

- **1、 Eletronic calibration**
- **2、 Accuracy +-0.5% and stability**
- **3、 SD memory card for data storage and data migration(32GB)**
- **4、 WAVERSAVER**
- **5、 Screenshots**
- **6、 Master Cloud**
- **7、 HMI Easy operation(ENGLISH & CHINESE)**
- **8、 REFILL COMPENSATION**
- **9、 Real time or history data export(excel)**
- **10、 Recipe percentage calculation and storage**
- **11、 Mastercloud**

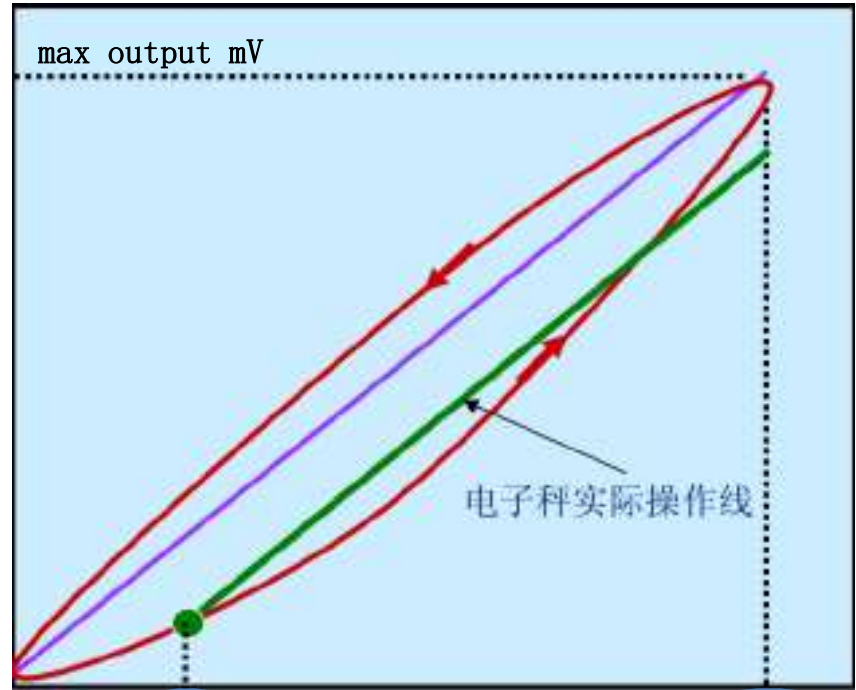
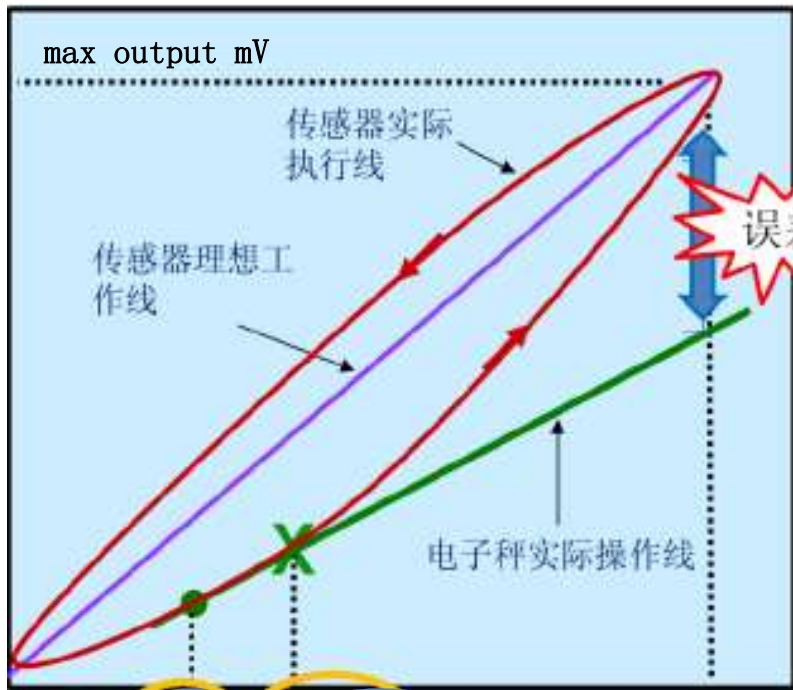
**24 hours problem shooting service**

