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COMPLETE BROILER SYSTEMS



WWW.GSIASIA.NET



FEED SYSTEMS

Bulk Feed Tanks

GSI is the world's largest manufacturer of corrugated, galvanized steel storage tanks, hence, you can be assured every component is made from the finest raw materials available and is manufactured by skilled professionals who have years of experience. Whatever the project, GSI has variety of bin sizes to fit your specific needs.

Bin Roof

Cumberland offers you choices of 30° or 40° bin roof to adapt to any application. Both 30° and 40° roofs feature reinforcing ribs at each roof seam for added strength and rigidity.

Unloader

Designed to fit below 16" (406mm) plastic and 22" (559 mm) metal boots, Cumberland 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 Cumberland unloaders have a ultra high impact, polypropylene slide-gate above the auger to meter feed

nuts. They also feature a for increased service life

Single Unloader Shown with optional swing away bottom for 100% clean and reduced maintenance.



- Internal magnet adds additional force to keep lid closed



Simple Clamp-Band Installation with one bolt



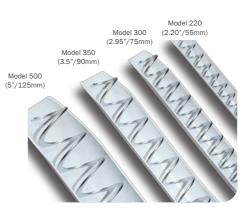






Flex Flo Systems

Cumberland offers five Flex-Flo models with capacities ranging from 15 lbs. to 220lbs./minute (6.8kg to 99.8kg/min.). Whether it's ground feed, crumble feed, mash, high moisture corn, shelled corn or pellets, Cumberland has the equipment to handle it. For corn with up to 27% moisture and other hard to flow materials, Cumberland also offers a Flex-Flo™ High Roughage system which incorporates a special combination of a 3" (75mm) auger in a 3-1/2" (90mm) tube to reduce plugging.



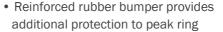
Flex-Flo Models	Model 220	Model 300	Model 350	Model 500	Model HR		
Tube Outside Diameter	2.25"	3"	3.5"	5"	3.5"		
Tube Outside Diameter (mm)	55	75	90	125	90		
Tube Corner Radius	5'/10'	5'	5'	6'	5'		
Tube Corner Radius (m)	3.05	1.83	1.83	1.83	1.83		
Max. Single System Length with Three Elbows	250'	200'	150'	*150'	150'		
Max. Single System Length (m) with Three Elbows	76.2	60.96	45.72	*45.72	45.72		
Recommended Motor Sizes at Max. Length (Horsepower)	0.5	1	1	1.5	1		
Capacity (Lbs./Minute at 40 Lbs. per Cu. Ft.)	15	50	100	220	50		
Capacity (Lbs./Minute at 640 kg. per Cu. m)	480	1360	2722	5988	1360		
Extension Length (Motor End of First System) w/o Elbows	300'	235'	185'	*185'	185'		
Extension Length (Motor End of First System) (m) w/o Elbows	92	72	56	*56	56		
Four Uline Mariations, Orang Darking, Orantains, Laurette, Inc. 500/							

* For High Moisture Corn Reduce System Length by 50%

Bulk Feed Tank Models:



 Available for 30° and 40° roof profiles • Plastic lid that is rugged and durable Factory assembled for easy installation Simplified clamp-band installation of lid assembly to peak ring



· Clamp-band design allows installation in 360° orientation

Protective Rubber

Bumper

Magnetic Lock



Quality Auger

Cumberland augers are coiled in-house from high tensile steel.The wire used is flattened prior to hardening, providing for a more consistent, high quality product.

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.

Part Number							Maximum Capacity			Overall Height		
Model	Diameter Feet	Diameter Meters	Ring	Angle of Hopper	Bushels	Cubic Feet	Cubic Meters	U.S. Tons	Metric Tons	Feet	Meters	
BFT	6	1.83	1	60°	111	137.99	3.9	2.76	2.50	10'7"	3.25	
BFT	6	1.83	2	60°	171	212.60	6.0	4.25	3.86	13'3"	4.06	
BFT	6	1.83	3	60°	231	287.20	8.1	5.74	5.21	15'10"	4.85	
BFT	6	1.83	4	60°	291	361.80	10.2	7.24	6.56	18'7"	5.69	
BFT	7	2.13	1	67°	185	230.09	6.5	4.60	4.17	13'6"	4.12	
BFT	7	2.13	2	67°	266	331.63	9.4	6.63	6.02	16'2"	4.93	
BFT	7	2.13	3	67°	348	433.17	12.3	8.66	7.86	18'9"	5.75	
BFT	7	2.13	4	67°	430	534.72	15.1	10.69	9.70	21'6"	6.56	
BFT	7	2.13	5	67°	511	636.26	18.0	12.73	11.54	24'2"	7.37	
BFT	7	2.13	6	67°	593	737.81	20.9	14.76	13.39	26'10"	8.18	
BFT	9	2.75	1	60°	308	383.02	10.8	7.69	6.96	14'0"	4.30	
BFT	9	2.75	2	60°	443	551.75	15.6	11.04	10.01	16'9"	5.11	
BFT	9	2.75	3	60°	578	719.62	20.4	14.39	13.06	19'5"	5.92	
BFT	9	2.75	4	60°	713	887.48	25.1	17.75	16.10	22'1"	6.74	
BFT	9	2.75	5	60°	848	1055.34	29.9	21.11	19.15	24'8"	7.55	
BFT	9	2.75	6	60°	983	1223.21	34.6	24.46	22.19	27'5"	8.36	
BFT	12	3.65	2	60°	923	1109.27	31.4	24.96	22.64	20'6"	6.25	
BFT	12	3.65	3	60°	1175	1407.69	39.9	31.67	28.73	23'2"	7.06	
BFT	12	3.65	4	60°	1427	1706.12	48.3	38.39	34.82	25'10"	7.87	
BFT	12	3.65	5	60°	1679	2004.54	56.8	45.10	40.91	28'6"	8.69	
BFT	12	3.65	6	60°	1931	2302.96	65.2	51.82	47.00	31'2"	9.50	
BFT	12	3.65	7	60°	2184	2602.24	73.7	58.56	53.12	33'10"	10.31	

Capacities for 6'-9' (1.83m-2.75m) diameter tanks are calculated at 40 lbs. per cubic foot (640kg/cubic meter). Capacities for 12' (3.65m) diameter tanks are calculated at 45 lbs. per cubic foot (720kg/cubic meter). Bushel capacities for 6'-9' (1.83m-2.75m) diameter tanks are calculated with no compaction and to full cubic foot (meter) capacities. 6' (1.83m), 7' (2.13m) & 9' (2.75m). Hopper Feed Tanks are designed for the storage of material having a density of no more than 40 lbs. per cubic foot (640kg/cubic meter). 12' (3.65m) Hopper Feed Tanks are designed for the storage of material having a density of no more than 45 lbs. per cubic foot (720kg/cubic meter).

