

## DESIGNING FEED-R-SYSTEMS

The Feed-R-System is a flexible system. You can design any custom feeding unit from standard items. To assist you in designing Feed-R-Systems, we suggest the following checklist:

### 1. HORIZONTAL FEED-R-SYSTEM

- A. Length.** After determining the length of the horizontal system, use one N4102A Basic for each run. Add the N4181A, N4182A or N4183A extensions for the required length.
- B. Drive.** The drives are available with four different auger sheaves. Proper selection can be made by referring to the RPM chart in this section. Remember to order the motor sheave when selecting the motor from the horsepower chart.
- C. Head Discharge.** For the discharge on the head of the horizontal auger the N4125A 90° discharge spout is recommended.
- D. Feed Drops.** For the intermediate feed drops select either the N4130A, N4131A, N4132A or N4133A drops. These are located on the feeder run at the time of installation. Cut out drop holes after drop location has been determined.
- E. Inlet.** Either the N4135A or N4136A inlets are convenient inlets to transfer feed from the supply auger. A length of flex tubing is a good connection at this point as it allows some adjustment during installation. The N4172A hopper tail piece is larger and has a 6" x 10" top opening. The larger N4137A hopper is also an excellent receiving hopper. The larger size allows more flexibility in some cases. When using the N4137A hopper you can either remove 18" of the auger housing or use one of the extension flights listed. In many cases it is advisable to use the half-pitch flight in this hopper. The half-pitch flight will limit the capacity of the auger one-half. In cases where the feed is bulky or 90° corners are used this will assure smooth operation.

### 1. VERTICAL FEED-R-SYSTEM

- A. Length.** The length of the vertical or inclined auger is generally short as it will just convey from the storage unit or bulk tank into the horizontal feeder run. The N4103A Basic may be long enough. If extensions are needed, the N4181A, N4182A or N4183A will extend this unit.
- B. Drive.** The drives are available with four different auger sheaves. Proper selection can be made by referring to the RPM chart in this section. Remember to order the motor sheave when selecting the motor from the horsepower chart.
- C. Head Discharge.** For the discharge on the head of the vertical or inclined auger the N4126A 45° discharge spout is recommended.
- D. Inlet.** The flight on the vertical auger is extended beyond the housing. When it is used in a bulk tank or bulk storage unit, this will serve as the pick-up. If the auger is used in the vertical position it is advisable to use the N4161A Intake Guard with bearing. This will keep the flight centered and also keep it off the floor.
- E. Accessories.** There are a number of accessories available to complete the system. These will vary from job to job and can be selected to fit the particular application.

### FEED-R-SYSTEM DATA

#### RPM CHART Based on 1750 RPM Motor

MOTOR SHEAVE (O.D.)	AUGER SHEAVE SIZE (O.D.)			
	8" (20.3 cm)	10" (25.4 cm)	12" (30.5 cm)	14" (35.6 cm)
1-3/4" (44 mm)	383	306	255	219
2" (51 mm)	438	350	292	250
2-1/2" (64 mm)	547	437	365	312
3" (76 mm)	656	525	438	375

#### RECOMMENDED AUGER SPEEDS

A standard horizontal auger should turn at a speed determined by the type of material being conveyed and the capacity desired. For most feeding operations this speed should not exceed 675 RPM. The minimum operating speed for a vertical auger is 500 RPM.

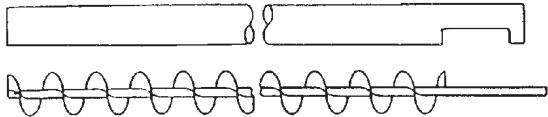
#### HORSEPOWER REQUIREMENTS

Based on horizontal speed of 365 RPM and vertical speed of 525 RPM. Lengths recommended are the maximum for the size of motor.

SIZE OF MOTOR	MAXIMUM LENGTH OF RUN	
	HORIZONTAL AUGER	VERTICAL AUGER
1/2 H.P. (.37 kw)	35' (11 m)	20' (6 m)
3/4 H.P. (.55 kw)	65' (20 m)	35' (11 m)
1 H.P. (.75 kw)	110' (34 m)	45' (14 m)
1-1/2 H.P. (1.1 kw)	150' (46 m)	---

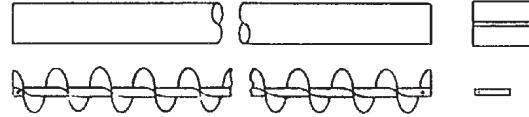
The above recommendations are intended to be used as a general guide. Horsepower will vary with the condition of the material being conveyed, moisture and method of feeding the auger.

