 360mm
- Min & Max.Package Width : 30mm ~ 220mm
- Min & Max.Package Height : 10mm ~220mm
- Loadcell : Tedia Brand,Hunter Brand of One Beam Type 1pc
- Construction : One Frame Type(Infeed and Weigh and Outfeed)(**OPTION**)
- Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms, rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : “ 0000 “ Password protection for Manager,Engineer
- Recommand Rejector System
- *** Drop Flap Type (R123)/* Flip Bar Type(R223)/**
- *** Slide Carrier Type(R323)* Air Blast Type(R423)/*Drop Belt(R723)/**
- ***Side Grip Conveyor(R730 : OPTION)**
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry,

(3)FAC5300-W333 Model

*** Standard Configuration**

- Product Max.Capacity : **3000g.**
- Resolution : **0.5g**
- Accuracy : **± 1.5g**
- Max.Weighing Speed : **190PPM**
- Conveyor Belt Speed : 26M~ 87M/Min
- Min & Max.Package Length : 70mm ~ 450mm
- Min & Max.Package Width : 30mm ~ 300mm
- Min & Max.Package Height : 15mm ~300mm
- Loadcell : Tedia Brand,Hunter Brand,CAS of One Beam Type 1pc
- Construction : Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms,
rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : " 0000 " Password protection for Manager,Engineer
- Recommand Rejector System
- *** Flip Bar Type(R233)/* Pusher on Belt Type(R533)**
- *** Side Grip Conveyor(R730 : OPTION)**
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry,
Many kinds of Powder Foods,Chemicals,Instant Foods so and so
Detergent,Noodles,Chocolets,a general food lines.

(4) FAC5300-W343 Model

*** Standard Configuration**

- Product Max.Capacity : **6000g.**
- Resolution : **1g**
- Accuracy : **± 3g**
- Max.Weighing Speed : **110PPM**
- Conveyor Belt Speed : 21M~ 61M/Min
- Minn & Max.Package Length : 80mm ~ 560mm
- Min & Max.Package Width : 30mm ~ 360mm
- Min & Max.Package Height : 20mm ~360mm
- Loadcell : Tedia Brand,Hunter Brand,CAS of One Beam Type 1pc
- Construction : Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms, rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : " 0000 " Password protection for Manager,Engineer
- Recommend Rejector System
- *** Flip Bar Type(R243)/* Pusher on Belt Type(R543)**
- *** Side Grip Conveyor(R730 : OPTION)**
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry, Many kinds of Powder Foods,Chemicals,Instant Foods so and so

(5)FAC5300-W353 Model

* Standard Configuration

- Product Max.Capacity : **18kg**
- Resolution : **2g**
- Accuracy : **± 6g**
- Max.Weighing Speed : **70PPM**
- onveyor Belt Speed : 17M~ 51M/Min
- Minn & Max.Package Length : 240mm ~ 800mm
- Min & Max.Package Width : 30mm ~ 400mm
- Min & Max.Package Height : 30mm ~400mm
- Loadcell : Tedia Brand,Hunter Brand,CAS of One Beam Type 1pc
- Construction : Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

* Standard Features

- Statistics : Average, standard deviation, product counts, histograms, rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : " 0000 " Password protection for Manager,Engineer
- Recommand Rejector System
- * **Pusher on Belt Type(R653)**
- Approval : EMI,EM MARK

* Options

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry, Many kinds of Powder Foods,Chemicals,Instant Foods so and so Detergent,Noodles,Chocolets,a general food lines.

(6)FAC5300-W363 Model

*** Standard Configuration**

- Product Max.Capacity : **30kg**
- Resolution : **5g**
- Accuracy : **± 10g**
- Max.Weighing Speed : **45PPM**
- conveyor Belt Speed : 17M~ 42M/Min
- Minn & Max.Package Length : 240mm ~ 1000mm
- Min & Max.Package Width : 30mm ~ 500mm
- Min & Max.Package Height : 30mm ~500mm
- Loadcell : Tedia Brand,Hunter Brand,CAS of One Beam Type 2pcs
- Construction : Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms, rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : " 0000 " Password protection for Manager,Engineer
- Recommend Rejector System
- *** Pusher on Belt Type(R663)**
- *** Collection Conveyor(C2)(OPTION)**
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Pharmaceutical,Confectionery,Bearing Industry, Many kinds of Powder Foods,Chemicals,Instant Foods so and so

(7)FAC5300-W373 Model

*** Standard Configuration**

- Product Max.Capacity : **60kg**
- Resolution : **10g**
- Accuracy : **± 20g**
- Max.Weighing Speed : **25PPM**
- onveyor Belt Speed : 14M~ 30M/Min
- Minn & Max.Package Length : 240mm ~ 1200mm
- Min & Max.Package Width : 30mm ~ 600mm
- Min & Max.Package Height : 30mm ~600mm
- Loadcell : Tedia Brand,Hunter Brand,CAS of One Beam Type 2pcs
- Construction : Two Frame Type(Infeed and Weigh and Outfeed(separate))
- Construction Materials : Mild Steel, Stainless Steel (**OPTION (IP65)**)