Warning: Cumberland hopper tanks are designed for free-flowing material only. Soybean meal, meat scraps and many other materials are not free-flowing and should not be stored in these tanks. Check with your material manufacturer or dealer to ascertain the flowability of any material ou intend to use. When in doubt about a specific material, please consult Cumberland's engineering department for additional information. Some eatures shown are optional or are available only on certain models. Ask your Cumberland dealer for details.





FEED SYSTEMS



Sure-Flo

An affordable and simple way to prevent bridging and promote even feed flow in feed bins!

- Reduces Feed Bridging
- First Feed In is First Feed Out
- Reduces Feed Separation
- Easy to Install

Load Cell Feed **Management System**



- Short-Cut keys to provide quick access to information.
- Password to access installation mode and prevent unauthorized changes to the feeding program.
- Target Bin Scale can be used for:

Target Bin Scale

- 1 or 2 bins (hens and cockerels).
- 1 to 4 fill augers and feed lines.
- 4 time clocks with up to 10 start/ stop cycles.
- Target Feeding Sequence
- Accurate inventory of feed remaining in storage at all times.
- Keep track of bird count.
- Historical information is readily available.
- Alarm Systems.
- Low total investment.

With Sure-Flo

The Sure-Flo

bolts to the

to install.

support bracket

hopper collar of

new or existing

feed bins and is

quick and simple





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

Bin Load Cell

- · Each load cell has 10000lbs capacity.
- · Lightning protection at each load cell.
- Accuracy over the entire linear range.
- Accuracy and durability to withstand lightning, wind and temperature fluctuations.

Heavy Duty Boots

Cumberland's 16" (40.6cm) parabolic boot (available in straight boot, 30° boot, and straight twin boot) is made from the very latest in ultra high impact polypropylene for greater flexibility, dependability and durability. Most of our competitors use the older ABS plastic. which is stiff, brittle and prone to fracture, cracking and tear-out,

especially where it's attached to steel. ABS is not able to be UV stabilized, unlike AP's polypropelene resin blend which contains special UV light inhibitors, further enhancing it's durability.

Special Blend

Cumberland 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.



Target Load Cell Support



Target Load Cell



Straight Boot



30° Drop Boot



Twin Boot





• Simple and concise control units, with test mode. Control unit can be remotely mounted or tank mounted with optional leg bracket.

Flow Hammer

Feed bridging has become a common event in the poultry industry as feed rations change due to

fluctuating input costs and the use of alternative feed stuffs to lower cost and gain feed efficiency. The "Flow Hammer" is a reliable and affordable solution that easily adapts to most existing feed bins. This patent pending product aids in the prevention of out of feed events in all phases of poultry production.

• Helps minimize feed bridging events to keep feed flowing consistently to animals.

• Can be installed on a full or empty bulk feed tank. Low maintenance and simple installation

(no field modifications to the tank are required). · Control unit has both timed and sensor

controlled modes: - The timed mode uses an "on" time and a "cycle" time to control the Flow Hammer when the feed system is running.

- The sensor mode uses a sensing device to detect a feed flow issue and activates the Flow Hammer. Once the event has ended, the Flow Hammer shuts off.

240 volt power supply required.











Over 500 lbs/sec



Extension Hopper

For applications requiring distances greater than the standard length of any given system, extension hoppers are available that can expand the delivery range to practically any distance and can provide access at 90° from the main line.







Belt-Drive Unit



Direct Drive Unit with Extension Length Transfer Capability



While high frequency vibration devices are effective in promoting feed flow, their use can result in loosened hardware and metal fatigue potentially resulting in structural failure. The FLOW HAMMER's low frequency/high impact design promoted feed flow without damaging your feed bin or voiding its warranty.

Patent Pending Designed and manufactured by AP in the USA

PAN FEEDING



Advantages Swing-able pan prevents bruising of birds' breast

MY Pan. From Day Old to Harvest

A comprehensive feeding pan that is easy to install and operate. Designed for day-old chick until harvestable. A feeding pan that is **MY Pan**

- Detachable Drop Tube
- 6 Stages Rotating Feed Level
- Flood Window
- Anti Scratch Fin
- Optional Shut Off

I-PLUS 3 Control Pan

Patent Pending

The I-PLUS 3 CONTROL PAN FEEDING SYSTEM utilizes Infrared Technology to sense and detect the level of feed in the control pan for proper and reliable operation. INFRARED TECHNOLOGY requires no moving mechanical mechanism or sensitivity adjustments.



As the i-plus3 Control Pan fills, the for a red levels breaks all three of the infrared sensors, the auger will stop



When the feed drops below the infrared sensors, the auger will re-start automatically after a 60 second delay.



automatically



M Se EZ FI The EZ flo through a corrosion





Hi-Lo Classic Pan & Hi-Lo VIII Pan

* US Patent No. 5,311,839



Two-Stage pan performance inside one complete feeder is the idea behind Cumberland's revolutionary Hi-Lo* Pan Feeding System. The Hi-Lo pan feeder represents a unique concept in the poultry industry, using one feeder to take birds from day old through adult. The first ten days of a broiler's life are critical. The Hi-Lo pan feeder starts on the house floor, presenting a lip height of 2.1" (5.33 cm), the average height of traditional "chick lids". As the birds grow and the feed line is raised, the Hi-Lo expands into a 3.5" (8.89 cm) deep pan. The higher wall and feed saver lip prevent waste from raking and billout.