ELECTRIC MOTOR SHAFT SIZES	
MOTOR SIZE	SHAFT DIAMETER
1/2 H.P. (.37 kw)	5/8" (16 mm)
3/4 H.P. (.55 kw)	5/8" (16 mm)
1 H.P. (.75 kw)	5/8" (16 mm)
1-1/2 H.P. (1.1 kw)	7/8" (22 mm)



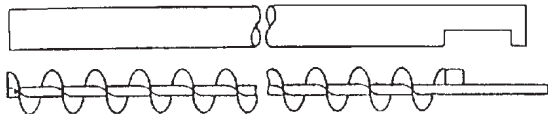
### 4" (10.2 cm) Feed-R-System

N4102A	4" x 10' - 6" (3.20 m) Horiz. 16 ga (1.52 mm)	43 lbs. (20 kg)	\$ 248.00
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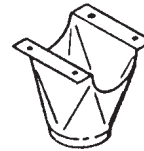
### 4" (10.2 cm) Feed-R-System

N4181A	5' Ext 16 ga (1.52 mm)	25 lbs. (11 kg)	\$169.00
N4182A	10'-6" Ext 16 ga (1.52 mm)	47 lbs. (21 kg)	242.00
N4183A	19'-6" Ext 16 ga (1.52 mm)	87 lbs. (39 kg)	395.00



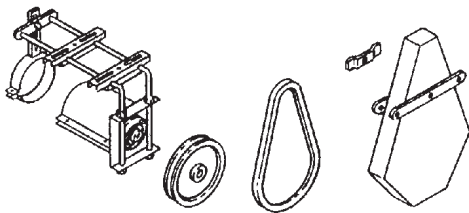
### 4" (10.2 cm) Feed-R-System Vertical

N4103A	4" x 11' (3.35 m) Vertical 16 ga (1.52 mm)	44 lbs. (20 kg)	\$ 226.00
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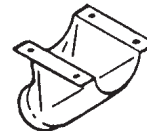
### Head Discharge Spout

N4125A	4" x 90° Spout	2 lbs. (0.9 kg)	\$ 30.00
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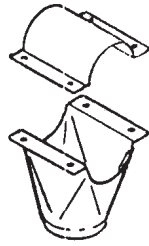
### Drive Unit

N4108A	Drive w/8" Sheave	21 lbs. (10 kg)	\$ 207.00
N4110A	Drive w/10" Sheave	22 lbs. (10 kg)	214.00
N4112A	Drive w/12" Sheave	26 lbs. (12 kg)	230.00
N4114A	Drive w/14" Sheave	27 lbs. (12 kg)	241.00

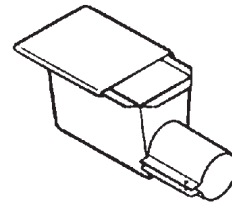


### Head Discharge Spout

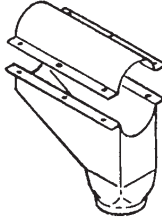
N4126A	4" x 45° Spout	3 lbs. (1.4 kg)	\$ 27.00
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N4130A	90° Intermediate Feed Drop	3 lbs. (1.4 kg)	\$ 39.00
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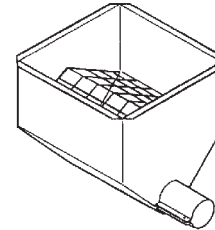


N4172A	4" Hopper Tail Piece	8 lbs. (3.6 kg)	\$ 150.00
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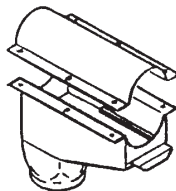


*N4131A	90° High Capacity Intermediate Drop	6 lbs. (2.7 kg)	\$ 106.00
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\*This spout will not attach to the motor mount.



N4137A	18" x 18" x 18" Hopper (45.7 cm) x (45.7 cm) x (45.7 cm)	35 lbs. (16 kg)	\$275.00
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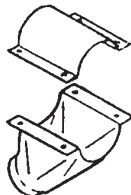


*N4132A	90° Intermediate Drop w/Slide Gate	9 lbs. (4.1 kg)	\$ 163.00
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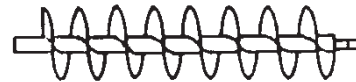
\*This spout will not attach to the motor mount.