*** Standard Features**

- Statistics : Average, standard deviation, product counts, histograms, rolling average, zone counts and zone weights
- Power : 110,230VAC + 50Hz,60Hz,Single(1Φ) Phase, 3Φ Phase
- Motor : Panasonic motor with speed stored in product memory
- Product Storage : Up to 50 product setups, complete with speed, timer settings
- Weight Zone : 3 sigma
- Language : English Only
- Security : " 0000 " Password protection for Manager,Engineer
- Recommand Rejector System
- *** Pusher on Belt Type(R763)**
- *** Collection Conveyor(C2)(OPTION)**
- Approval : EMI,EM MARK

*** Options**

- Feed Back Control to Filler(Program)
- Auto Tracking System(Program)
- Random Checking System(Program)
- B-A TYPE(Accumulated) Control System(Program)
- Serial Communication : RS-232C,422,485
- Reporting : FS-6026 Printer
- Application : Heavy Duty,Carton,Sack,a larger box.

5.Optional Presentations for Automatic Checkweighers.

1. OP 1 : Feedback Control System by TIME/SEC

This system can control a filling Machine of a previous production lines based on The user Parameter Setting Points.

Also This Feedback Control System will be displayed on the main Screen.

When a new article is being entered in the article memory or when the stored article Data/settings of a certain article are being modified, Feedback Control System work after leaving the Article Interval screen. Depending on the checkweigher version all parameters shown below or less will Appear on the screen.

For a Example.

- Pulses/g when Feedback Controlling is effected by Transmitting Pulses.
: When the filling machine works with “1pulse/g” 10pulses are required(and Transmitted from the checkweigher) to compensate for a weight deviation of 10Grams to readjust the filling machine.
- Sec/g when Feedback controlling is effected by means of pulse width modulatioin.
: The pulse width,Duration depends on the weight deviation which is to be Compensated for.

If the filling machine`s control requires a variable control factor, The feedbackcontrol program is designed such that the checkweigher automatically calculates the suitable control factor and adapt it permanently to the filling behavior of the filling machine.in this case the control factor does not appear on the Article – Feedback control data-input screen and thus cannot be modified by the operator.

2. OP 2 : RS-232 Program of data

If The user requires RS-232C Program with the following requirement.
This OP2 can fully meet the below User Requirement.

“ We are not sending the weighing data to computer but we are sending the weight to Ink-Jet Printer(the Ink-Jet Printer is more stupid than computer),then we want the checkweigher to send the weighing data with the following format.”

- A. User Setting Point : OVER = 10100g,GOOD = 10000g,UNDER=9900g

- B. Upon knowing the weight once the product being weight by checkweigher :
 - (1) If the product is within the tolerance,pls print the following format :
Only nominal weight(or Judged weight) eg 10000g(it does not want the part no & level)
 - (2) If the product is out of tolerance,pls print the following format
The actual weight Eg 10090g(it does not want the part no & Level)
Eg 9800g(it does not want the part no & Level)

- C. This program will be use together with Auto-Tracking System.
So,during the operation,the Auto nominal value will change according to Mean Value.Also the user can key in a fix nominal value for case no 1.

3. OP3 : Auto Tracking system

We set the upper reject limit is **10g** more than Target weight(1000g) and the same for lower limit during the first user setting.but this does not means that the upper & lower reject limit will always remain the same value once the operator set in the first time.

If the operator set the sampling interval of 3pieces to get th new mean value.the program will automatically reset the upper & Lower mean value based on the new mean value as show below after sampling of 3products sample(New Mean Value of the first 3products = $1000g + 1005g + 1006g = 3011g/3\text{factor} = 1003.67g \ggggg 1004g$)

In this case the immediate(effective)upper reject limit is = 1014g(the old one is 1010g) & the lower reject limit is 1004g(the old one is 990)

However,after the 4th product pass through the checkweigher,the new mean value is the average of the last 3 products which is $1005+1006g+1010g=1007g$.then 1010g counted as good product because of the new mean value = 1004g.

However,after the 5th product pass through the checkweigher,the new mean value is the average of the last 3 products which $1006g+1010g+1016g = 1011g$.then 1016g counted as good product because of the new mean value is 1011g.

Please pay the attentions for more detailed understanding as follows.

