





AP's Bulk Feed Tanks and Flex-Flo™ perfectly illustrate the attention to detail that quality demands. AP is a division of The GSI Group, Inc., the world's largest manufacturer of corrugated, galvanized steel storage tanks (from the smallest feed tanks to massive 100 feet/31 meters tall, 15,000+ ton capacity commercial giants).

Every component is made from the finest raw materials available. Every stage of the forming process, from corrugation to die-cut shaping to precision finishing, is done under one roof and under our direct control and supervision.

# BULK FEED TANKS



▲ 30° Bulk Feed Tanks



▲ Reinforcing Rib



▲ 40° roofs provide additional strength and capacity. (Shown with optional pneumatic fill kit.)

## BIN ROOF

AP offers your choice of a 30° or 40° bin roof to adapt to any application. Roof panels are precision manufactured using die-form tooling to provide consistent quality. Both 30° and 40° roofs feature reinforcing ribs at each roof seam for added strength and rigidity.



## SIDE LADDERS

A unique, non-interfering safety rail and sectional, fully die-formed side ladder with dimpled, non-skid rungs provide solid, comfortable access.

## E-Z KLEENOUT PANELS

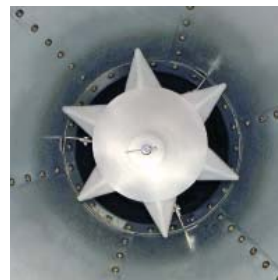
AP's optional E-Z Kleenout hopper panel allows for convenient and thorough ground level inspection and cleaning. The panel can be easily unbolted and removed in a matter of minutes from the exterior of the bin. A weather seal gasket protects the bin contents from the elements.



▲ The E-Z Kleenout panel can be easily adapted to existing feed bins.

## SURE-FLO

Sure-Flo directs feed down the hopper of the bin rather than down the center creating a first in, first out feed flow. The gentle movement of the heavy walled molded cone enhances flow as feed passes over it.



The Sure-Flo support bracket bolts to the hopper collar of new or existing feed bins and is quick and simple to install.



With Sure-Flo



Without Sure-Flo

Diameter	Meters	No. of Rings	Angle of Hopper	Overall Height (feet) 30° Roof	Overall Height (feet) 40° Roof	Overall Height (meters) 30° Roof	Overall Height (meters) 40° Roof	Max.* Cap. Bushels 30° Roof	Max.* Cap. Bushels 40° Roof	Max.* Cap. Cubic Feet 30° Roof	Max.* Cap. Cubic Feet 40° Roof	Max.* Cap. Metric Tons 30° Roof	Max.* Cap. Metric Tons 40° Roof	Max.* Cap. U.S. Tons 30° Roof	Max.* Cap. U.S. Tons 40° Roof
6'	1.83M	1	60°	10' 7"	10' 11"	3.23	3.31	111	120	137.99	149.12	2.50	2.71	2.76	2.98
6'	1.83M	2	60°	13' 3"	13' 7"	4.04	4.31	171	180	212.60	223.72	3.86	4.06	4.25	4.48
6'	1.83M	3	60°	15' 11"	16' 3"	4.85	4.94	231	240	287.20	298.32	5.21	5.41	5.74	5.97
6'	1.83M	4	60°	18' 7"	18' 11"	5.66	5.75	291	300	361.80	372.93	6.56	6.77	7.24	7.46
7'	2.13M	1	67°	13' 6"	13' 11"	4.12	4.23	185	198	230.09	246.76	4.17	4.48	4.60	4.94
7'	2.13M	2	67°	16' 2"	16' 7"	4.93	5.05	266	280	331.63	348.30	6.02	6.32	6.63	6.97
7'	2.13M	3	67°	18' 10"	19' 3"	5.75	5.86	348	361	433.17	449.85	7.86	8.16	8.66	9.00
7'	2.13M	4	67°	21' 6"	21' 11"	6.56	6.67	430	443	534.72	551.39	9.70	10.00	10.69	11.03
7'	2.13M	5	67°	24' 2"	24' 7"	7.37	7.48	511	525	636.26	652.94	11.54	11.84	12.73	13.06
7'	2.13M	6	67°	26' 10"	27' 3"	8.18	8.30	593	606	737.81	754.48	13.39	13.69	14.76	15.09
9'	2.74M	1	60°	14'	14' 9"	4.30	4.49	308	335	383.88	416.68	6.96	7.56	7.69	8.33
9'	2.74M	2	60°	16' 9"	17' 5"	5.11	5.30	443	470	551.75	584.54	10.01	10.60	11.04	11.69
9'	2.74M	3	60°	19' 5"	20' 1"	5.92	6.12	578	605	719.62	752.39	13.06	13.65	14.39	15.05
9'	2.74M	4	60°	22' 1"	22' 9"	6.74	6.93	713	739	887.48	920.25	16.10	16.69	17.75	18.41
9'	2.74M	5	60°	24' 9"	25' 5"	7.55	7.74	848	874	1055.34	1088.11	19.15	19.74	21.11	21.76
9'	2.74M	6	60°	27' 5"	28' 1"	8.36	8.55	983	1009	1223.21	1255.97	22.19	22.78	24.46	25.12
12'	3.66M	2	60°	20' 6"	21' 7"	6.25	6.57	887	946	1109.27	1182.69	20.1	21.5	22.2	23.7
12'	3.66M	3	60°	23' 2"	24' 3"	7.06	7.38	1126	1185	1407.69	1481.11	25.5	26.9	28.2	29.6
12'	3.66M	4	60°	25' 10"	26' 11"	7.87	8.19	1365	1424	1706.12	1779.53	31.0	32.3	34.1	35.6
12'	3.66M	5	60°	28' 6"	29' 7"	8.69	9.00	1604	1662	2004.54	2077.94	36.4	37.7	40.1	41.6
12'	3.66M	6	60°	31' 2"	32' 3"	9.50	9.82	1842	1901	2302.96	2376.36	41.8	43.1	46.1	47.5
12'	3.66M	7	60°	33' 9"	34' 11"	10.31	10.63	2082	2140	2602.24	2674.77	47.2	48.5	52.0	53.5
15'	4.57M	2	60°	23' 11"	NA	7.29	NA	1548	NA	1934.95	NA	35.1	NA	38.7	NA
15'	4.57	3	60°	26' 7"	NA	8.10	NA	1921	NA	2401.22	NA	43.6	NA	48.0	NA
15'	4.57M	4	60°	29' 3"	NA	8.92	NA	2294	NA	2867.50	NA	52.0	NA	57.4	NA
15'	4.57M	5	60°	31' 11"	NA	9.73	NA	2667	NA	3333.77	NA	60.5	NA	66.7	NA
15'	4.57M	6	60°	34' 7"	NA	10.54	NA	3040	NA	3800.40	NA	69.0	NA	76.0	NA