Poultry Boots

Heavy fabricated, galvanized, single and double outlet boots are available for end or center house feeding applications.

Control Pans

Cumberland offers a variety of control pans for your feeder line. Choose from I-PLUS 3, proximity switch, micro switch, the new plunger style, or Cumberland's exclusive spinner motor control pan. All control pan models are durably constructed and assure consistent feed regulation.

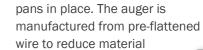
M Series Pan EZ Flood Pan & 7 & 14 Spoke Design

The EZ flood pan, 7 & 14 spoke M Series pan is suited for day old chick through adult. It is made from high quality plastic material with high corrosion resistance and UV resistance capabilities.





Feed Level Switch



stress and provide for a more consistent, high quality product.

Non Flood Minimum Feed Position

Tubing and Auger

The rib on Cumberland's lock formed tubing

gives added strength to the tube, as well

as providing a solid way to hold the

When the feeder is winched up above the floor, the flood feed window will shut off and minimize the feed to flow through the saving ring.

Flood Feed Position

The design of High & Low concept window gives maximum flood feed when it is seated on the floor. The shallow pan is designed with a feed-saving lip that prevents waste and allows day old chicks to access the feed easily.

Hopper Feed Level Switches

Traditional micro switchesor proximity hopper level controls are available to regulate feed delivery.

winch up position gives



Two-Stages: Collapsed (2.1") and Expanded (3.5")



Feed Depth Control

Feed depth control measures directly off the bottom of the pan assuring all birds a consistent, even supply of fresh feed.



360° Action

The drop tube and grill combination allow play in 360°, reducing bruising and injury to the birds.



The **TELESCOPING DROP TUBE** automatically compensates for uneven floor conditions. The drop tube is available in either the standard one piece or optional two piece design.

> winch down floor position gives maximum flood fee

WATERING SYSTEMS



Twin Lock Nipple Valves

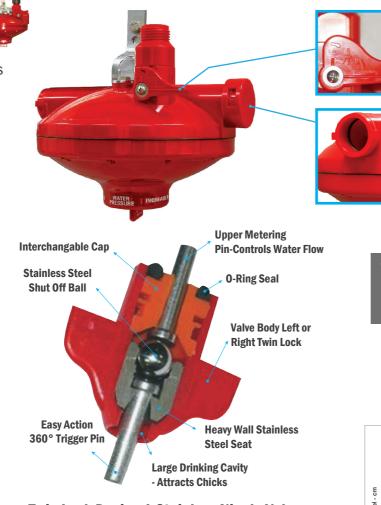
- 6 different styles available to meet all watering needs.
- Only 3 moving parts.
- Extra long life.
- 360° toggle.
- Four times easier action.
- Quick and easy assembly (no wrench required)
- High precision stainless steel ball and seat.
- Lower pin drinking cavity attracts chicks.
- Standard Twin Lock connection interchanges with other brands.
- The double locking feature compresses and seals the o-ring uniformly around the drinker.

Self Sealing Cap

Self sealing cap at clear sight tube to prevent water spillage.

Water Regulator

Flushing of the Cumberland Watering System requires no EXTRA plumbing and valves. The Cumberland Regulator can be easily removed from the watering Line without interfering with the suspension of the watering Line. The heavy-duty housing of the Cumberland Water Regulator design will accept higher incoming water pressure and help prevent any leakage where housing is bolted together. Optional square pipe adaptor kit is available for Square Pipe System.



Twin Lock Design | Stainless Nipple Valves

Purple	CW-10233T
White	CW-9197T
Grey	CW-9580T
Orange	CW-9440T

Convenient Flush

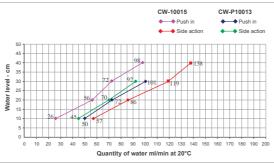
GSI unique Water Regulator is designed for greater versatility and ease of use, no by-pass necessary. (manual version shown on the left)

Removable End Cap

This regulator can be easily removed from the watering line without interfering with the suspension of the watering line. With the unique in-line design, it can be used as a mid-line regulator by simply removing the end cap.

Water-O-Matic Watering Systems

Cumberland's experience and engineering continue to bring you a complete watering system loaded with innovations and features that promote large healthy birds and dry floors.





WATERING SYSTEMS





End Kit-Auto Flush

- Extra strong design
- All flexible sight gauge allows easy pressure reading.
- Garden hose
- Require no valve at end kit to flush.

Evo Flow Watering Systems

This system feature an importantinnovation, using ball valve sitting on toggle pin. It has a 360° side-to-side toggle action Evo-Flow screw in nipple makes drinking four times easier than ever before, the upper metering ball recisely control the flow of water through the valve and the high quality snap on drip cup which keeps the litter dry. Cumberland experience and engineering continue to bring you a complete watering system loaded with innovations and features.

Evo-Flow Nipple & Drip Cup

Cumberland Square Pipe Watering System equals most European manufacturer on overall performance.

- Cumberland uses a hardened high grade S.S. ball for a tighter seal and accurate flow control
- Inner components are contained and will not disassemble during shipping.
- Evo-flow screw in nipple use all stainles steel component manufactured in USA.
- Consistance flow rate of 110-120ml.
- No special wrench required for assembly.



Innovative Regulator

- Delivers high volume of water at an adjustable pressure.
- Heavy construction.
- Square pipe adaptor available as an accessory.



VENTILATION FANS







Slantwall Fans

Cumberland offers 50" and 52" galvanized steel belt drive slantwall fans to efficiently and effectively maintain optimal environmental conditions. All galvanized fans are constructed of heavy gauge, G-90 grade galvanized steel and use high efficiency motor for continuous duty cycles. Galvanized fan propellers are aerodynamically balanced for maximum air flow.

Box Fans

Cumberland offers 36" and 50" galvanized steel belt drive slantwall fans to efficiently and effectively maintain optimal environmental conditions. All galvanized fans are constructed of heavy gauge. G-90 grade galvanized steel and use high efficiency motor for continuous duty cycles. Galvnized fan propellers are aerodynamically balanced for maximum air flow.