Test Sample	Status of Weight	Rejctor	New Lower Limit	New Upper Limit
1) 1000g	Count	No Reject		
2) 1005g	Count	No Reject		
3) 1006g	Count	No Reject	990g>>>994g	1010g>>>1014g
4) 1010g	Count	No Reject	994g>>>997g	1014g>>>1017g
5) 1016g	Count	No Reject	997g>>>1001g	1014g>>>1021g
6) 1020g	Count	No Reject	1001g>>>1005g	1021g>>>1025g
7) 1000g	No Count	Reject	1005g>>>1005g	1025g>>>1025g
8) 1008g	Count	No Reject	1005g>>>1005g	1025g>>>1025g
9) 1020g	Count	No Reject	1005g>>>1006g	1025g>>>1026g
10) 1027g	No Count	Reject	1005g>>>1006g	1025g>>>1026g

4. OP 4 : Statistic with Ticket Printer (FS-6026)

Check Weigher Printer Format can print all statistical data judged by C/W.
And All informations set up by the user.

1. Hard Copy Print Format

- This function is to print all data displayed on the screen.
- It can be printed by COPY Button on display panel.

2. Data Accumulation

- If you press (Accu.) key,
All data which the user have worked will be printed

3. Print (Individual date output)

The P.N., Counts, Grade & weight will be printed Whenever C/W's Judging
Also, this printer will be ran until removing.(Available to set Initial display)

PA	SE	G.	WEIG
RT	R.		HT
01	411	P	70.6
01	412	P	70.2
01	413	P	70.4
01	414	P	70.4
01	415	P	40.2
01	416	P	70.0
01	417	U	69.6
01	418	P	70.2
01	419	P	70.0
01	420	P	70.4
01	421	O	71.0
01	422	O	70.8
01	423	P	70.6
01	424	U	68.4
01	425	P	70.2
	.		
	:		

P : (Passed Product)
O : (Overweight Product)
U : (Underweight Product)
M : (Metal included Product)

<Print Format WHENEVER A Product pass through>

5. OP 5 : "S" Type Pusher Cylinder.

A normal Pusher Cylinder was Rectangular type.

But, this "S" type will be used according to the user's requirements.

Also we will follow up your requirements according to the factory Conditions.

Except of the above Special Specification.

6. OP 6 : Random Checking System

This system will be used with a barcode reader.

When A various kinds of products is being flowing on the main conveyor,

The user will try to check the weight of each product and check if the carton box was completed or not through 1 unit check weigher.

Then, it should be installed with BARCODE READER which can read

The BARCODE attached to Each Product before Checkweigher.

So, Barcode Reader will transmit their product barcode data to Checkweigher

After reading Each Barcode, then Check weigher can check Each products specialized With barcode through Random Checking System Program.

For completing this Random Checking Program with Automatic Checkweigher

The user should show their Barcode Informations for us to make a suitable Program.

In advance.

7. OP 7 : B-A Type(Accumulated Weight) Control system

If a carton which was filled with Materials have a various typies.

Gross Weight included with carton may be different according to the carton weight.

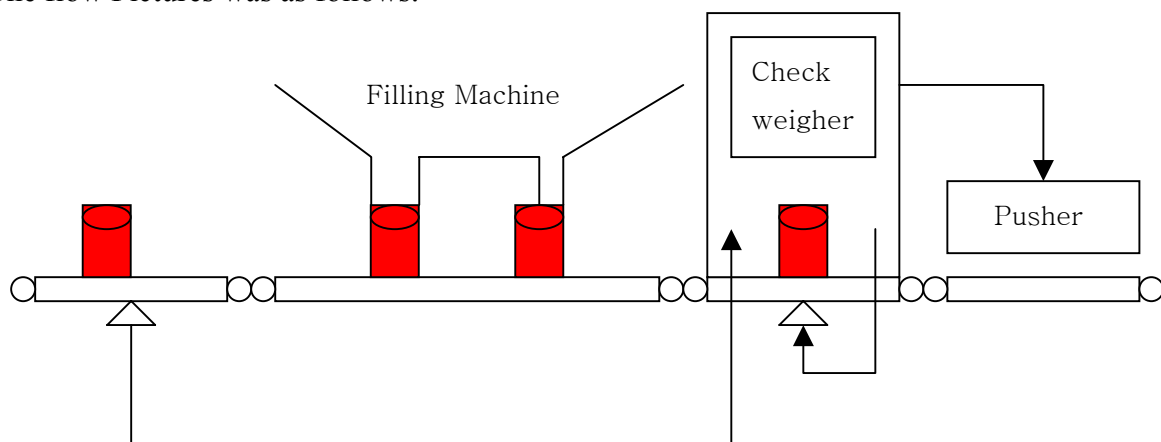
Then,the Carton Weight flowing on the conveyor should be weighed

Before Checkweigher

Also the Gross Weight of Carton filled with Materials should be weighed again.

Therefore,this Control system will check if the carton was completed with Materials as the user set up.