### C2® electronic calibration



traditional weight calibration

auto-calibration



zero point

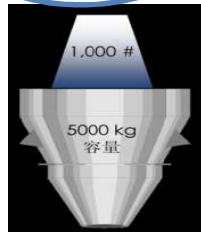
5kg

10kg

zero point

0kg

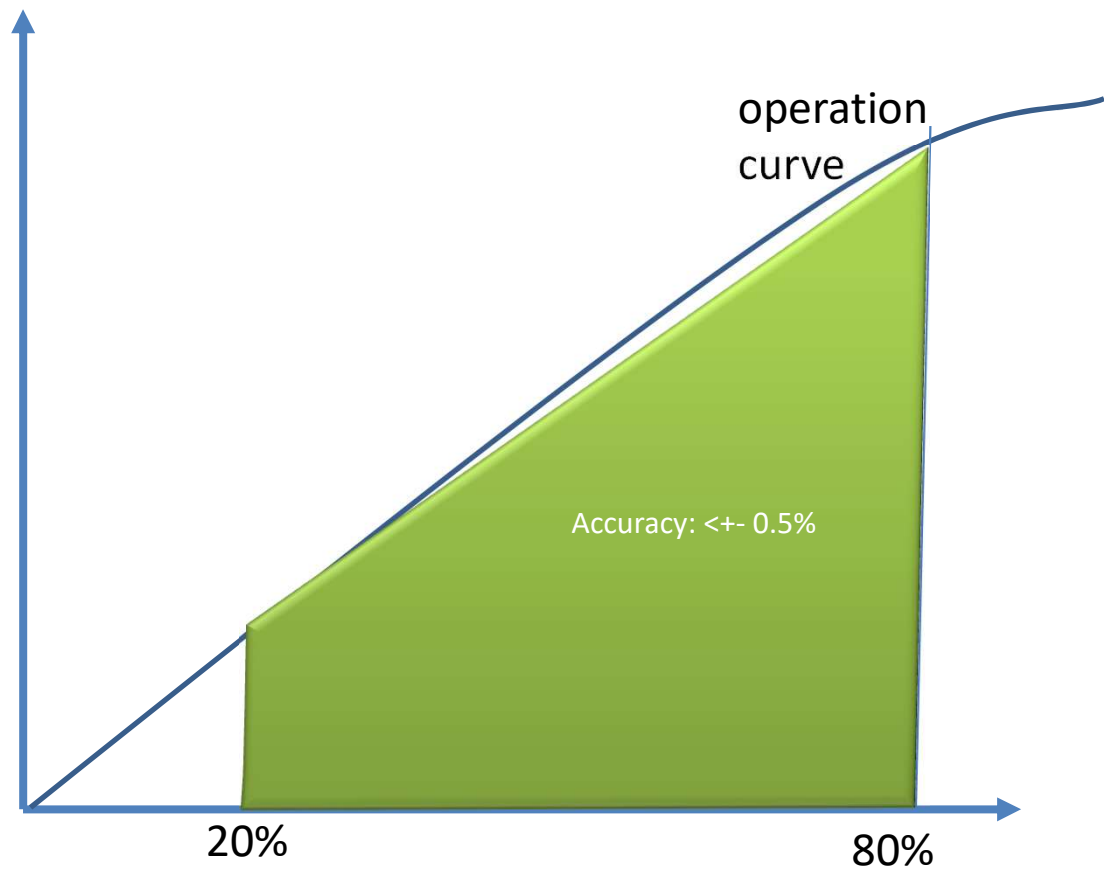
200kg



only ONE reference value needed to be set

## FIVE POINT CALIBRATION

FIVE POINT CALIBRATION  
to ensure the feeding rate  
is in a certain rates and  
high-accuracy.  
It can be auto-calibrate by user.



管理员

VF

VF

2018-01-18  
09:29:10



Feeder 1

A



manual

Off

Local

Intl off

I  
d  
l  
e



0.00%



-7

Output  
%

50.000

ACT  
kg/h

0.000

Net Wgt.  
kg

-4.219



E-cal

Ref. Weight 0.000 kg

Weight Span 1.002004

eCal

Zero Cal.

Tare 0.000 kg

Zero.Cal.

Weight Cal.

Ref. Weight 5.000 kg

Wgt.Cal.

管理员

VF

VF

2018-01-18  
09:29:10



Feeder 1

A



manual

Off

Local

Intl off

I  
d  
l  
e

0.00%

-7

Output  
%

50.000

ACT  
kg/h

0.000

Net Wgt.  
kg

-4.219

E-cal

Ref. Weight 0.000 kg

Weight Span 1.002004

eCal

Zero Cal.

Tare 0.000 kg

Zero.Cal.

Weight Cal.

Ref. Weight 5.000 kg

Wgt.Cal.



管理员

VF

VF

2018-01-18  
09:29:12



Feeder 1

A



Calibration

Screw type

0

Tube type

0

L

H



manual

Off

Local

Intl off

I  
d  
l  
e

Adaptation

ON

PID P

36.2

PID I

14.1

CAL1.

29 %

0.039

kg/h

CAL2.

30 %

0.078

kg/h

CAL3.

40 %

0.403

kg/h

CAL4.