51" & 69" Euro Fan

GSI 51" & 69" Euro fan are designed for multiple application and provide excellent air circulation.

- Stainless Steel fan blade for excellent corrosion resistance
- V-belt plastic safety protection cover
- Plastic venturi for better corrosion resistant and easy to clean for optimal hygiene
- Robust and strong internal X-support structure
- Materials resistant against aggressive climates
- Galvanized shutter with Centrifugal Shutter opening system
- Fully concealed and maintenance free bearing

Cone Fa<u>ns</u>

Optional discharge cones can boosts fan output by as much as 10-15%, greatly increasing efficiency. Made of all galvanized steel, cones are available in easy to ship and assemble four-piece segments for 6 Blade Cone Fan 36", 50", 52" & 54" models

Galvani Model

X52GCE X50GCE X52GC6 X50G6E

X50GSV X54GCE X52GSV

* All test with PVC shutter. * All 50Hz fan result are test by GSI Asia fan test chamber

Model X51G6B X69G6P



The Mega Flow External Damper Fan (Mega Flow ED) follows in the footsteps of its top of the line Mega Flow predecessors, boasting the industry's highest performance in a galvanized fan. The External Damper line has been completely redesigned and engineered from the ground up to insure optimum levels of both quality as well as performance. Increasing air flow during operation and providing an unsurpassed complete seal when closed. Our innovative AddAire butterfly style shutter system comes in standard on all Mega flow ED models. Due to the fact that minimal dust and debris is collected by the AddAire Shutter, the efficiency and performance of the unit will remain at their optimum levels for the life of the fan.

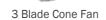
- · Doors remain fully opened under extreme static pressure due to the patented AddAire wings.

Megaflow Galvanized Fans

GSI

Lower Cost , Increase Profits

Cumberland ventilation systems are the perfect solution for more efficient, high performance, climate control in poultry production facilities. Our equipment has been field refined and industry proven to be extremely effective in reducing bird stress caused by overheated or poorly ventilated houses. Even if your building is well ventilated, inefficient equipment can blow healthy bird profits right out the window. If you're looking for a better return on your investment, look for Cumberland, your ventilation company.





* 6 blade cone fan only available in 52" mode

nized Fan Performance Values						.05 Static Pressure		.10 Static Pressure		
	Hz	Dia.	Drive	Туре	HP	CFM	CFM/Watt	CFM	CFM/Watt	
В	50	52"	Belt	SW Cone	1.5	24052	20.3	21415	17.1	
В	50	50"	Belt	SW Cone	1.5	21420	19	19680	16.9	
6B-HH	50	52"	Belt	SW Cone	1.5	23900	16.6	21900	14.9	
B-WOSH	50	50"	Belt	Box	1.5	20050	16.7	19200	15.5	
W	50	50"	Belt	SW CONE	1.5	18757	15.7	16652	13.5	
В	50	54"	Belt	SW CONE	1.5	25983	19.1	23504	17.1	
SW	50	52"	Belt	SW CONE	1.5	21200	16.9	18500	14.3	

Euro Fan Performance Values

			-			.04 51811	c Pressure	.12 Static	Pressure	
	Hz	Dia.	Drive	Туре	HP	CFM	CFM/Watt	CFM	CFM/Watt	
B-SS	50	52"	Belt	Box	1.5	22,765	13.39	20,949	12.32	
B-SS	50	50"	Belt	Box	1.5	40,909	19.48	36,826	17.54	

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Megaflow External Damper Fans

Lower Cost, Increase Profits

External Damper Models

- Magnetic shutter panel ring eliminates movement of shutter when not in use and creates a complete seal.
- Pillow block bearings.
- Super efficiency totally enclosed air over energy efficient motors.

- Four piece galvanized cone for ease of installation.
- Belt or direct drive on 36" model.
- Can be ordered with cordset only available on 240v 60Hz single phase models.
- Available with gold label cog v-belt with automatic belt tensioner or powertwist links belt.

Fan Shutters

Available in a variety of sizes and materials, we have a shutter to fit your particular requirements be it low light, low maintenance or low cost. The true airfoil design of our shutter blades make them



extremely effective allowing for very little performance loss.Simple to install and built to last a lifetime. Cumberland shutters can provide an easy and affordable means of controlling incoming light and building climate.

Cumberland PVC shutters come in white or black, and are very low maintenance and easy to clean. The black shutters are used in reduced lighting applications. Aluminum shutters offer great durability in any environment. They have no parts to rust, and are practically maintenance free.

Fan Model	Phase	Motor	Static Press.	CFM	CFM/Watt	BessLabs#	HHI Part#	
		140	0.05"	26,000	24.2	05337	6603-6502	
	Single	1Hp	0.10"	24,000	21.0	05337	6603-6502	
	5	1.5Hp	0.05"	29,200	22.1	05338	6603-6503	
52" Standard		1.011p	0.10"	27,500	19.4	05338	6603-6503	
	Three		1Hp	0.05"	27,600	23.3	05333	6603-6513
			0.10"	25,900	20.5	05333	6603-6513	
		1.5Hp	0.05"	29,000	20.9	05331	6603-6504	
			0.10"	27,300	18.5	05331	6603-6504	
	Single	1.5Hp	0.05"	29,000	21.4	08252	6603-7088	
54" Standard		nonp	0.10"	27,800	19.5	08252	6603-7088	
J4 Starluaru		1Hp	0.05"	29,000	22.0	08247	6603-7086	
			0.10"	27,700	20.0	08247	6603-7086	

* All tests results are current as of January 1, 2013. Tests results are subject to change without notice. Refer to www.bess.uiuc.edu for constantly updated figures. * All tests performed using single phase 240v 60Hz power. * All tests run with v-belt and automatic tensioner.



AddAire is a patent pending feature that allows the butterfly style doors to be fully opened and remain fully opened under extreme levels of static pressure.

Mega Flow External Damper Fans - Performance and Technical Specification Data*

COOLING SYSTEMS & CURTAIN MACHINES

Attic Vents & Vent Doors

Have You Ever Consider Using Attic Heat As Green Solar Energy For Brooding?

