Botec® & ProFeed® Delivery Boxes

BTC 100 Series / PF 100 Series



www.KuhnNorthAmerica.com



WHY A KUHN KNIGHT DELIVERY BOX?

COMPLETE FEEDING CENTER PRODUCT OFFERING

Kuhn North America boasts an outstanding lineup of commercial TMR mixers and delivery boxes for centralized TMR mixing and feeding. Commercial vertical and commercial reel mixers are available to meet the stationary mixing needs of customers looking to mix a wide variety of rations and mixes. Auger-style delivery boxes, in a wide range, of capacities can be used to quickly and accurately deliver rations ranging from higher roughage rations to wet, heavy finishing rations.

SIMPLE, RELIABLE DELIVERY BOX DESIGN

The auger-style delivery box design is the simplest delivery box design on the market. No floor chains are needed to unload feed with an auger delivery box. Unlike other delivery box designs, feed doesn't have to be moved in two directions, front and then sideways. Auger delivery boxes effectively place a variety of rations with two simple horizontal augers. The simplicity of this delivery box design results in low maintenance and provides a long lasting solution.

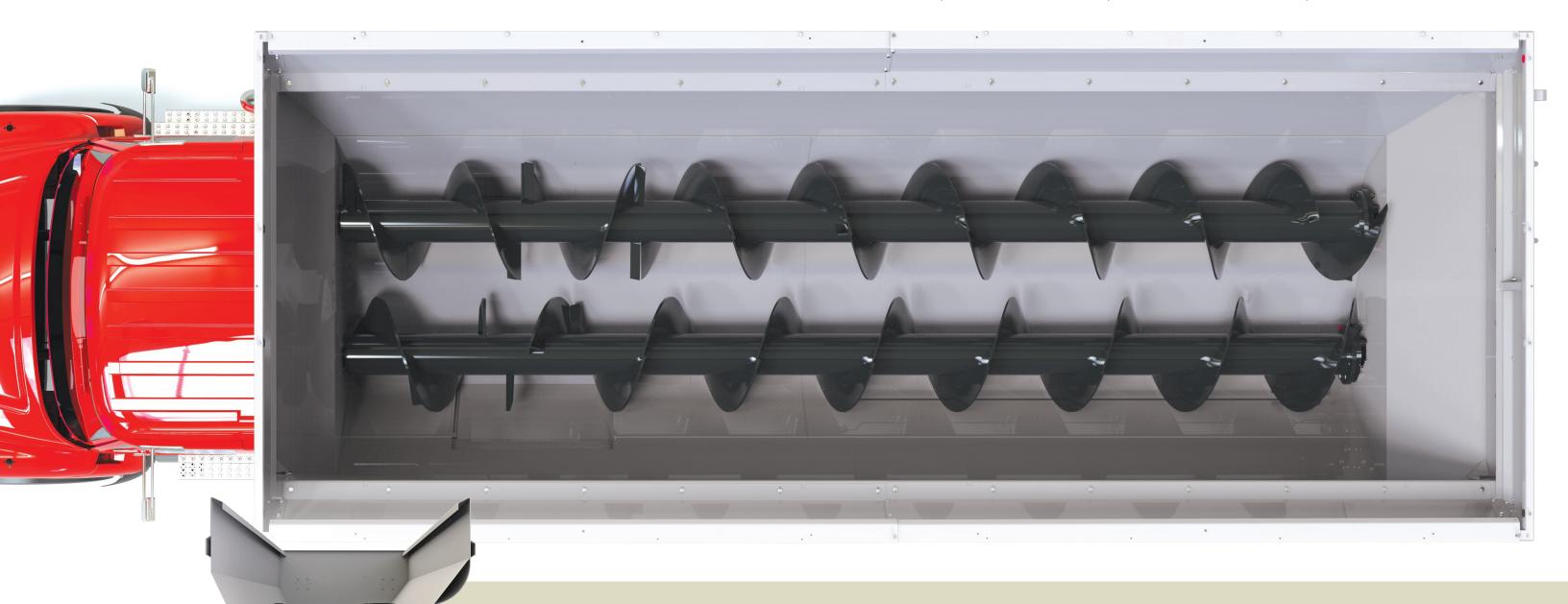
MACHINE LONGEVITY

Central TMR mixing centers utilizing single purpose machines are subject to less wear and tear than machines serving many purposes. TMR mixers on a fixed undercarriage are not exposed to the stresses of travel over farm terrain and the associated wear. Feed delivery boxes that do not need to provide feed mixing action do not experience component wear related to the mixing action of a TMR mixer.