50 %

0.728

kg/h

CAL5.

75 %

1.541

kg/h

Max. Rate

2.353

kg/h

0.00%

-7

Output %

50.000

ACT kg/h

0.000

Net Wgt. kg

-4.219

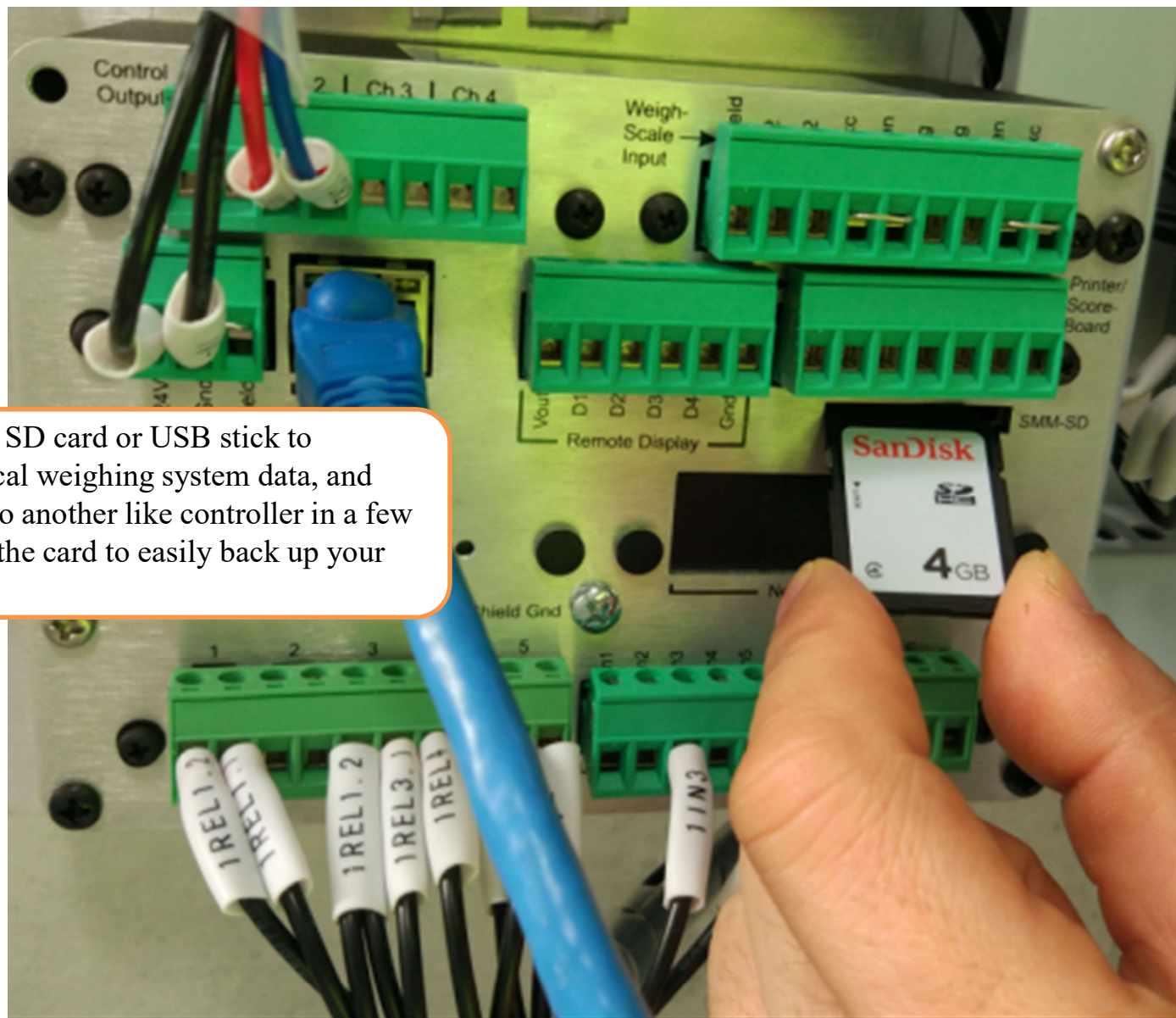






## SD CARD

SD CARD uses a standard SD card or USB stick to automatically back up critical weighing system data, and allowing you to transfer it to another like controller in a few minutes. You can also use the card to easily back up your controller data onto a PC.