Cumberland's Attic Vent System is precision engineered to extract solar heat from the attic space so it can be used as a valuable heat source to reduce BTU's of heat supplied by brooder or heater. This unique and innovative design is cost effective, green energy, durable and easy to install.



Vents are operated with a linear actuator or curtain machine and are controlled by your ventilation controller.

Unique Door Design

Exceptional air mixing due to the curved door profile which provides proper air velocity directing warm air from the attic into the house.

House Conditions

Significant benefits to GSI's Attic Vents are drier litter and lower ammonia concentration levels, thus providing a better in house environment for the bird.

Fuel Savings

Mixing warm air from the attic with house air during minimum ventilation reduces fuel consumption as compared to using cold air through sidewall inlets. Fuel savings can vary depending on management, house construction and climate.

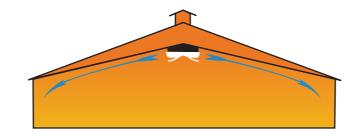
Retrofit Friendly

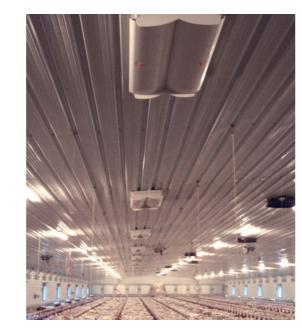
The Attic Vent System is designed to be retrofit friendly in most drop ceiling poultry houses.



Cumberland's vent doors are used in poultry applications where transitional ventilation is required. All galvanized construction and simple to install. These doors are maintenance free and will provide optimum circulation for many years.







Specifications: - 3.5" discharge opening equals 2500 CFM @ .10 static pressure. - Full discharge opening equals 4000 CFM @ .10 static pressure.

Part Number	Description	CFM at 0.10SP	Rough Opening
6612-4408CN	Plastic Vent Door	1816	8.75" x 44.50"
6612-4413CN	Plastic Vent Door	2953	13.50" x 44.50

The height is controlled by the rolling belt that is better in operation compared with pulling cable. Even a single motor can operate up to 3 layers tunnel door! The door comes in standard size of 3ft x10ft. The opening of 2 layers can reach up to 6ft.

- Airtight
- High R-value of insulation

Lightweight rigid laminate foam panel doors allow for easy installation and can be operated with a curtain machine. Doors are black for dark out conditions. Available in 4', 5', & 6' heights.

Fully Assembled existing curtain tunnel inlets.

Tight Seal

A profiled rubber seal keeps form and provides an airtight seal.

Lower energy costs! With an insulation value of R-8, tunnel doors are much better insulators versus conventional curtain inlets.

 Plastic curved door directs fresh air into the house along the ceiling toward the peak for gentle air mixing without downdrafts on the birds and is ideal for wider poultry houses.

TUNNEL DOOR SYSTEMS

Roll Seal Tunnel Door

Cumberland now offers Roll Seal Tunnel Door that is easy to install and made of high density extruded polystyrene foam clad with Fiberglass Reinforced Plastic (FRP). The new tunnel door not only is energy efficient and airtight seal but also save space when it operates. The FRP sheet is strong, easy to clean and rust-free for long service life.

System Features

- Fully automated
- Space saving

- Smooth operation
- Low maintenance
- Lightweight panels
- Easy to clean



Single Door Tunnel Inlet

Black Lightweight Doors

Doors come fully assembled and can easily retrofit

Energy Savings



Two Door Tunnel Inlet

White Durable PVC Doors

Lightweight rigid PVC doors allow for easy installation and can be operated with a curtain machine.

H-Channel & C-Channel

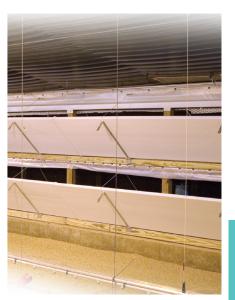
PVC H-Channel & C-Channel slide onto the PVC panels for proper seal.

Tight Seal

Static pressure pulls double stitched nylon curtain up against tunnel door to create an air tight seal.

Energy Savings

Will lower your energy cost 9 times the insulation value of conventional curtain material.



CONTROLLING SYSTEMS

Electronic Controller Expert LA

- Ventilation based on static pressure and temperature
- 2 timed curtain output
- Up to 16 relay output
- Feeder, heater runtime and water monitoring are saved in memory for up to 75 days
- Upload and download chip to easily transfer all the settings (up to 15 different programs)
- 2 air inlets. 2 natural curtain outputs and 2 tunnel outputs
- Energy saver features
- Seamless ventilation step between stages
- PC programmable (optional)
- Minimum ventilation curve strategy and status LED
- Stage 1 fan ramping feature
- Up to 8 inside and 2 outside temperature probe
- 4 heating stage with Hi/Low for up to 75 days
- Light program

13

- Two 0 -10 volts outputs
- 1 cooling stage with programmable cycle timer and relative humidity (RH) override feature when the maximum RH set point is reached.

Easy to use

Push-button access to information

· Gives important daily information: -

- Standard deviation, Uniformity and daily gain

Help you reach your desired TARGET weight

- Average & Number of weight

Weigh your birds 24 hours a day

to house 1 or house 2

Give you accurate data

PC Compatible

Help you reduce mortality

- Compatible with . Download Box festimeter 2 🚳 🛲 INTE
- Clean mode can be activated for empty roomvs
- Alarm monitoring
- 3 controller programs that can be changed manually, by age and by outside temperature
- · Copy and paste feature within control.
- Memory chip
- Multiple password protected user levels or optional no passwords
- Sensor calibration
- Misting, age and mortality
- Longer histories (timed and dated)
- Room temperature 60 days
- Inside probe temperature 10 days
- Outside temperature 75 days
- Humidity 75 days
- Heater run time 75 days
- Feeder run time 75 days

• Featherweight can have up to 4 platforms - 2 in each house. Each

platform has an independent reading. Any platform can be assigned

- Daily water consumption 75 days.

