

Rite Weight™ Feeder



the power
in
powders

Rite Weight™ Feeder

“the high cost of ingredients demands tighter control of feed rates.”

the rite weight concept

Carolina Conveying manufacture 2 types of competitive and versatile Weigh Feeders, designed to meet the demands for high accuracy solids feeding in industry:-

- **The General Purpose Rite Weight™ Feeder**
- **The Sanitary Rite Weight™ Feeder**

high accuracy

The Rite Weight™ Feeder has been designed to cope with the rigorous demands of modern Weigh Feeding applications, where the high cost of ingredients demand tighter control of feed rates and variations of bulk density significantly affect the flow rate.

Sophisticated software control coupled to the well proven Feeder design has resulted in achievable accuracies of $\pm 0.5\%$ (or better) of target flow rate.

modular systems

Designed to operate in a wide variety of different environments, the Rite Weight™ feeder can be built into most handling systems. It is fully compatible with the existing Soliweigh MK1 & MK2 systems as well as the Solifeeder range of Volumetric Feeders.



Sanitary Model with Agitator Conditioning

The rite weight system consists of three basic modules.

- **Screw Feeder**
- **Weigh Platform**
- **Weigh Controller**

Each may be tailored to suit the required application precisely. Integration with external control systems is a key feature in the design.

versatile

The Rite Weight Feeder reflects the experience gained from over 30 years involvement in the design and production of bulk handling equipment, with many thousands of powder handling systems already supplied. Carolina Conveying have now developed an outstandingly versatile Weigh Feeder capable of measuring many different products by gravimetric methods in batch or continuous mode.

robust design

Carolina Conveying have won an excellent reputation for quality, a reputation maintained by rigorous Q.A. procedures and continual development of production techniques allied to the latest computer aided design methods.

Well equipped factories produce the range of Weighing, Storage, Feeding, Conveying, Mixing and Process Plant Systems manufactured in aluminum, mild steel and stainless steel.

These factories also produce spare parts to the original specification so all Carolina Conveying users can be sure that replacement parts are easily obtainable and will fit accurately, regardless of the age of the unit.

simple operation

The Rite Weight™ Feeder has been designed to keep operation as simple as possible.

The target flow rate is entered via a keypad on the controller.

The software automatically monitors the resultant loss - in - weight as material is discharged. The calculated flow rate is compared to the target flow rate and any error is corrected by varying the speed of the feeder drive.

Automatic refilling is accomplished using standard Carolina Conveying machines such as Bin Activators, Soliflo Dischargers under the control of the Rite Weight Feeder.

The Feeder will maintain a calculated output during the refilling cycle.

electronic control

Once the Rite Weight™ Feeder is in operation all monitoring is automatic. Minimal operator intervention is needed. A full self diagnostic routine guards against any event that will threaten the continuous discharge of material. If an alarm condition persists a visual display will identify the source of the problem.

The status of the Rite Weight™ Feeder can be communicated to supervisory control systems, using standard communications links.

reliability

Over 3,000 Carolina Conveying Feeders are already in use throughout the World, where their virtues of easy maintenance, reliability in continuous heavy duty applications and compact, effective design are fully appreciated.

applications

Robust and flexible, The Rite Weight™ Feeder may be applied to all bulk handling needs. Modular design has produced a system that is tailor made to fit actual requirements and operating conditions anywhere in the World.

Standard I/O data permit the controller to interface with all common process control computers whilst sophisticated software reveals a high degree of independent operational capability.

Carolina Conveying weighing systems have already been applied to these industries.

- Food Industry
- Agriculture
- Petrochemical
- Glass
- Rubber
- Plastics
- Foundry

specifications

screw feeder

Approximate capabilities from
30 - 10000 lb/Hr.

Full range of wire and flighted shafts available.

For a full specification please see separate feeder leaflet.

weigh platform

Capacity 300 lb and 600 lb.

Configuration 3 load cell system

load cell specification

Type Bending Beam.

Capacity 100 lb and 200 lb.

Temp - 15°F to + 155°F.

Safe load 150%.

FSO 2 MV/V.