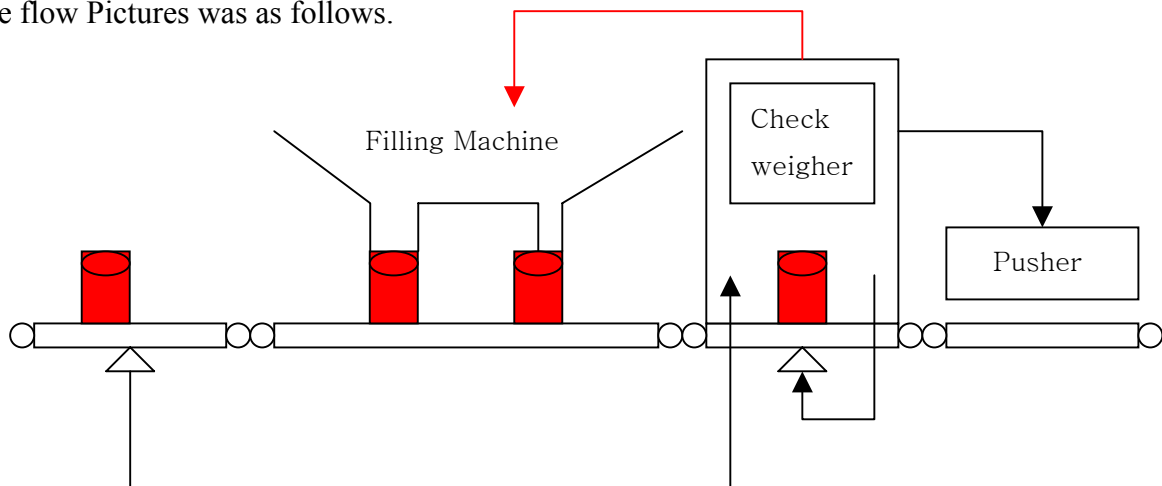
The flow Pictures was as follows.



8.OP 8 : B-A Type(Accumulated Weight) Control system+Feedback Control Sys

If a carton filled with Materials was not enough as much as the user setting value Continously then Automatic Checkweigher will control a previous Filling Machine with Auto Feedback Control System at the same time.

The flow Pictures was as follows.



9. OP 9 : I/F RS -232C (Interface with others) : Free of charge.

10. OP 10 : BCD DATA OUT

11. OP 11 : I/F RS-422 or RS-485

12. OP 12 : INTER LOCK

This function will be used for stop belt type on the conveyor without a normal rejector.
Then, this N.G Signal will stop the previous lines and back lines at the same time.

13. OP 13 : BUZZOR

14. OP 14 : TOWER LIGHT

This function will be used for stop belt type on the conveyor without a normal rejector.
Then, this N.G Signal will stop the previous lines and back lines at the same time.

15. OP 15 : Continous N.G Signal

This functions will be used for the applications which have a continous ERROR
Products of (00~ 99) the user can set up
That is ,A continous NG Singal means that a filling machine have some ERROR
In the productions lines.
Also, After Continous N.G Signal work then All product will flow without checking.

So, the user saperately should restrict a previous and Back Production Lines by Interlock
To avoid decreasing any Continous Error Products

16. OP 16 : Infeed Part Side Grip Conveyor

This side grip conveyor was installed with a speed controller.
And the height and wide can be adjusted by a handler in manual.

This side grip will be used for the bottle lines or shampoo or the products which was more
higher than length or wide size.
to escape the product`s down on the conveyor.

Please refer to this pictures our data site(www.webhard.co.kr).

ID : iktech.

PASS : iktech.

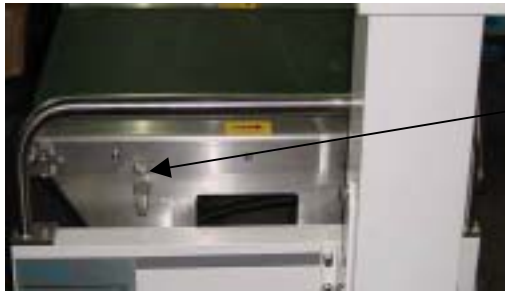
- 17. OP 17 : Outfeed Part Side Grip Conveyor**
- 18. OP 18 : Special Infeed Conveyor for Metal Detector**
- 19. OP 19 : Special Infeed or Outfeed Conveyor**
- 20. OP 20 : METAL DETECTOR (ORDER MADE).**
- 21. OP 21 : BARCODE READER (ORDER MADE).**
- 22. OP 22 : INK JET PRINTER(ORDER MADE).**
- 23. OP 23 : LABEL PRINTER (ORDER MADE).**
- 24. OP 24 : X-RAY INSPECTOR (ORDER MADE).**
- 25. OP 25 : Stainless Steel Frame (1.20 Time of Mild Steel).**