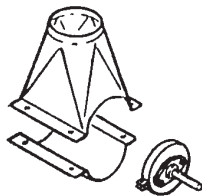
N4138A	3-1/4" (83 mm) x 18" (45.7 cm) Full Pitch	4 lbs. (1.8 kg)	\$ 80.00
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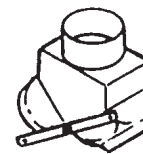
N4133A	45° Spout	3 lbs. (1.4 kg)	\$ 38.00
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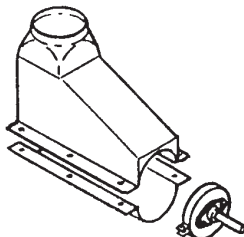
N4139A	3-1/4" (83 mm) x 18" (45.7 cm) Half Pitch	4 lbs. (1.8 kg)	\$ 83.00
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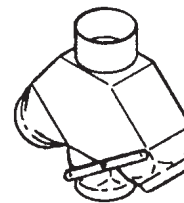
N4135A	4" Standard Inlet	5 lbs. (2.3 kg)	\$ 121.00
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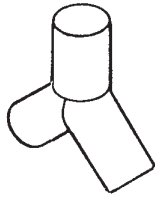
N4150A	2-Way Pan Valve	6 lbs. (2.7 kg)	\$ 183.00
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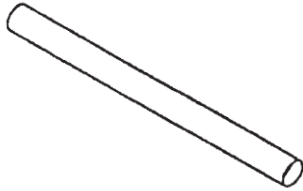
N4136A	4" High Capacity Inlet	8 lbs. (3.6 kg)	\$ 206.00
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N4151A	3-Way Pan Valve	11 lbs. (5.0 kg)	\$ 256.00
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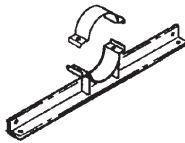
N4152A	Y Spout	3 lbs. (1.4 kg)	\$90.00
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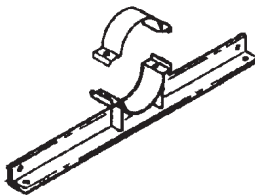
31307	4" x 5' (1.52 m) Tube 16 ga. (1.52 mm) Wall	14 lbs. (6.4 kg)	\$ 71.40
31308	4" x 10'-6" (3.20 m) Tube 16 ga. (1.52 mm) Wall	29 lbs. (13 kg)	114.70
31309	4" x 19'-6" (5.94 m) Tube 16 ga. (1.52 mm) Wall	53 lbs. (24 kg)	196.20



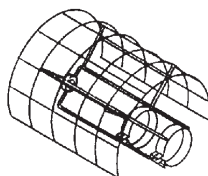
N4158A	End Cap w/brg.	2 lbs. (0.9 kg)	\$ 88.00
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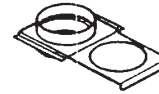
N4159A	4" Mounting Bracket 18" (45.7 cm) long	3 lbs. (1.4 kg)	\$ 51.00
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N4160A	4" Mounting Bracket 24" (61 cm) long	4 lbs. (1.8 kg)	\$ 67.00
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N4161A	4" Intake Guard	7 lbs. (3.2 kg)	\$ 154.00
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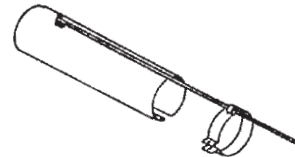
N4163A	4" Slide Shut-off	2 lbs. (0.9 kg)	\$ 104.00
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N4164A	Flight Connecting Stub 13/16" (21 mm) x 5 1/2" (25 mm)	1 lb. (0.5 kg)	\$ 18.00
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N4134A	Bin Well Adapter	1 lb. (0.5 kg)	\$ 30.00
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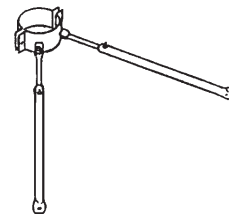
N4057A	4" Control Gate	5 lbs. (2.3 kg)	\$ 99.00
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N4170A	Intake Stub 13/16" (21 mm) to 1" (25 mm)	1 lb. (0.5 kg)	\$ 31.00
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N4359C	4" Connecting Band	1 lb. (0.5 kg)	\$ 21.00
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N4174A	4" Adjustable Mounting Bracket	11 lbs. (5.0 kg)	\$ 115.00
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