General Purpose Model with Vibratory Conditioning

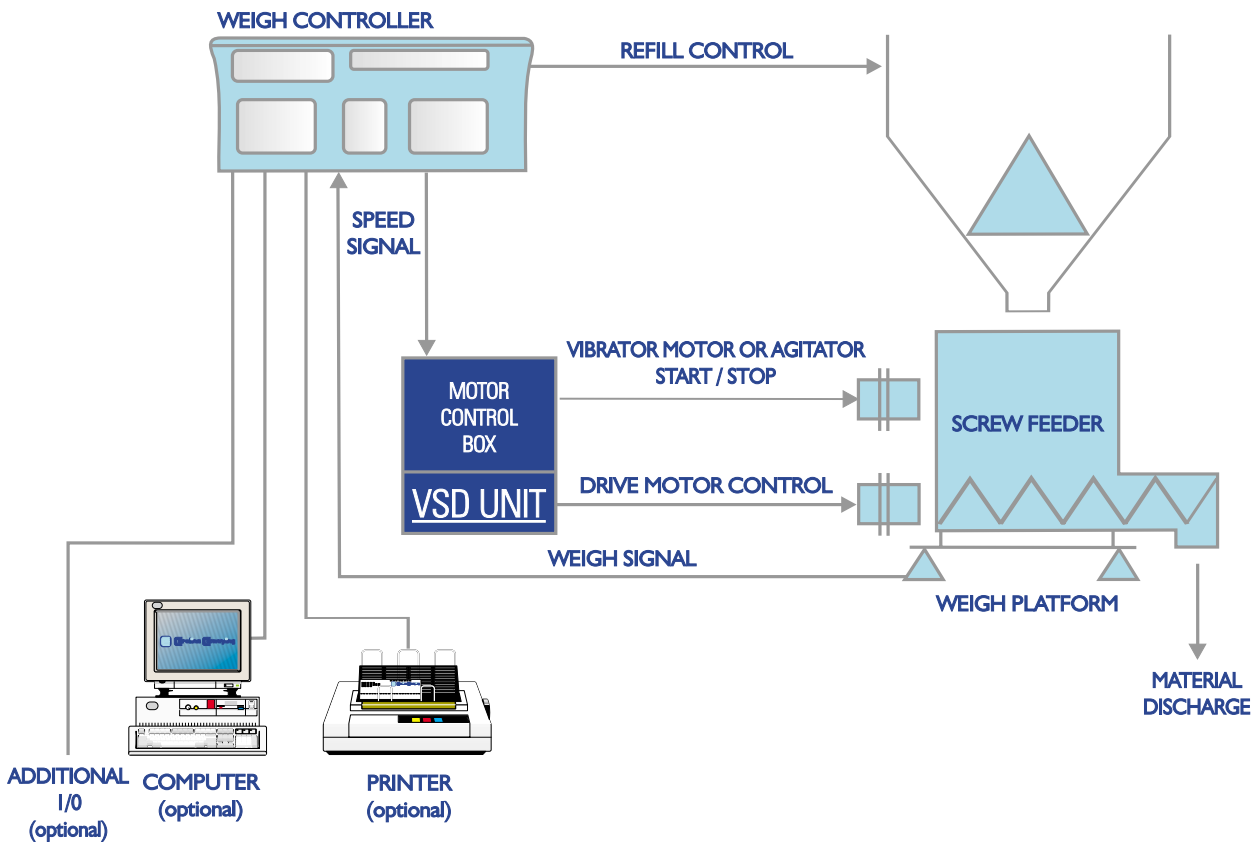
special features

- Proven Feeder Design
- Self Diagnostic Fault Conditions
- Accurate Flow Rate Control
- Hazardous Area Applications
- User Friendly Operation
- Versatile Software
- Cost Effective
- Simple Calibration and Commissioning
- Full After Sales Support



Special Designs for Specific Needs

control system



weigh controller

Power Supply 110V - 220V (+10% - 15%) 50/60 Hz.

Power Consumption 60 VA.

Temp Range -15°F to +105°F (Operational).
-10°F to +155°F (Storage).

Keyboard 24 Key with parameter switch

Display 6 Clear vision LED's with 7 segments.
16 LCD for text.

Memory REPROM 512 K.
RAM 64 K.
Battery back up.

Digital Inputs 8 Differential isolated digital inputs.

Digital Outputs 8 Dry contact 110 V/1A.

Analogue Inputs 3 4/20 Ma or 0/5 V or 0/10 V.
Weight signal 16 Bit.
Others 12 Bit.

Analogue Outputs 3 4/20 Ma or 0/5 V or 0/10 V.
12 Bit.

Communications RS 232C.

RS 422.

RS 485.

Options

Printer
VDU Keyboard
Computer
Modem

VSD Unit

Independent drive motor and
agitator motor control

DC Control as standard
(AC Optional).

20:1 Turndown ration (DC).

AC Power requirements 120
or 240 VAC.

Accuracy

± 0.5% based on standard
Carolina Conveying test methods.



Carolina Conveying

Specialists

in powder handling components and systems. We offer a very comprehensive range of products including Rotary Airlocks, IBC Systems, Diverter Valves, Silo Dischargers, Volumetric and Weighing Systems, Aero-mechanical Conveyors and Dense Phase Conveying Systems.

Carolina Conveying

Technology

product test facility with our complete range of machines allowing prospective clients to visit and witness trials. State of the art CAD and manufacturing facilities for material handling systems.

Carolina Conveying

Design

products are always designed to suit your particular application and requirements.

Carolina Conveying

Philosophy

it is our company policy to supply customers with products which conform to the highest quality specifications, are fit for their intended purpose, and offer a wide range of support services including installation, commissioning and service contracts.



product range

Bin Activators

Soliflo™ Dischargers

Solibin™ IBC Systems

FIBC Systems

Rite Rate™ Feeders

Rite Weight™ Feeders

**DiscAir™
Aeromechanical
Conveyors**

**Blo-Bin™ Dense Phase
Pneumatic Conveying**

**Blo-Bend™ Ni Hard
Bends**

Rotary Valves

Side Entry Rotary Valves

Blow Thru Rotary Valves

Double Dumps

**Flexible Conveying
Diverter**



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