5. Controller Start up time

- A. Data back-up during power down or other electrical supply interruption
- B. The user can start C/W as soon as the power turn on.
- C. Normal Starting warming time is about 10sec.until disappear **FINE logo**

6. C/W Conveyor Maintenance

- D. The way to remove and refitting was very easy.
- E. Because all conveyor was Un- installed by Hand Clip easily.
- F. In case of FAC5300-W363 Weighing Conveyor for heavy duty
- G. The user can remove and refit it easily as the below picture



It can take off conveyor and change the belt by lifting this clip

7. All system and parts Maintenance inside Controller

- H. All spare parts can be remove or refitted easily
- I. Also all system(board,device so and so) inside Controller box was installed easily.
- J. The user also can replace all parts and system parts as Engineer Manuals



Analog Board

Controller Main Board

Power Supply

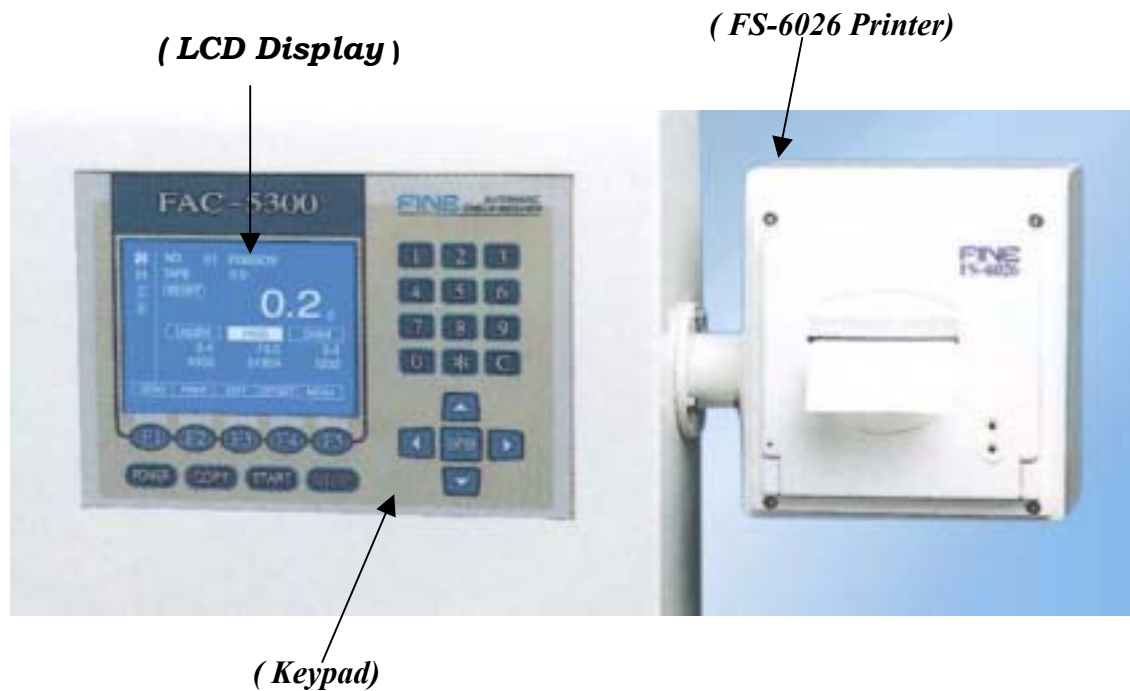
Noise Filter

8. Operating Panel

K. A current keypad can be easily replaced by hands

L. Also, it is very easy for the user to operate C/W as the display showed.

M. Each Function Key pushing was displayed as the help service screen



9. Controller Time Setting

N. FINE controller can set and memory all system until 50 Products.

All setting parts can be adjusted in the display by keypad

O. Also for more precise weight between motion and stop status,

It can be set by Dynamic Adjustment value in the display.