管理员

VF

VF

2018-01-18  
09:28:30



# Feeder 1



Time	Setpoint	ACT.	Dev. %	Drive%	Net Wgt.	
01-18 09:28:23	1.000 kg/h	0.000 kg/h	0.003 %	0.00 %	0.00 kg	-4.219
01-18 09:28:17	1.000 kg/h	0.000 kg/h	0.041 %	0.00 %	0.00 kg	-4.219
01-18 09:28:11	1.000 kg/h	0.000 kg/h	0.000 %	0.00 %	0.00 kg	-4.219
01-18 09:28:05	1.000 kg/h	0.000 kg/h	0.029 %	0.00 %	0.00 kg	-4.219
01-18 09:27:59	1.000 kg/h	0.000 kg/h	-0.006 %	0.00 %	0.00 kg	-4.219
01-18 09:27:53	1.000 kg/h	0.000 kg/h	0.015 %	0.00 %	0.00 kg	-4.219
01-18 09:27:47	1.000 kg/h	0.000 kg/h	0.018 %	0.00 %	0.00 kg	-4.219
01-18 09:27:41	1.000 kg/h	0.000 kg/h	0.021 %	0.00 %	0.00 kg	-4.219
01-18 09:27:35	1.000 kg/h	0.000 kg/h	0.012 %	0.00 %	0.00 kg	-4.219
01-18 09:27:29	1.000 kg/h	0.000 kg/h	0.024 %	0.00 %	0.00 kg	-4.219
01-18 09:27:23	1.000 kg/h	0.000 kg/h	0.015 %	0.00 %	0.00 kg	-4.219
01-18 09:27:17	1.000 kg/h	0.000 kg/h	-0.006 %	0.00 %	0.00 kg	-4.219
01-18 09:27:11	1.000 kg/h	0.000 kg/h	0.006 %	0.00 %	0.00 kg	-4.219

USB  
Download

DataRefresh

Download  
Vol.



Config

Output

50.00 %

ACT

0.000 kg/h

Accuracy

0.00 %

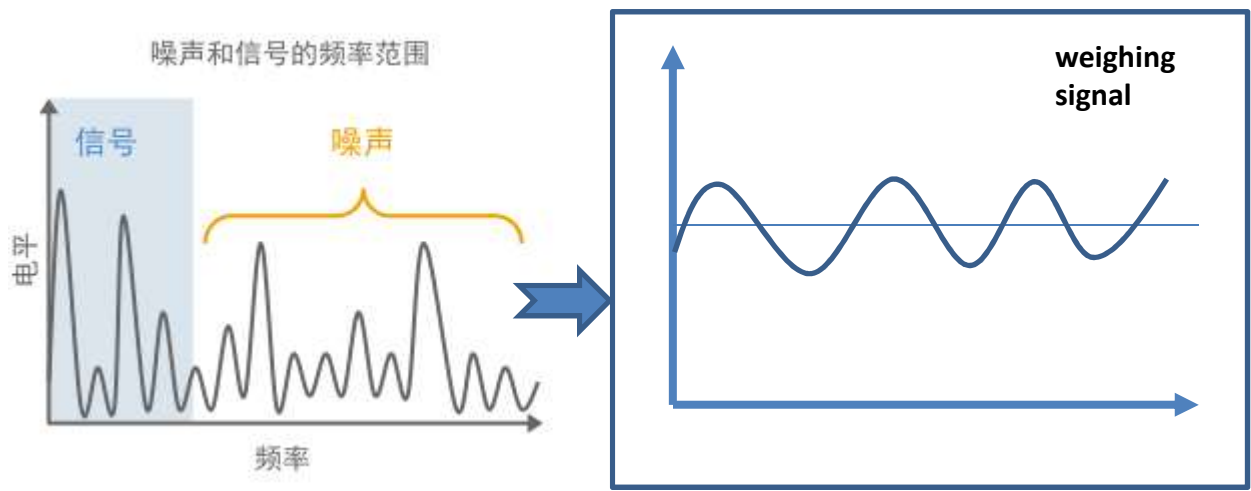
Net Wgt.

-4.21 kg

Drive %

0.00 %





Frequency filtration
7.5 Hz
3.5 Hz
1.0 Hz
0.5 Hz
0.25 Hz

**WAVERSAVER** selects from a bank of 7 noise filters, and uses the optimum mix to provide a stable weight under static conditions.