\*Capacities are calculated at 40 lbs. per cubic foot with no compaction and to full cubic foot capacities.

6', 7' and 9' (1.83m, 2.13m and 2.7m) diameter tanks are designed for the storage of free-flowing material having a density of no more than 40 lbs. per cubic foot. 12' and 15' (3.66m and 4.57m) diameter tanks are designed for the storage of free-flowing material having a density of no more than 45 lbs. per cubic foot.

Experience has proven that many bulk feed materials have unpredictable storage characteristics. It is absolutely necessary to install an appropriate agitator in feed tanks storing soybean meal, cotton seed meal, hot feeds and other products not considered as free-flowing materials.



### AUTO-LOCK

AP's patented "Auto-Lock" lid system allows the bin to be opened, closed and locked from the ground. The lid swings open a full 180° eliminating interference with fill augers.



### FACTORY FORMED FILL KITS

Another AP exclusive is the pre-punched, extruded lip roof panels provided for the optional pneumatic fill-kit (eliminating the inconvenience and difficulty of field-cutting the openings for the fill and exhaust tubes, and insuring secure, moisture-proof seals).



## HOPPER BOTTOMS

Tank hoppers are available in three slopes: 45° for dry, free flowing grains and 60° or 67° for harder flowing feed.

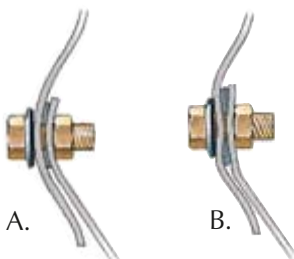
Like the roof panels, hopper panels are die-formed with rounded corners and down-turned sealing edges for safety and a weather-tight fit. In addition, assembly with rounded, truss-head bolts reduces "bridging" of contents on inner surfaces.



By fitting snugly into the offset outward throat of the hopper, the heavy gauge galvanized steel collar provides a perfectly smooth internal transition for optimum flow, as well as a sure-fit adapter for all 16" (406mm) unloading accessories. Hoppers are available at no additional cost with an optional 22" (559mm) opening which adapts to our rotary unloader. . . or the larger, heavy duty 22" (559mm) metal boot.

Exclusive to AP hoppers, the "eave", the upper edge where the hopper is joined to the sidewall, is specially die-formed to conform to the shape of the sidewall corrugation (See A.). Most other manufacturers depend on crimping and bolt pressure to force the connection (See B.) . . . which produces corrosion-prone distortion

and "dimpling" of the sidewall. AP's die-formed eave provides a much tighter seal and smoother flow of material.



3 bulk feed tanks

## AP's CLEAR BOOT

AP's clear boot allows producers to verify at a glance while driving by that feed is present in the bin. This heavy walled boot is injected molded from a specially formulated ultraviolet stabilized clear polycarbonate blend to provide years of trouble free service.



## DRIP LIP

AP's drip lip water deflection system is a one-of-a-kind, roll-formed bottom sheet edge. It forces water away from the hopper and lower boot area, giving complete weather protection without a loss in capacity.



