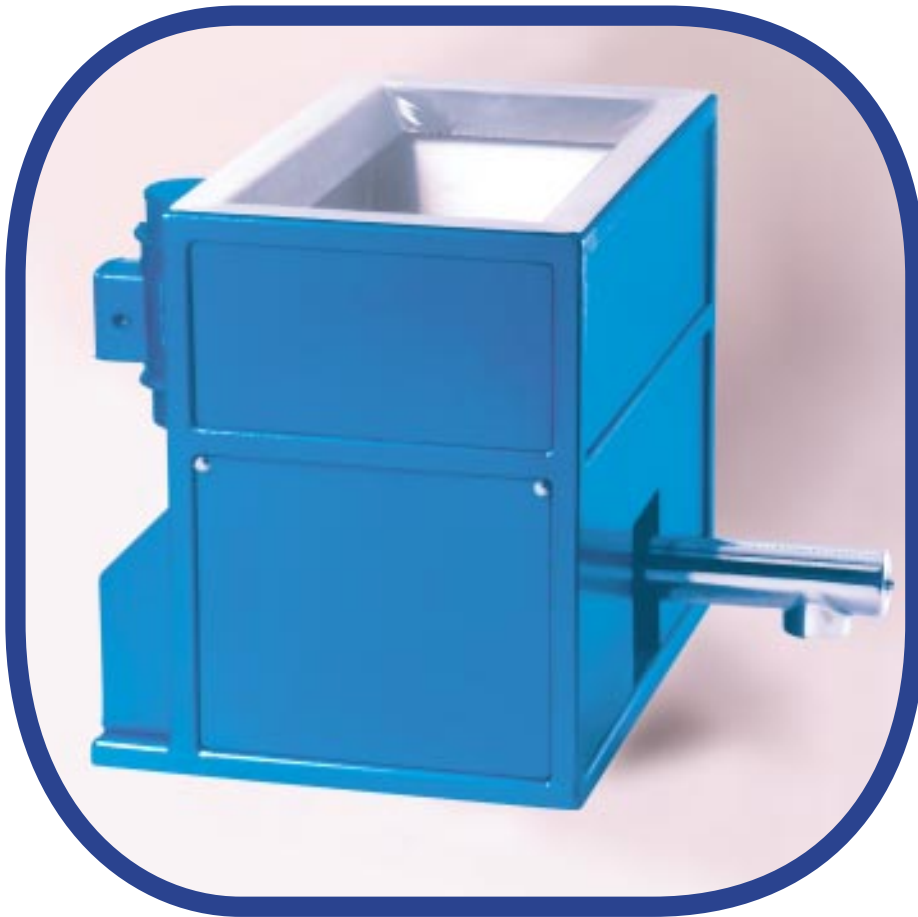


**Rite-Rate™ Feeder**



the power  
in  
powders

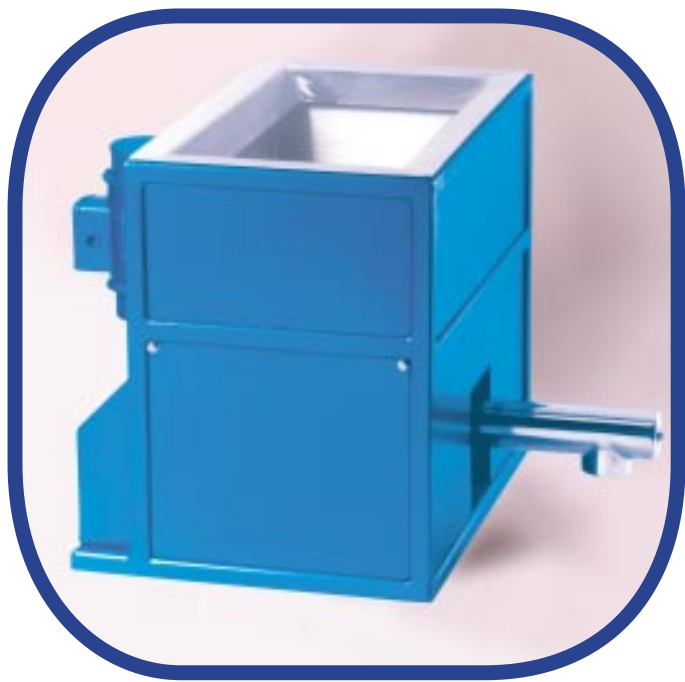
# Rite-Rate™ Feeder

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

To meet the current demands set by the industry, Carolina Conveying is introducing the “Rite-Rate™” range of feeders, which have modular design with quick strip down facility, high accuracy but with the advantage of greater compactness, and therefore competitiveness.

**It is being introduced in two main formats:**

- The General Purpose dry chemical volumetric feeder.
- The Sanitary type volumetric feeder - primarily to meet the requirements of the food and pharmaceutical industries.



## The General Purpose Rite-Rate™ Feeder

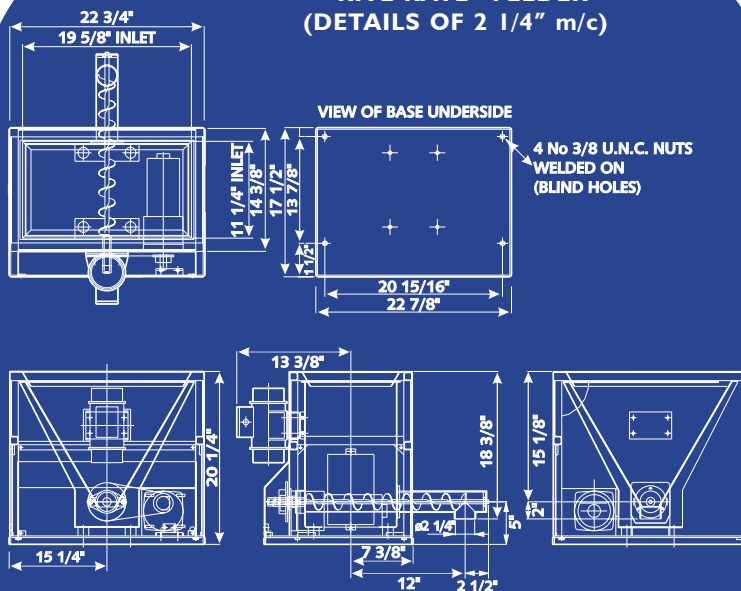
The General Purpose unit is designed to handle fine, cohesive or adhesive powders and is normally supplied with a vibratory motor which helps achieve an even flow bulk density.

The standard unit has a  $\frac{3}{4}$  cubic foot trough, but with the robust frame that encloses the hopper, considerable additional storage capacity can be accommodated to suit most customer needs.

To maintain accuracies stated at  $\pm 1\%$  or better, the prime contributory design features include:

- Steep walled hopper aiding mass flow.
- Vibratory assistance ensuring compactness and a uniform bulk density in areas of the feed screw.
- Amplitude variations on the vibratory motor giving greater flexibility.
- Stainless Steel hopper and screw, preventing product contamination.