- Time setting can be easily adjusted by the Keypad according to the area

10. Memory of Products setting

A. Available to set all 50 products with English and hangul and Alphabe

B. Alos China Language can be displayed on the basic screen only for the worker.

11. Graphical Displays of FAC5300 Controller.

Basic Screen



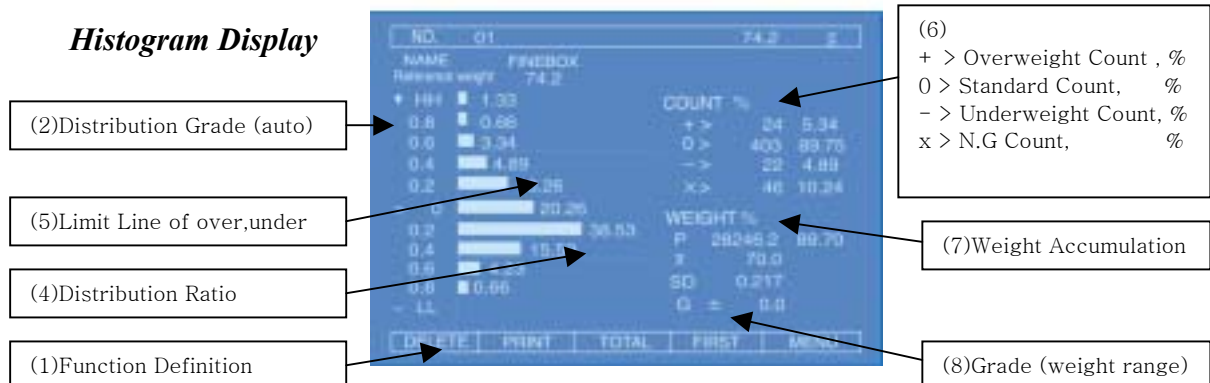
Level Bar Screen



X- R Screen



Histogram Display



(1)Function Definition.

F1

DELETE

Delete for the accumulated data & graph

F3

TOTALT

Printing of the accumulated data :

Date,start time,stop time,Item No,Count,Each Rate

F4

FIRST

Return to First screen.

(2)Distribution Grade(Auto Setting) :

Date rate distributed by Weighing zone level from standard weight.

(3)Distribution graph :

Quantity & weight accumulated Data can be changed in the screen.

But, the graph can not be changed.

It can show a new up dated graph through setting Menu Screen again.

(4)Distribution ratio : Bar distribution percentage

(5)Limit line of over weight & under weight :

It can be changed automatically according to the distribution Ratio

Of Underweight & Overweight setting.

(6)Quantity accumulation

(+) OV : Overweight quantity & percentage in 100%

(0) P : Passweightquantity & percentage in 100%

(-) UN : Underweight quantity & percentage in 100%

(x) MD : Metal Product quantity & percentage in 100%

(x) NG : Overweight & underweight quantity & percentage in 100%

(7)Weight accumulation

P : The sum of Pass weight & percentage in 100%

X bar : Average weight of passing materials

SD : Standard Deviation

(8)G(Grade) : Display for the weight range in distribution bar.

For example

In case of $G \pm 0.2$,

The weight range in distribution bar on the central graph > 0 is $-0.2, 0, +0.2$.

The weight range of distribution bar $+0.6$ is $0.4, 0.6, 0.8$.

The weight range of distribution bar -0.6 is $-0.4, -0.6, -0.8$.

For more informations.

In case of example(1)

1) Digit : $0.2g$

2) G(grade) : $\pm 0.0g$

3) Distribution Grade(Auto Setting)

- 0 : just standard weight range

- $+0.2$: just standard weight range

- $+0.4$: just standard weight range

- $+0.6$: just standard weight range

.....

In case of example(2)

1) Digit : $0.2g$

2) G(grade) : $\pm 0.2g$

3) Distribution Grade(Auto Setting)

- 0 : $-0.2g < 0 < +0.2g$ weight range

- $+0.6$: $+0.4g < +0.6 < +0.8g$ weight range

- $+1.2$: $+1.0g < +1.2g < +1.4g$ weight range

- $+1.8$: $+1.6g < +1.8g < +2.0g$ weight range

.....

Finally, this Distributions Grade can be showed differently according to

The setting range which the user want to.

Also this Distribution Grade have the purpose of showing the user the weight percentage changed according to the weight range automatically.

And the user can check the good and No good product through the limit line of Under weight and Over weight in the screen.

12. Interface Communication(RS-232C)

(1)A/C can be interfaced with any external equipments by RS-232C, RS-422, RS-485 and Current-Loop. You can choose 2 interfacing type out of 4 ways.

- BAUD RATE : 1200 ~ 9600 bps
- DATA BIT : 8 bit
- PARITY BIT : NONE
- START BIT : 1 bit
- STOP BIT : 1 bit
- CODE : ASCII

(2)Transmitting & Receiving Format

① when Computer set their data to Checkweigher

· COMPUTER to C/W(CheckWeigher)

BYTE	1	2	1	6	6	6	1
DATA	STX	P.N	“S”	PASS	UNDER	OVER	ETX

*Remark

- STX : Start

- P.N : Part No

-“S” : Set

-PASS : PASSWEIGHT

-UNDER : UNDERWEIGHT

-OVER : OVERWEGIHT

-ETX : Finish

· If C/W(CheckWeigher) received the Data from Computer without Fail

BYTE	1	1	1
DATA	STX	ACK	ETX

● Remarks

- ACK : OK received

·If C/W(CheckWeigher) did not receive the Data from Computer with Fail.