Bird Scale

CONSISTENT INTEGRATED MANAGEMENT SYSTEM	Featherweight Bird Scale II
1: 24:000 2: 25:000 3: 25:000 4: 20:000 4: 20:000 4: 20:000 4: 20:000 4: 20:000 5: 20:000 6: 20:0000 6: 20:0000 6: 20:00000 6: 20:00000 6: 20:000000 6: 20:000000 6: 20:000000 7: 20:000000 7: 20:00000000	



160 days of history on:

- Average temperature.
- Individual temp sensor.
- Water monitoring.
- Heater run time.
- Humidity.
- 50 last alarm memory :
- Water spill.
- Hi / low temperature & humidity.

TC4-4SD - 4 Steps Controller

CA-10 Temperature Control



- Four ON/OFF climate controller for fan or heat.
- Up to four fan outputs.
- Up to two heat outputs.
- Minimum ventilation ON/OFF timer.
- Automatic temperature reduction

Attractive platform encourage birds to hop onto the scale. The more weight hits each day, the more accurate the house average weight will be.

This Broiler Hanging scale kit include the bird platform and the LCT-1 load cell.

- Maximum weight 50kg
- Trade quality Load Cell
- Load cell is located above the platform away from the litter
- Litter and manure build up do not influence weighing accuracy
- · No electrical wires under the platform



TC5-8SDA - 8 Steps Controller



- Eight ON/OFF climate controller for fan or heat
- Up to eight fan outputs
- Up to two heat outputs
- Up to one cooling output
- Minimum ventilation ON/OFF timer
- Automatic temperature reduction
- Optional: humidity sensor
- Alarm

Agri Alert 128 Touch



I-Box 360° hardware, software, and support is provided in partnership with E2E Resolutions, the communication specialist."

Features

- Pre-defined graphs, reports and summary views are generated automatically for water and feed consumption, temperature Uniformity, Humidity, Ventilation Conditions, feeder Runtime, Mortality and Inventory in standard format (PDF, XLS, etc...)
- Flagging functionality allows the user to set out of range value on any parameter of any controller connected to I-BOX 360° to detect when water consumption is too low, ventilation settings are being changed outside of limits, feed bins are getting low, etc...

Easy Monitoring & Convenient

- 7-inch colour touch screen allows all zones to be seen at once
- Internet connectivity provides remote access, eliminating your need to go to the barn every time it notifies you*
- Email and SMS* notifications
- Simple icon & symbol to navigate

Worry-Free

- · Phone dialer provides dependable delivery of alarm notification even if you don't have internet
- Built-in security makes sure only authorized users can adjust the system

Cost Saving

- 128 zones lets you monitor a large site with a single svstem*
- Fully compatible AA9600 replacement

Customizable System

• Modular architecture allows you to design a system that's the right size for your operation

- · Alarm view shows all the current alarms coming from the controllers plus all active flags generated by the I-BOX 360° itself. This view shows you exactly what is abnormal ar the farm . When a new alarm or flag is raised, a visual indication appears next to the building, room, floor, or zone where the alarm or flag was generated.
- E-mails can be sent automatically when flags are raised, reports or graphs are generated.
- Dedicated system runs 24/7 and does not require dedicated computer or serial port adapters
- All data changes, events and alarms are automatically logged as they occur
- Data retention up to two years
- System entirely based on WEB technology (i.e. Remote users only need Internet Explorer or Firefox
- Remote connection through Internet, Modem, Ethernet network, Wi-Fi, no software to install on customer's PC
- Export Data capability



* Features coming soon

CONTROLLING SYSTEMS

Environmental Electrical Control Panel



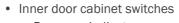
Wall mount control systems

This control systems range from:

- Ventilation Control Systems
- Lighting Control Systems
- Feeding Control Systems
- Winching Control Systems

Optional Large Cabinet for whole house Control Panel

- Evolution Secondary Sensing Systems
- Lighting Distribution Control Systems
- Feeding Distribution Control Systems
- Ventilation Control Systems
- TC5 8SDA
- Lifting eyebolts
- Divide Mounting plate
- Base / plinth, complete 100mm high.



- Power on indicator - Alarm Indicator
- Auto on/off selector switch
- Plexiglass door cabinet
 - Environment controllers
 - Alarm & backup systems



Manual motor starters for Control Systems

This Manual motor starters provide protection against:

- Overload Phase failure
- Short circuit
 Undervoltage

Fuseless protection saves costs, space and provides for quick reaction under short circuit condition, switching the motor off within 3 ms. It is therefore an easy to handle, cost effective protection solution.





- industry.



15

LIGHTING SYSTEMS

Environment condition has a major role in poultry industry. A well controlled lighting system will help the birds to grow accordingly hence increase productivity.

Introducing the GSI LED light backed by advanced technology, safe and low energy consumption.



DLS6W & DLS9W



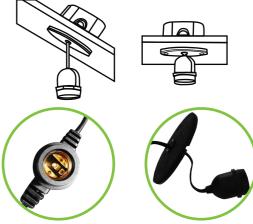
- UL water resistant and EnergyStar approved.
- Every unit sold with two gaskets for waterproof/
- dustproof performance.
- Blastproof polycarbonate cover.
- 88 lumens per watt, highest lumen per watt bulb available in
- Deep dimming down to 1%.



DLS12W

- Use with adjustable waterproof socket
- UL approved
- Deep dimming down to 1%
- Incredibly even light distribution and great light ouput for both floor and cage applications!

Socket (Able to fit on pitched ceiling and flat ceiling)



Æ

GSI Sockets Offer Solution to Socket Corrosion & Uneven Light Distribution

- Holds socket in place
- Provides complete waterproof seal for junction box connections.

Soft elastomer material provides compete dust and waterproof seal for bulb and socket preventing any corrosion.

