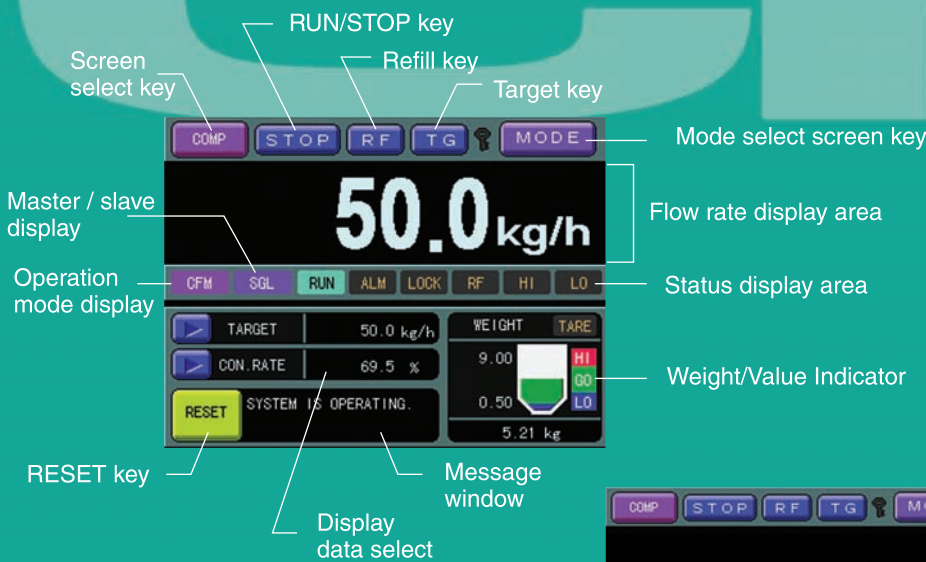


A weighing controller developed for weight supply and loss-in-weight. Automatic control of weight supply (discharge) and replenishment (charging) is performed by calculating flow rate from the discharged weight of material inside of hopper.

F 8 0 5 - C F / C O N S T A N T F E E D W E I G H E R



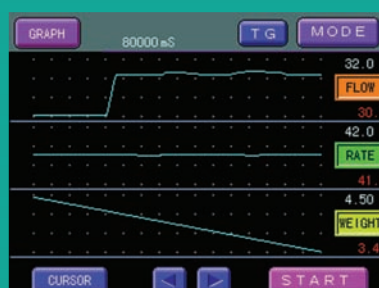
Main Screen

Displays momentary flow rate, operational information and alarm messages.



Message Screen

Displays simple error message for each trouble and weighing status to allow subsequent counter-operation without the use of Operating Manual.

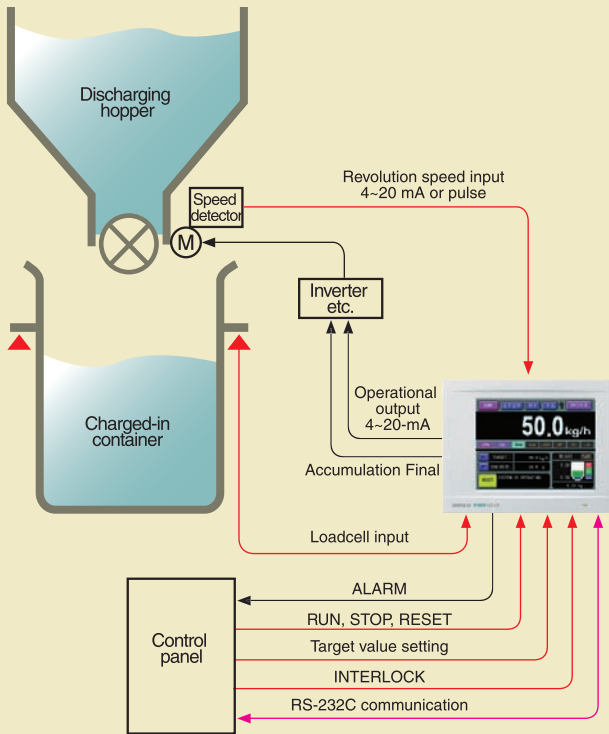


Graphic Screen

Allows segmented-screen viewing to display required settings such as waveform comparison so that check on the correctness of operational condition can be carried out.

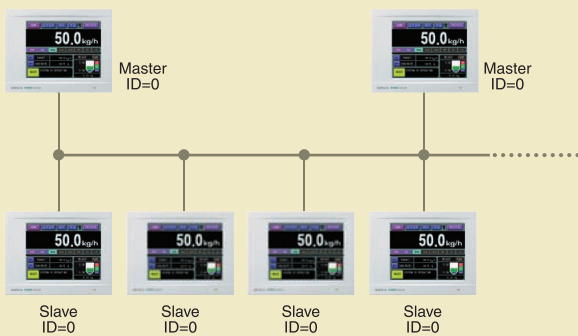
Constant Batch weighing via Accumulation Final

To enable automatic control of material's weight supply and material's replenishment. Shown in this example is the charging cut-off control using total weight output function.



Master / Slave Operation

Other than operating as a single controller, it can also perform master / slave operation. Slave unit can perform proportionate synchronized operation with the master unit's target value or flow value. This function strongly helps the construction of a continuous feed system. Up to 8 units of master/slave units may be connected in the same network and grouping can be done by setting ID number to each of it.



Control System & Interlock during Continuous Starting

Depending on the condition inside of tank (material quality and density), a certain period of time may be needed to achieve the target flow rate at the onset of operation. For this case, auto calculation of appropriate control weight can be done by performing auto coordinate operation. With this, the time needed to achieve the target flow rate can be shortened so that a better and stable control can be achieved. Also, when resuming operation after the activation of emergency interlock, operation is resumed from the stabilized control weight just before the emergency. This gives speedy recovery to stable operation.

6 Types of Sequence Modes

Pre-installed with 6 types of sequence modes to provide flexibility to respective applications. Operation mode can be selected via external signal.

Continuous operation

Once the operation is started and with the discharge of material, calculation of flow rate data and PID control are performed. Once the weight reaches the fill-in start weight, auto filling will commence. This cycle can be controlled to repeat continuously without having to stop the discharging.

Batch operation

During batch operation, filling is not done even though the weight had reached the fill-in start weight. It is instead continued until the weight reaches the lower limit of the weight value.

Fixed operation

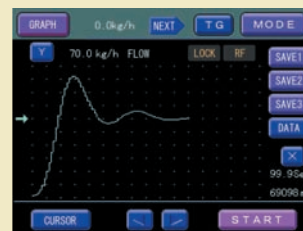
In fixed operation, auto filling is not performed. It only carries out discharging work. As control rate can be specified and fixed, this mode is best for test operation.

Fixed and accumulated operation

Fixed and accumulation operation performs auto filling and totaling operation.

Auto coordinate operation

In auto coordination operation, feeder characteristics can be recorded while performing actual operation test. With this, start-up can be smoothly done during operation start.



EX: Operation without auto adjustment



EX: Operation with auto adjustment

Volumetric operation

A constant control rate is output during the operation of volumetric operation.

PID Control

The target value in relation to discharge weight (momentary flow rate) from the feeder can be set. It compares the variation of target value and momentary flow rate (control deviation) and performs feedback control that adjusts the operational output (control rate) to enable control of momentary flow rate. Setting of controls specific to the site environment such as control of sporadic fluctuations can be done by setting countermeasures for each error or by automatically switching over to LOCK operation.

Control Conceptual Diagram