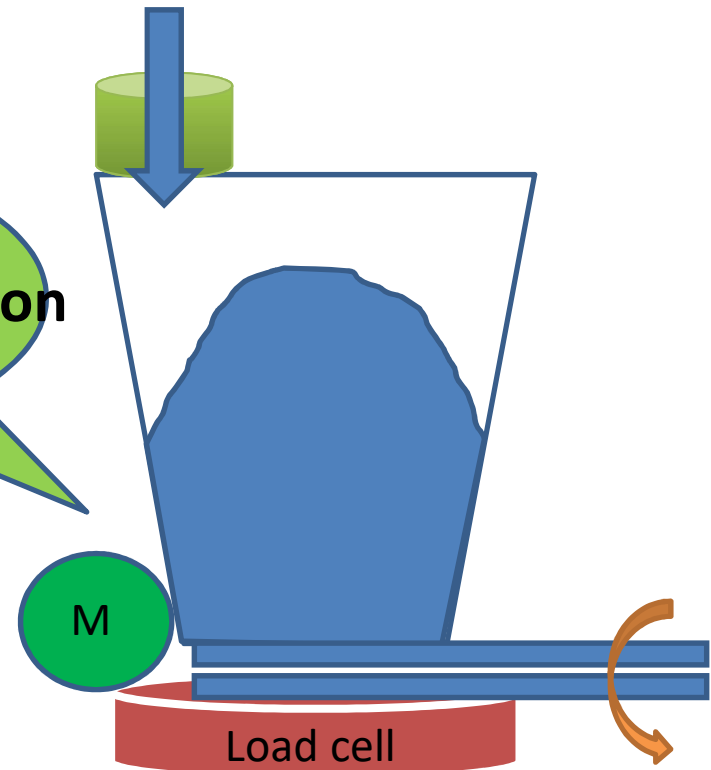


**WAVERSAVER+** Noise Suppression

## AUTO-REFILL


Feature: The speed of motor will be Auto adjustable according to the weight of material adding in Hopper during refill.

Auto-Refill compensation



管理员 VF VF 2018-01-18 09:28:54

### Feeder 1 A



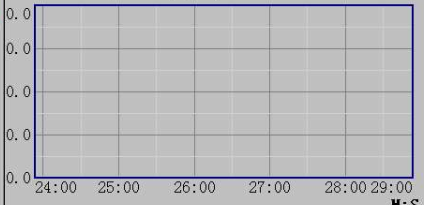
manual  
Off  
Local  
Intl off

Idle

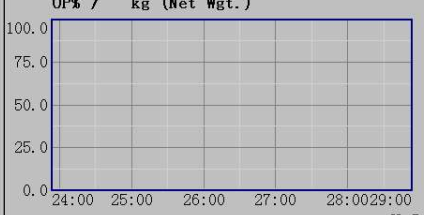
0.00%

-7

ACT/Setpoint (kg/h)



OP% / kg (Net Wgt.)



Output ACT DEV. % Net. Wgt. Totalizer


50.000 % 0.000 kg/h 0.000 % -4.219 kg 130.5 kg

OP. Mode  
Feed Param.  
Alarm Param.  
Ctrl. Param.  
Calibration  
Rate Cal.  
Sampling

Start Stop Refill Reset

管理员 VF VF 2018-01-18 09:28:43

### Feeder 1 A



manual  
Off  
Local  
Intl off

Idle

0.00%

-7

RUN  REPILL  INTEL.

SHUTOFF  ALARM  NULL

Loadcell millivolt 0.000 mV

A/D counts 0.000 mv/V

Analog Output A01 0.000 V

Analog Output A02 0.000 mA

Analog Output A03 0.000 V

Analog Output A04 0.000 mA

Output ACT Net Wgt.

50.000 0.000 -4.219

Start Stop Refill Reset

管理员 VF VF 2018-01-18 09:28:21

### Feeder 1



Idle

0.00%

A Off Line

SP % 50.000

ACT kg/h 0.000

Dev. % 0.000

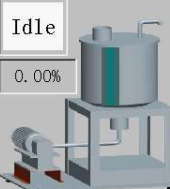
NetWgt. kg -4.219

Total kg 130.51

RefillMin. 2.00kg

RefillMax. 20.00kg

### Feeder 4



Idle

0.00%

Off Line

SP % 10.000

ACT kg/h 0.000

Dev. % 0.000

NetWgt. kg 272.908

Total kg 0.00

RefillMin. 2.00kg

RefillMax. 20.00kg

Group Setpoint Group ACT Totalizer

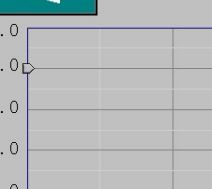
0.000 kg/h 0.000 kg/h 0.00 kg/h

G. Start G. Stop

Historical Trends  
Data Sheet  
Alarm Record  
Edit Recipes  
I/O  
Optimized Refill  
Remote sets  
System

管理员 VF VF 2018-01-18 09:28:25

### Feeder 1



0.00%


USB Download

Download Vol.

Output ACT Accuracy Net Wgt. Drive %

50.00 % 0.000 kg/h 0.00 % -4.21 kg 0.00 %

Historical Trends



18 09:18 18 09:20 18 09:22 18 09:24 18 09:26 18 09:28

管理员

VF

VF

2018-01-18  
09:28:34



Time	Object	Alarm Type	Alarm Event	Value	Limit	Description
01-16 11:45:43.4	设定值超限报警1	Switch alarm	Alarm occur	On	On	Feeder1 Setpoint overlimited
01-18 09:22:33.7	设定值超限报警1	Switch alarm	Alarm end	Off	On	Feeder1 Setpoint overlimited



Alarm  
Download



Alarm Num.