BYTE	1	1	1
DATA	STX	NAK	ETX

● Remarks

- ACK : NO Don`t receive

② When C/W(Checkweigher) judged the actual weight of Product,

· When C/W will send the below format to Computer

BYTE	1	2	1	6	1
DATA	STX	P.N	Grade (U.P.O)	Actual Weight	ETX

☞ Grade - "U" : Underweight , "P" : Passweight, "O" : Overweight

Then,If Computer received the Data from C/W(CheckWeigher) without Fail

Computer will re-transmit with the below format to Checkweigher

BYTE	1	1	1
DATA	STX	ACK	ETX

● Remarks

- ACK : OK received

Then,If Computer did not receive the Data from C/W(CheckWeigher) with Fail.

Computer will re-transmit with the below format to Checkweigher

BYTE	1	1	1
DATA	STX	NAK	ETX

● Remarks

- ACK : NO Don't receive

· If the user want to delete Count displayed C/W screen,

Computer will transmit to C/W with the below format.

BYTE	1	2	1	1
DATA	STX	P.N	C	ETX

● Remarks

P. P.N : Part No

Q. C : Clear

- If the user want to delete all accumulated data in Checkweigher which Computer didn't receive with Fail from C/W,

Then, Computer can delete all data accumulated in C/W with the below format.

BYTE	1	1	1	1	1
DATA	STX	C	L	R	ETX

- Remarks

- C.L.R : Clear

If Computer want to get the data from C/W,

Then Computer can transmit to C/W with the below format.

BYTE	1	2	1	1
DATA	STX	P.N	R	ETX

- Remarks

R. P.N : Part No.

S. R : Request

When C/W will give all data as Computer requested,

Then, C/W will transmit all data to Computer with the below format.

BYTE	1	2	1	6	6	6	6	4	4	1
DATA	STX	P.N	A	PASS Weight	UNDER Weight	OVER Weight	PASSED COUNT	UNDER COUNT	OVER COUNT	ETX

- Remarks

T. A : Answer

③ ETC.

- STX (02H)
- ETX (03H)
- ACK (06H)
- NAK (15H)

☺ **All data have no Decimal Point.**

☺ **All data can be transmitted when C/W judge.**

But,if C/W did not receive all data “ACK” from Computer with Fail,
Then,All data remained until 200data in C/W which Computer already sent.

Also If Data being Excessive to 200th data in C/W remained,
Then,automatically It will be deleted when C/W judge from the first data,

And if C/W received “ACK” from computer again without Fail,
All data will be transmitted to Computer again

· OPTION FORMAT

BYTE								
DATA								

BYTE								
DATA								

13. All comments which the user can set by himself easily.

a. General Setting Comments(Operating Manuals explained)

- 1 Time setting
- 2 Parts name setting
- 3 How to input the parts name
- 4 For example to set Parts name
- 5 The setting of decimal point
- 6 The setting for unit
- 7 The system driving after Power on
- 8 The setting for baud rate
- 9 The setting for driving a rejector
- 10 Language converting (Korean/English)
- 11 The setting for constant value of dynamic coefficient
- 12 Weight calibration.

b. General Operating(Operating Manuals explained)

- 1 Main Power Key
- 2 On/Off Key
- 3 Start/Stop Key
- 4 Zero Key
- 5 Print Key
- 6 Clear Key
- 7 Basic operating of key board
- 8 Basic operating in screen
- 9 Application of basic screen
10. Accumulation screen

14. Data Storage on power failure or Power ON/OFF

- U. Data back-up during power down or other electrical supply interruption
- V. This Data Back –Up Program automatically returned as the user first set up
- W. Always the user had better use the Power Key on the Key-PAD.

15. Operation History Function.

Check Weigher Printer Format can print all statistical data judged by C/W.

And All informations set up by the user.

1. Hard Copy Print Format

- This function is to print all data displayed on the screen.
- It can be printed by COPY Button on display panel.

2. Data Accumulation

- If you press (Accu.) key,
All data which the user have worked will be printed

3. Print (Individual date output)

The P.N., Counts, Grade & weight will be printed Whenever C/W's Judging
Also, this printer will be ran until removing.(Available to set Initial display)

PA	SE	G.	WEIG
RT	R.		HT
01	411	P	70.6
01	412	P	70.2
01	413	P	70.4
01	414	P	70.4
01	415	P	40.2
01	416	P	70.0
01	417	U	69.6
01	418	P	70.2
01	419	P	70.0
01	420	P	70.4
01	421	O	71.0
01	422	O	70.8
01	423	P	70.6
01	424	U	68.4
01	425	P	70.2

.
:

P : (Passed Product)
O : (Overweight Product)
U : (Underweight Product)
M : (Metal included Product)

<Print Format WHENEVER A Product pass through>

18. Password Setting way for operator,supervisor,Maintenance.

a.Main Setting parts for operator

C. Calibration(option)

D. Set up

E. System Test

b. Set up manuals for Engineer

F. Decimal Point

G. Set Unit

H. Adjust Stability

I. Zero Sensitivity

J. Forced Zero Range

K. Digital Filter

L. Weighing Time

M. Zero Time.

N. Run Testing

c. Set up parts for Supervisor & Maintenance.