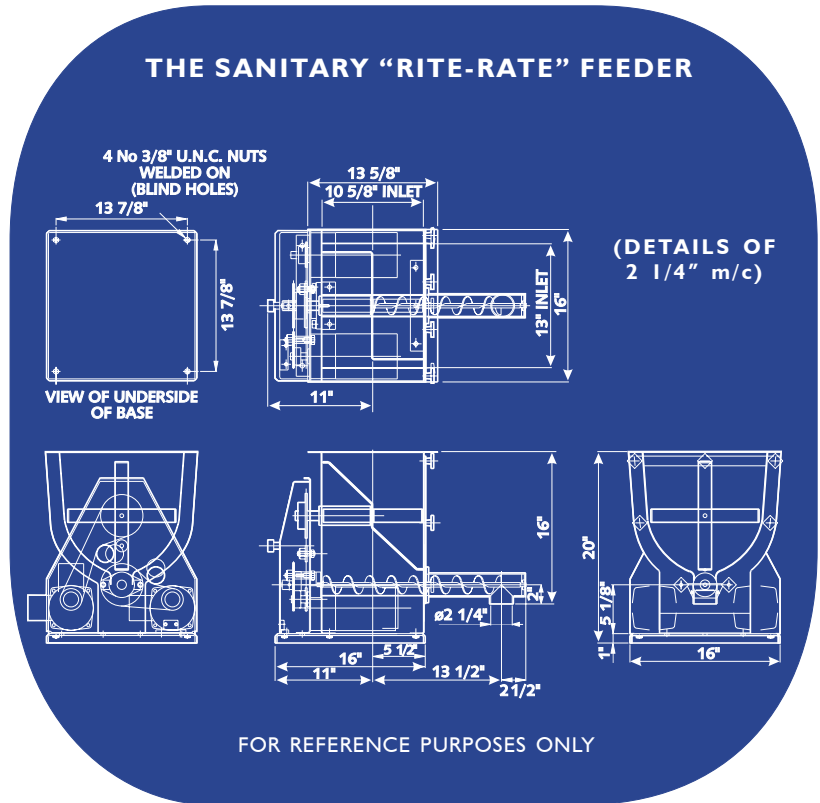
### THE GENERAL PURPOSE “RITE RATE” FEEDER (DETAILS OF 2 1/4" m/c)



## The Sanitary Rite-Rate™ Feeder

In the food and pharmaceutical industries cleanliness is of prime importance to prevent product contamination and in order to meet the stringent standards of these industries the following features have been incorporated into the design.

- The hopper is manufactured to closely fit the screw diameter thereby becoming self cleaning ensuring that no product is retained in the hopper.
- Quick strip down to facilitate cleaning.
- Crack and crevice free welding and polishing of all parts to prevent product build up.
- Easy access to components.



### approximate maximum capacities

Size	10	15	20	30	40	50	75	100
Litres/h	3.4	14	38	134	340	762	1700	5100
ft <sup>3</sup> /h	0.12	0.5	1.3	4.7	12	27	60	180

The above throughputs assume a relatively free-flowing material.

## applications

The Rite-Rate™ feeders can be used in many applications in industry, from simple hand or sack filling to more sophisticated needs, covering controlled volumetric feeds from silos, IBC's, flexible bags etc.

Special care must be taken on the automatic devices to ensure that the feeder is not overloaded by weight or vibration.

Carolina Conveying engineers have considerable experience and can guide you at the design stage to eliminate such problems and can undertake complete turnkey systems solving all your bulk handling needs.

Carolina Conveying has full testing facilities, reassuring customers before investment decisions are made. We also have a vast data base of previous products handled, but are keen to enlarge our range and experience.



## 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.

## drive options

Many options are available to suit the customers individual requirements.

For most applications customers select the DC Thyristor control or the AC inverter control.

On both feeders it is normal that only the feed screw rate is varied and the variable speed unit provides infinite variations over the available range.

## specification

### SIZE RANGE

8 sizes of Feed / Screw / Discharge Tube are available 3/8" - 4" mm nominal size.

### STANDARD

Inlet to outlet center line dimension of 309mm (12in).  
(Longer tubes can be supplied, length dependent on diameter).

### HOPPER SIZES

25 3/4 cu ft. A lid or screen can be supplied. Larger hopper can be fitted if necessary.

### MATERIALS OF CONSTRUCTION

**Standard** Contact parts stainless steel bead blasted.

**Optional** Stainless steel, polished if required. All welds ground smooth.

### DRIVES

#### Standard Drives

1/8 H.P. to size 50 machine  
(90 VDC P.M. totally enclosed)  
1/4 H.P. sizes 75 & 100  
(90 VDC P.M. totally enclosed)

#### Voltages

110 / 1 / 60 supply D.C. Drives  
380 / 3 / 60 supply A.C. Drives

Vibrator motor as per drive motor  
but 1/16 H.P. 3000 RPM.



**Carolina Conveying**

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