Alarm Reset

管理员

VF

VF

2018-01-18  
09:28:59



Feeder 1

A



manual

Off

Local

Intl off

I  
d  
l  
e



0.00%



-7

Output  
%

50.000

ACT  
kg/h

0.000

Net Wgt.  
kg

-4.219

Refill OP.

Manual  
Refill

Refill time

60.0

s

Bulk Density

1.000

Kg/L

Hopper Vol.

60.000

L

Refill Min.

2.00

kg

Refill Max.

20.00

kg

Underload

1.00

kg

Overload

25.00

kg

New Material

A

1



Materials

Delete

Prev Recipe

Next Recipe

Recipe to csv





### HMI Easy operation

To start operation

ONLY by setting **3**  
DATAS

- sampling quantity
- refresh time
- filtered value

管理员 VF VF 2018-01-18 09:29:19

Feeder 1 A

manual

Off

Local

Intl off

Idle

Output %	ACT kg/h	Net Wgt. kg
50.000	0.000	-4.219

Control Dev. 5.000 %

Control ADJ. 70.000 %

Low. shutdown 1.000 kg/h

High. shutdown 1000.000 kg/h

Alarm Delay 30.0 s

Shutdown Delay 30.0 s

Stop Delay 0.0 s

Start Delay 0.0 s

# Recipe Calculation

管理员		VF		VF		2018-01-18 09:28:40					
Name of recipe				Recipe Mod.		Total Set					
Current				Num.		0		Single Mod.		0.000	
Feeder No.		Setpoint%		ACT(kg/h)		Mode		On Line		Interlock	
Feeder 1				50 %		VF		NO		Off	
Feeder 4				10 %		VF		NO		Off	
Sub_Total											