O. Maintenance display manual can be accessed by password(4digits).

P. Also Engineer Manuals can support the user to fix a troubles easily.

Q. Cablibrations is protected by password for Supervisor

19. Safe Function to cover a different weight data

According to the weighing conveyor positions Installed to the factory

X. The user should test around the weighing conveyor by a test weight.

Y. Then,the user can Easily find out the weight Error by TEST SYSTEM Screen

Z. Also Because **a compulsory Dipswitch**(No 2 or No 3) on Sequence Board which can run the conveyor lines without the Controller Running for the user continous production lines,the user easily can test and adjust a weight Error while fixing the controller in running conveyor lines.



Compulsory Dipswitch(No 2 or No3)

20. Safe Function to cover Double Product on weighing conveyor.

- AA. It can choose either Product Pass Signal or N.G Signal by software according to the user order.
- BB. But, Generally In case of Pusher Type Rejector,
- CC. Most of N.G Signal will transmit Double – Product to pass through without a rejector running for the product packing damage
- DD. Of course, In case of Almost Rejector except of Pusher Type,
- EE. N.G Signal will transmit Double- Product not to pass through by a rejector.

21. External Control.

- FF. Remote External FAC5300 Controller will be used for the applications which the user can not directly adjust according to the factory conditions.
- GG. This REMOTE EXTERNAL Controller can be made as Optional.

22. The actual Pictures of Checkweigher which already installed according to the applications.

A. Seasoning Packing Lines.



* Remarks

- This Checkweigher was installed to Ajimoto Factory in Indonesia.
- It can find out that check weigher can check the weight and control a filling machine which is filling a seasoning in the each polybag.
- This Processing Speed was 80~100PPM
- The above actual Digit and Accuracy was 0.1g +/- 0.4g

(2) Paper Tissue Production Lines.



* Remarks

- The above Checkweigher was installed to check the weight of Paper Tissue of Kimberly.
- Also Slide Carrier Type Rejector is processing the Error Tissue which will be converted to Error Lines without any Product Damage.
- Also the above was installed with A Checkweigher which is transmitting Production Date and Standard Weight Confirmations data to Ink Jet Printer.
- Normally FINE Check Weigher can process all kinds of Tissue Products.

(3) Tuna FISH Multiple Selection Lines



**Remarks*

- *the Above Checkweigher was installed to select a Tuna Fish by 8Step according to the weight.*
- *Most of a processing FISH Company should get a checkweigher which can select a Fish SIZE by the weight.*
- *It can be supplied with a controller and weighing part conveyor only according to the user conditions.*

(4)Noodle Including Seasoning and others.



** Remarks*

- *The above check weigher was installed to check Noodle Weight and to check if seasoning was included or not.*
- *This Checkweigher Processing Speed was 220PPM(0.2g +/- 0.4g)*
- *It can find out Air Blast Rejector to reject a Error Product*
- *The above Noodle Company was known In the world.*
- *Acutally this Checkweigher was installed to China and Korea.*

(5) Confectionery Packing Production Lines.



**Remarks*

- *This Checkweigher was installed to check a Confectionery Quantity in a Pack*
- *Although A Filling Machine on Previous lines correctly is filling Confectionery, a filling Machine such as the above lines have a lot of Error Filling so check weigher can correctly inspect all confectionery included for the final user.*
- *Also Checkweigher can control overweight of products to decrease the production Cost.*

(6) Seasoning Pouch Packing Lines



**Remarks*

- *This Checkweigher was installed to check the weight of Seasoning Pouch Packing.*
- *As the previous packing Machine is making a constant Pitch between one and one, Check Weigher can easily check the weight as the Parameter setting point as the user set up.*
- *This Checkweigher construction Frame was made with Stainless Steel.*

(7) Refill Type Shampoo Lines.



* Remarks

- Normally it may be worried that the above refilled Shampoo Pack will be drop down on the conveyor, but it will be difficult to do that like the above pictures.
- Because Infeed Conveyor is making the conveyor speed same with a previous lines, also it was made to avoid dropping down by Double Belt Type on Outfeed Conveyor.
- If the user are thinking that the higher packing will drop down on the conveyor, then it can be made with an additional Infeed conveyor which can control a speed and Guide on the side of Conveyor.
- Finally the saler should advise all packing and Production conditions before.

(8) Chemical Bottle Lines.



* Remarks

- *Special Small Connector Roller was installed to protect the bottle waving on the Conveyor.*
- *Also you find out the Guide Pipe the bottle to drop down from Infeed to Outfeed.*
- *Please contact me for more informations regarding to the bottle Lines.*

Finally if you want to look for another pictures of checkweigher installed,
Please use CD-R which you already received from us