## HEAVY DUTY METAL BOOT

Multiple outlet requirements can be easily handled by our 22" (559mm) all metal boot. This boot, which can be fitted to any AP feed bin, will allow installation of up to four feed lines in several directions at once.



## THE BEST BOOT POSSIBLE

AP's 16" (406mm) parabolic boot (available in straight drop or 30° models) is made in our own facility from the very



Straight Drop Boot

latest in ultra high impact polypropylene for greater flexibility, dependability and durability. Most of our competitors still use the older ABS plastic, which is stiff, brittle and prone to fracture, cracking and tear-out, especially where it's attached to steel. It is impossible for ABS to be UV stabilized, thus creating a built in deterioration factor over time.



30° Drop Boot

In addition, AP's polypropylene resin blend contains special chemical ultraviolet light inhibitors and impact modifiers to further enhance durability and resilience.

Distributing feed to the feeders controllably, cleanly and efficiently is the specific function of AP's Flex-Flo™ Auger System. Flexibility applies to the entire system and its adaptability to your specific needs — in feeds, in house layout, and in installation and maintenance.

Using PVC tubing as the carrier of feed not only provides flexibility in facility design, but reduces dust, provides protection against insect and rodent contamination, reduces noise, therefore reducing stress and offering longer life.

### SPECIAL BLEND

AP's polyvinyl chloride (PVC) tubing is extruded and formed in our own facility, to exacting standards and under our own quality control.

Blended PVC allows us to formulate the optimum compound for UV stabilization, strength and wear resistance.



# FLEX-FLO™ SYSTEMS



▲ Single Unloader shown with optional swing away bottom for 100% clean out.



▲ Double-Through Unloader

Most unloaders are available in single or double outlet models, as well as “through” & “twin through” models which can be used in tandem where two tanks are used in line.



▲ Rigid Auger System

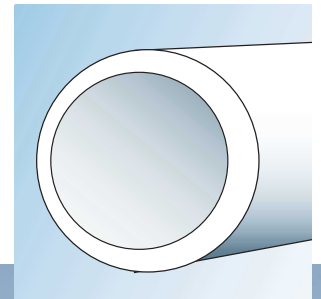
### UNLOADERS

Designed to fit below the 16" (406mm) plastic and 22" (559 mm) metal boots, AP's standard unloaders are available for 2.2" (55mm), 3" (75mm), 3.5" (90mm) and 5" (125mm) Flex-Flo™ or 4" and 6" rigid auger systems.

All AP unloaders have a slide-gate above the auger to meter feed or serve as a complete shut off . . . and a convenient, inspection/ clean out plate on the side which is easily removed with two wing nuts. AP unloaders feature a heavy duty ball bearing for increased service life and reduced maintenance.

### AROUND THE BEND

For moving feed up in the air and around corners, Flex-Flo™ tubing is available in specially formed elbows with increased wall thickness on the inside of the elbow for strength and wear resistance.







### KWIK-ATTACH DROP KIT

The Kwik-Attach drop kit installs quick and easy and attaches securely to avoid feed spills. The Kwik-Attach drop kit allows for complete clean out of feed and can be adapted with actuators for remote operation.



### MAXIMUM RUN TIMER

AP's Maximum Run Timer prevents costly feed spills and auger wear by shutting down the feed line if the system operates longer than the programmed run time. An indicator light alerts you to why the system was shut down. The reset button allows the auger to be restarted after the problem has been corrected. This run timer can be easily adapted to any flexible auger system.



### UNIVERSAL SENSOR

AP's Universal Sensor is truly universal, it adapts to control voltages from 24 to 240 volts and can operate either normally open or normally closed. This switch utilizes technology that is not sensitive to changes in temperature or humidity eliminating the need for a sensitivity adjustment. The convenient push button interface allows you to quickly and precisely program an on delay from one second to three hours to prevent short cycling of the feed system. LEDs indicate the status of the switch at all times.



The Universal Sensor is available pre-mounted and pre-wired in the Flex-Flo control unit. This control unit features an oversized outlet to prevent feed bridging.

### FLEX-FLO™ MODELS

Both tubing and augers are available in a variety of models to fit your specific requirements. Whether its ground feed, crumble feed, mash, high moisture corn, shelled corn or pellets, AP has the combinations to handle it.

For corn up to 27% moisture and other hard to flow materials, the Flex-Flo™ High Roughage system incorporates a special combination of a Model 300 (75mm) auger in a Model 350 (90mm) tube. For pelleted feeds, a special auger is available for Model 300 Flex-Flo, which increases the tolerance between the tube wall and auger. This increased tolerance prevents auger plugging and damage to expensive pelleted feeds.

Model 220  
(2.20"/55mm)

Model 300  
(2.95"/75mm)

Model 350  
(3.5"/90mm)

Model 500  
(5"/125mm)



### PRECISE CONTROLS

AP offers both drop tube and hopper level switches as automatic shut-off options. Both units are located at the last feeder in the line. Drop tube switches and hopper level controls are also available with an optional proximity style switch with time delay.