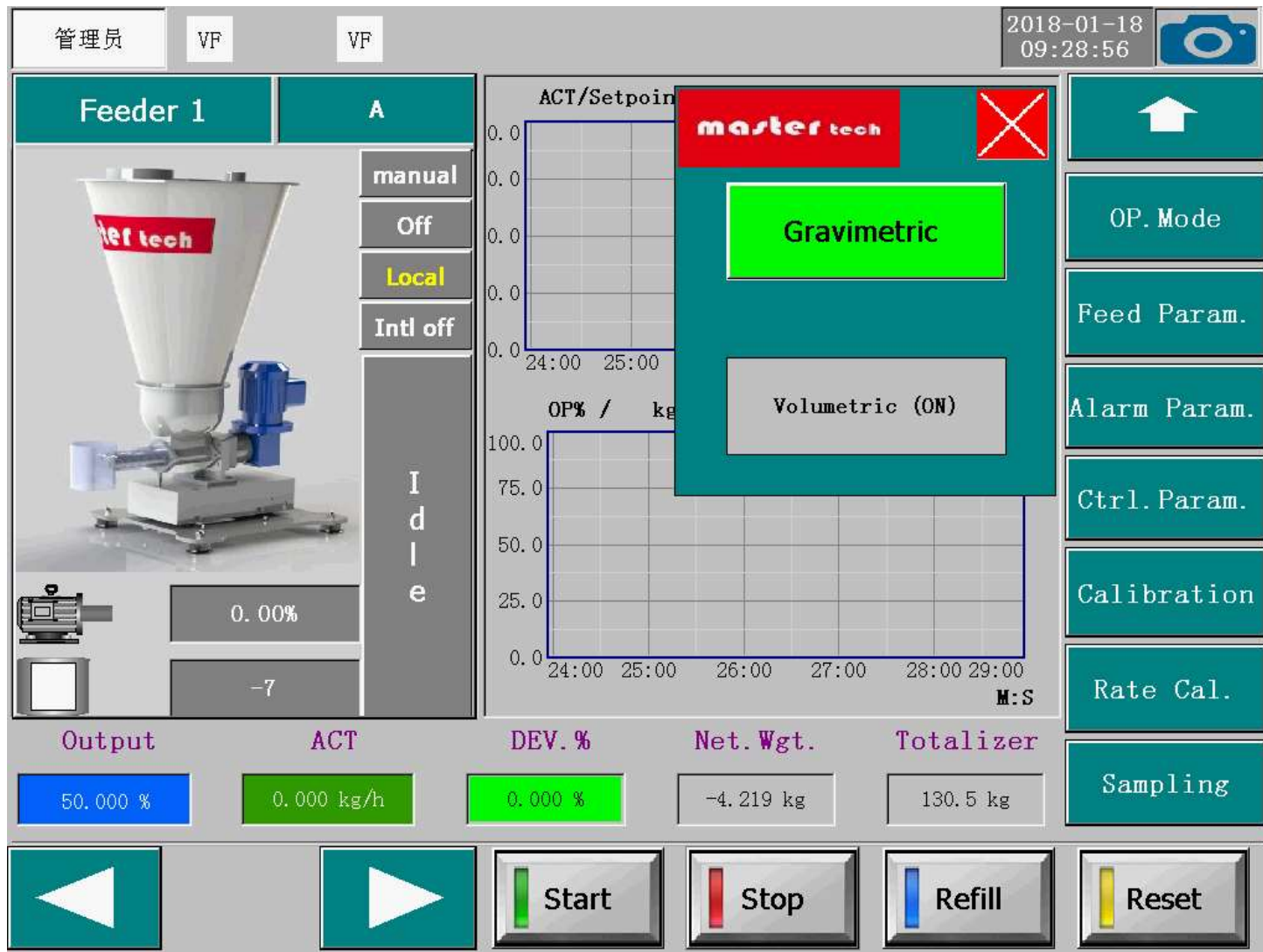
↑

Recipe Load

Recipe Edit

Lines Check

# Gravimetric and Volumetric Mode switch



## ROBUST DESIGN

All components of the feeder contacts with material are made of SUS304/316




A dark, close-up photograph of a mechanical component, possibly a fan or turbine, with the word "SCREWS" overlaid in white text. The component features several curved, overlapping blades or vanes. The lighting is dramatic, highlighting the metallic surfaces and creating deep shadows. The word "SCREWS" is centered in a bold, white, sans-serif font.

SCREWS



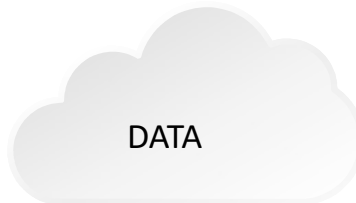
# Tailor-made

物料类型 (Material Type)	螺杆类型 (Screw Type)	直径*螺距 (Φ*P)mm	最大颗粒尺寸 (Max. Particle Size) mm	套筒内径 (Tube ID.) mm	转速 (Speed) r. p. m	喂料范围 (Capacity Range) Liters/hr	
粉料	刀型单螺杆 Blade Screw	DB2812	28*12	2	Φ32	54-135	16-40
		DB2815	28*15	2	Φ32	54-135	26-65
		DB2824	28*24	2	Φ32	54-135	44-110
		DB3622	36*22	2	Φ40	54-135	68-170
		DB4328	43*28	2	Φ47	54-135	116-290
		DB4345	43*45	2	Φ47	54-135	192-480
		DB6435	64*35	2	Φ68	54-135	324-810
		DB6455	64*55	2	Φ68	54-135	520-1300
		DB6468	64*68	2	Φ68	54-135	660-1650
		波形双螺杆 Twin Cancave	DTC3412	34*12	2	Φ38	74-186
	DTC3420		34*20	2	Φ38	74-186	80-200
	 DTC3434		34*34	2	Φ38	74-186	136-340
	DTC3451		34*51	2	Φ38	74-186	160-510
	DTC4336		43*36	2	Φ47	108-270	338-845
DTC4360	43*60		2	Φ47	108-270	338-1420	
刀型单螺杆 Blade Screw	DB2212	DB2212	22*12	5	Φ32	54-135	20-50
		DB2221	22*21	5	Φ32	54-135	34-85
		DB3021	30*21	5	Φ40	54-135	58-145
		DB3034	30*34	5	Φ40	54-135	100-250
		DB3740	37*40	5	Φ47	54-135	170-425
		DB5830	58*30	5	Φ68	54-135	280-700
		DB5843	58*43	5	Φ68	54-135	400-1000
		DB5860	58*60	5	Φ68	54-135	600-1500