Saving	Waterproof	Anti Corrosion	Dimming
	DLS6W	DLS9W	DLS12W
Wattage	6 watts	9 watts	12 watts
Equivalent incandescent wattage	75 watts	100 watts	100 watts
Lumen Output 2700k	550	840	1100
Beam Angle	180 Degree	160 Degree	270 Degree
FireProof/water Resistant	yes/yes	yes/yes	yes/yes
Estimated Life	35,000	35,000	25,000
Lens Cover	Polycarbonate	Polycarbonate	Polycarbonate

FLOOR SYSTEMS

We are the **PIONEER** in **Plastic Poultry Slat**. **Built for DURABILITY STRENGTH**

Warm, Dry & Comfortable Enviroment

GSI Poultry Flooring is made from high-impact, wear resistant polypropylene plastic designed to replace wood or wire slats in poultry housing. Interlock Design

Performance

 Our Slatted floor reduces foot pad related disease and breast blisters often experienced with wooden slats and will easily outlast them.

Rot-Proof/Non-Porous

• Our solid plastic construction is rot/corrosion proof, resists microorganisms build-up and sheds waste efficiently

High Ouality

- Made from high impact polypropylene plastic material for durability & easy cleaning.
- Corrosive free, does not hide contaminants or harbor bacterial growth.
- Available with or without UV protection.

Original GSI Slats Contain





GSI Logo



Manufacturing Date

- Designed with interlock system for all four sides of the slat.
- Provides secure attachment to the steel support beam.

No Sharp Edges

- 100% consistence dimensions.
- · No sharp edges or corners.

Strength

• Strong enough to hold 120kg (265lbs) of body weight to stand or walk.

Optional

• PVC slat support or fiberglass pultrusion cross bar and available for complete slat system package.

Interlock Design





nical Data	Comfort Model (Oval Holes)	Eco Model (Square Holes)
rial	Polypropylene	Polypropylene
ensions	1020mm x 515mm	1020mm x 515mm
Dimensions	20mm x 45mm	20mm x 20mm
al Weight	2.74kg / 6.04lbs	2.10kg / 4.63lbs
	Natural	Natural





-



New Style Hanging System



Comfort Model

Eco Model

HEATING SYSTEMS

Super Saver Heater

The **SUPER-SAVER XL** heating line is a line of direct fired heaters that have model variations for both inside suspension hanging and outside mounting. The inside mount model is a gas circulating heater that's dependability and rugged construction make it the ideal unit for confinement houses of all ages and classes of poultry. The outside mount models are forced air heaters that come complete with all relevant brackets and accessories for installation. Its superior combustion is provided by clean, fresh outside air which insures healthy, safe heat for your poultry. All models are available with options for natural gas or liquid propane.



- Hot surface and direct spark models available 225.000 BTU.
- · High temp aluminized steel burn chamber.
- Side swing door for easy access and maintenance.
- Diagnostic lights for troubleshooting ease.
- · Standard adjustable "Y" heat deflector.
- 1/3 HP totally enclosed thermally protected motor with sealed bearings.
- Standard 1/2" gas cock installed at gas valve.
- · Back-up safety sail switch.
- · High limit safety switch (manual reset)
- On/Off toggle switch
- · Service-Saver enclosed control box.



Universal Mount

Super Saver Heater can be used for either inside or outside mount applications.

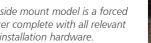
Super-Saver XL Specifications

Model#	Maximum Input	Ventilation	Voltage	Amps
HH-SS-225-XL	225,000 BTUH (65.9kWh)	1000 CFM (1699 m ³ /hr)	240 Volts	4.8 Amps

New Style Sloped Top



The outside mount model is a forced heater complete with all relevant



area and heat chamber efficiency.

enclosed



The inside mount model s a gas circulating heater ideal for a confinement environment.



Purafire Heater

With one of the lowest carbon monoxide outputs in the industry (CO emissions of 5 parts per million), Cumberland's PuraFire Heaters are available in C225 (225,000 BTUH). Each heater is LP or natural gas compatible and can be mounted inside or outside any house. These heaters are constructed of tough, rust-resistant galvanized steel for long life and durability.

PuraFire's bottom-draw intake better controls the air flow into and

throughout the entire unit and provides a more efficient mix of air and gas. Cool air, channeled along the inside casing, creates a buffer that keeps

the outside cooler (not hot to the touch). This air pattern results in a

unique bent flame design, which greatly increases the flame's surface



PuraFire igniters are available with stainless steel casings.



Thermostats, Regulators & Hoses

- · Consistent, clean burning source of warmth with near 100% fuel efficiency.
- Thermostat operated.
- Intelligent trouble-shooting safety features.
- In case of flame failure, an automatic fan shut down stops drafts & gas control lockout prevents gas from escaping.
- 30% Gas saving vs conventional brooder

- Bottom-draw intake better controls air flow.
- "Bent flame" design greatly increases flame surface area & heat chamber efficiency.
- Outside is not hot to the touch.
- Motor assembly, blower, gas valve, control panel & other components are protected from moisture. dirt & dust.
- Swinging doors on each side allow access to all working parts.
- Even heat distribution

A side swinging door design

gives EASY ACCESS to internal components like the "Super-Saver" control unit and blower motor, making it one of the easiest to service heaters on the market

Super-Saver XL Minimum Clearances					
Ceiling	12" (305mm)				
Wall	12" (305mm)				
Floor	20" (508mm)				



ield serviceable.

The "SERVICE-SAVER"

ical control unit is sealed from

The ELECTRONIC HSI IGNITION is standard on

chamber is made of high temp aluminized stee

for superior rust protection. The cast iron burner

s enamel dipped to eliminate dust adhesion and

rust. The air intake surround increases combus-

debris such as dust and moisture and is accessible through a side

swinging door making the unit easily

Super-Saver heater models.

tion and heat change efficiency.



18

COOLING SYSTEMS

Evaporative Cooling Systems

GSI evaporative utilize the natural cooling effect of evaporation to combat seasonal dips in production caused by heat stress. Cumberland offers two different styles of Komfort Kooler. The Closed Top System has been an industry favorite for many years. Made of ultraviolet stabilized PVC, this system offers great durability and longevity for the poultry environment. In addition, Cumberland's rapidly growing Open Top System is available. This design offers the grower easy access to manage and maintain their evaporative cooling system and utilizes a combination of PVC and the highest quality of stainless steel or aluminum for years of dependable operation. Komfort Kooler Systems will adapt to new and existing poultry facilities.