# MASTERCLOUD



EQUIPMENT

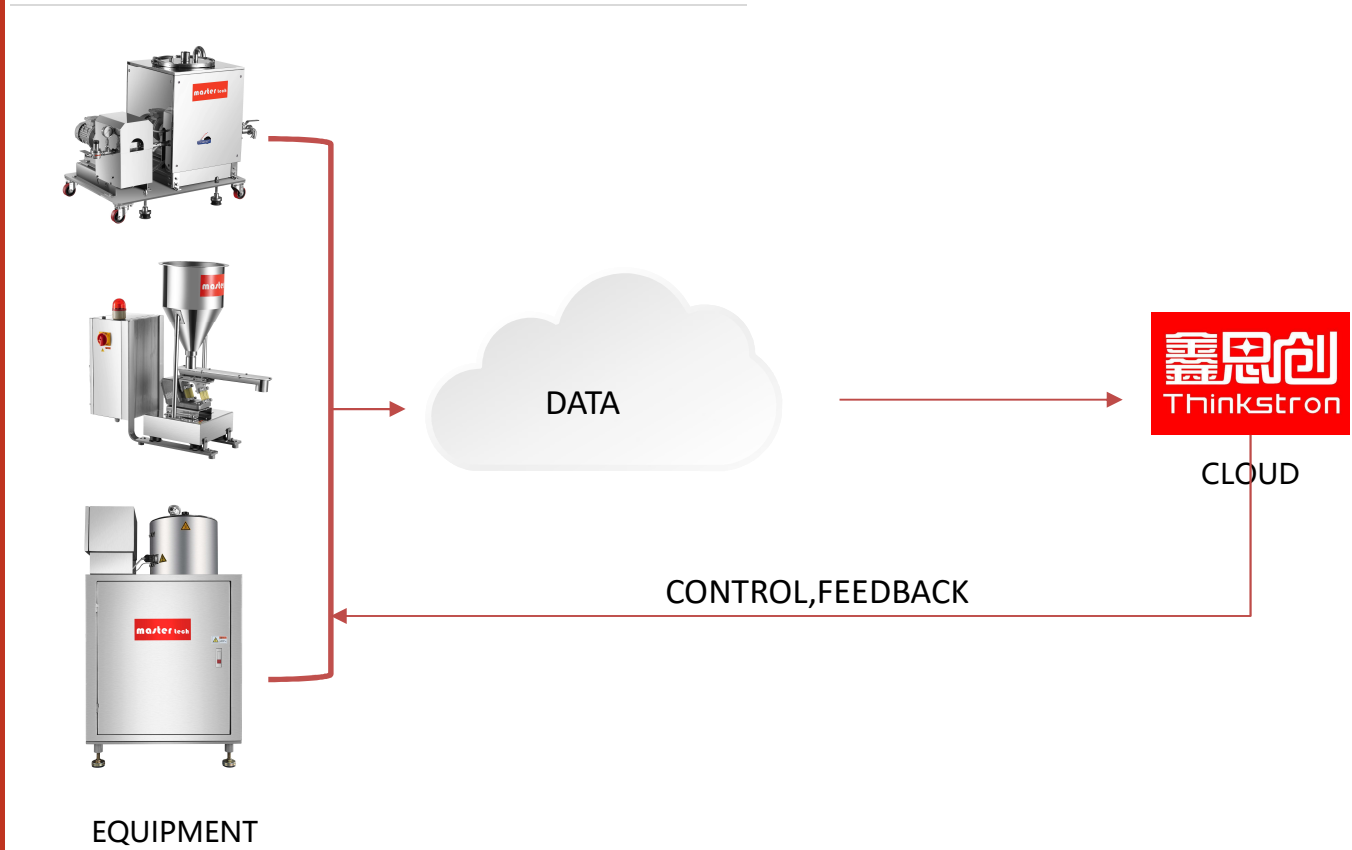


DATA



CLOUD

CONTROL, FEEDBACK



## PROBLEMS

Device running status cannot be viewed at any time

- Alarm record
- Real-time data
- Devices online duration
- Error information
- Operating status
- Specification

Unable to prejudge equipment failure

- Unable to confirm error source after alarm
- Device parameter setting error

Long after-sales service and high cost

- Unable to accurately determine the source of the error, you need to seek after-sales technical support.
- It takes a long time after sale and affects the production schedule.
- After-sales service costs increase.

01

02

03

## SOLUTIONS

### Remote monitoring of device data

- Using Mobile tablet, mobile phone, webpage to log in to the cloud, check and download data anytime, anywhere: alarm record, real-time data, device online duration, location, device fault information, set running status and parameter setting.

### Device fault self-diagnosis function

- When the device is running, it collects data and feeds it back to the cloud. The system self-diagnosis function quickly checks the cause of the fault.

### Troubleshooting solution push

- The device detects the cause of the fault through the self-diagnosis function, feeds back the fault report to the equipment manufacturer's after-sales technical department, processes the fault online and pushes the solution to the user.

## PROBLEMS

Equipment alarm failed to be discovered in time

- Improper parameter setting
- Component damage
- Human error operation
- External interference

Inconvenient system upgrade

- Download software installed through media
- Need to operate the update system correctly on the system

Upstream and downstream devices are not interconnected

- Need to learn more than one system operation
- Multiple parameter settings are prone to errors

04

05

06

## SOLUTIONS

Alarm mobile push

- Device alarms caused by various reasons will be pushed through the mobile terminal: mobile phone, tablet, and computer at the same time to timely understand the source of equipment failure and handle the fault.

Automatically system update

- The system automatic update in the pop-up HMI which eliminates the trouble of manually downloading and then inserting the HMI through the medium to update the system.

Support multiple communication protocols

- Connect upstream and downstream devices by communication protocols to control and set the operation and parameters of multiple devices.