Water Troughs

GSI's pre-formed square trough serves as a 3 gallon per lineal foot (44.8 liters per meter) water reservoir. Constructed of corrosion proof, ultra-violet stabilized PVC components, the trough allows unevaporated water to be recirculated back to the holding tank. A perforated tray snaps to the trough to hold pads firmly in place. Injection molded end caps and couplers speed installation.

Komfort Kooler Jet Pump

• All jet pump kits will be factory assembled for

Our new motor is a 3/4hp 208/230v -50/60Hz

This motor will also mount to the wet end of

continuous duty CSA approved motor

any previous model Jet Pump Kits.

No start switch.

easy field installation.





New Open Top Design



Cam-Lock system allows toolless pad installation and replacement.





Open Top Design

Made of high quality stainless steel or aluminum, this system will give years of dependable operation under the harshest conditions. The Open Top design allows you to see the water jets and easily check water pressure. It also offers access to the spray bar for cleaning. Pre-punched and heavy duty stainless steel components help simplify installation.

Closed Top Design

The Closed Top system is extruded from ultraviolet stabilized PVC for durability and ease of installation. The hinge-open cover and thumbscrews allows accessibility to spray bar and holds pads firmly in place. The spray bar bracket and water deflector insure pads are uniformly wet.

Water Tank

Unevaporated water flows back to the holding tank to be recirculated and a float level & port automatically add water as required.

- A roto-molded holding tank offers increased water storage capacity.
- Submersible pump keeps water levels consistent for efficient water delivery.
- Automatic float valve for matching water supply with water demand.

Centrifugal Pump

- The Centrifugal Pump System provides an external self priming pump.
- Our Centrifugal Pump System is field proven. reliable and a cost effective way to deliver water to Evaporative Cooling Systems.

The superior quality & design of the PowerTrak has produced maximum performance and efficiency. This model is a second generation of super strength power pulley systems introduced by Cumberland. It has been completely redesigned with service in mind and boasts many performance & durability enhancing features while maintaining the strong points of its popular predecessors, Power Curtain & Power Vent.

- 15% increase in load block support surface for greater life.
- Convenient hinged springlock door that is easily removed.
- Built in head bracket with needle bearing pulleys.
- · Modular construction for ease of service.
- · Greater protection from the elements
 - 5.000 pound capacity.



· Channel lock "trak-drive" system captures load block.

CURTAIN MACHINES

Curtain Machines

Protect the health of your investment with a properly controlled curtain system. Cumberland's curtain machines deliver powerful performance and reliable operation with durable components to withstand a rigorous environment.

PowerTrak Linear Drive & Systems

PowerTrak Optional Chain & Sprocket

Depend on the superior quality and design of Cumberland power systems for maximum performance and efficiency. A proven standard in vent applications was set with the introduction of the optional Chain and Sprocket PowerTrak which minimizes alignment problems and cable breakage in vent applications.

• Upper and lower auxiliary contacts for enhanced Evolution features.

· Easy adjust springcam limit switch system.



Pully Assembly Solid construction and rust resistant materials make the sprocket controller a reliable workhorse year after year.



Load Block Light but hard aluminium load block.



Spider Coupling Lovejoy Coupling The PowerTrak utilizes a threaded block and drive screw directly coupled to a direct drive gear motor.



High Limit Adjustment Collar

Adjustable Collar to control the travelleddistance.



Lower Limit Adjustment Collar Adjustable Collar to control the travelled distance.



SpringCam Limit Switch Actuator Isolated primary and

secondary limit switches allow for back-up protection.

Emergency Curtain Drop Curt-O-Matic II & III



- 5 minutes time delay.
- Simple 3-wire hookup.
- Available in 120, 208 or 240 volt models
- 5 years product defect warranty.
- · Curtain chain kit.
- · Easy installation.
- Curt-O-Matic III can be hooked up to your alarm system's electronic audible, to signal alarm if arm on system should drop.



To eliminate downtime. Hired-Hand stocks a complete line of parts and components for the

Prefabricated Housing

Prefabricated Housing

Our new 60-Series building can double net payback to growers when compared to conventional width buildings.

The 100% steel construction Generation Structures definitely state-of-the-art of live production buildings. No plastic ceilings or wood walls. The structure's negative pressure ventilation is unmatched with its durable operating design features. Winter weather heat loss is minimized, optional, bi-flow selectable heat exchanger baffle system. When compared to other buildings on the market, this Generation Structures' attention to detail in building design, use of premium materials, day-to-day operating efficiency and its anticipated 35 year useful life, no greater value can be found anywhere. We are confident that once you have had an opportunity to learn more about this building, you'll agree that Generation Structures is the industry's choice in building design and production.

Features & Benefits :

- Fiberglass wool insulation with R12 to R29 insulation value to save energy cost.
- Hired-Hand Quality assurance each construction material is inspected & tested thoroughly for accuracy.
- Professionally engineered single storey, double storey & elevated slat flooring's buildings.
- Code Acceptance: Steel framing is backed by national building codes.
- Single span structure from 40ft(12m) up to 80ft(24m) width & wider!
- Made of High Tensile Structural Steel with heavy Zinc Coating for structure's rigidity & longevity.
- Flexible: Steel can be designed for longer spans that create more open floor plans & fewer load- bearing walls.
- Safety: The strength of steel offers greater protection to you & your family during inclement weather.

- Pest-Proof & Fire Proof.
- Natural Attic ventilation design for heat & moisture exhaust.
- Use 25% less energy in ventilation fans vs conventional house.
- Use 30% less energy in heating & brooding.
- Fully airtight construction on ceiling & side wall.
- · Gatorshield galvanized tubing frame.
- Efficient climate control engineering.
- 50-70% reduction on Insurance claims.
- Uncompromising design standards.
- Endwall & Sidewall are "C" channel framing kits.
- Engineered Structural Tubing Truss.
- Pre-Engineered 100% Galvanized steel construction.
- Pre-engineered for Hired-Hand components installation.
- Roll-Seal doors (Manual or automated control options).
- Thicker 4" walls. (Industry standard walls are only 3 1/2").