BOTEC® & PROFEED® DELIVERY BOXES in brief

Models	Hauling Capacity (w/ Extensions)	Maximum Net Load	Available Configurations
BTC 155	550 (630) cu. ft.	18,000 lbs	Trailer or Truck
BTC 163	630 (720) cu. ft.	20,700 lbs	Trailer or Truck
BTC 172	720 (810) cu. ft.	23,700 lbs	Trailer or Truck
BTC 190	900 (1,000) cu. ft.	29,700 lbs	Trailer or Truck
PF 1130	1,000 (1,100 & 1,300) cu. ft.	50,000 lbs	Truck Only
PF 1145	1,100 (1,200 & 1,450) cu. ft.	50,000 lbs	Truck Only

KUHN KNIGHT AUGER DELIVERY BOXES MORE BOX, MORE FEED, FEWER PARTS, FEWER WORRIES



RAISED, TWIN-AUGER DESIGN

The BTC and PF 100 Series delivery boxes use a simple, effective twin-auger design for quick, consistent discharge. Similar to the famous twin-auger design of the KUHN Knight ProTwin® Slinger® manure spreaders, the raised right auger of the BTC and PF delivery boxes eliminates material bridging and works to consistently charge the lower auger on the discharge side. Proven high performance in a variety of manure materials remains true when unloading a variety of feed ingredients and rations.

EASE OF OPERATION

The twin-auger delivery box provides outstanding ease of operation From the beginning of the unload cycle to the end, a consistent amount of feed is provided to the discharge, making it easier to provide even feedout in the bunk.

LONGER WEAR LIFE & LESS MAINTENANCE

With far fewer wear components than other delivery box designs, auger delivery boxes provide superior component lifetime and require minimal daily maintenance. No chains to replace, less daily service points, and the reduction of a cross conveyor are all examples of how the auger delivery box highlights simplicity and longevity over other designs.

COMPLETE CLEANOUT AND NO CARRYAROUND

Close auger-to-floor tolerances allow for excellent cleanout of the delivery box. Another advantage of the auger delivery box design is the elimination of feed carryaround. Unlike other designs that utilize chain conveyors to move feed, augers do not carry feed around and deposit it in an undesired location.

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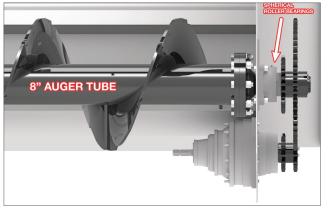


BOTEC® BTC 100 SERIES

SIMPLE & VERSATILE

KUHN Knight BTC 100 Series delivery boxes are designed for dairy and feedlot operations looking for a fast and accurate feed delivery solution from a central mixing point. Available as a trailed or truck mount configuration, four models have capacities ranging from 550 ft³ up to 1,000 ft³ with extensions.

The BTC delivery boxes offer a wide range of options to fit the needs of a wide variety of producers. Trailed units provide a solution for farms looking to utilize a tractor for multiple operations, while truck mounted units are avilable for farms wanting a dedicated feeding unit, or that need to travel longer distances. Varying discharge options allow farms to feed into differing areas. Need a delivery box at a reduced cost for a low-wear application? The BTC 100 Series delivery boxes can be ordered minus stainless liners, and truck mounts can utilize a mechanical drive. On the flip side, boxes going into high-use applications can be ordered with various stainless liner kits and more sophisticated hydrostatic drives.



DRIVE COMPONENTS

The BTC delivery boxes feature a simple, yet effective drive design for superior performance. Input speed is reduced through a planetary gearbox, eliminating the need for additional high-speed chains and sprockets. Heavy-duty drive roller chains drive the auger sprockets in an enclosed oil bath. Splined auger shafts provide a reliable connection from the sprockets to the augers. Augers use a bolted flange



TRUCK OR TRAILER CONFIGURATION

The BTC 100 Series delivery boxes are available in a trailed or truck mounted configuration to fit your operation's needs.



TRUCK DRIVES

Either mechancial or hydrostatic drive packages are available for the truck mounted BTC delivery boxes. For customers looking for a low cost, simple drive option, the mechanical drive option can be used due to the low horsepower requirements of the BTC delivery boxes. For customers looking for independent control of the delivery box from ground speed, the hydrostatic drive can be used.



AXLE CONFIGURATIONS

Dependent on BTC delivery box size, either single or tandem axle configurations can be used in either trailer or truck models. Single axle trailers and trucks are standard on the BTC 155. Single or tandem axle options are available on the BTC 163 & 172. The BTC 190 requires tandem axles for both trucks and trailers.

connection to mate with the auger drive shafts.



PROFEED® PF 100 SERIES

MAXIMIZE FEEDING EFFICIENCY

The new KUHN Knight ProFeed® PF 100 Series delivery boxes are an efficient option for many large and extra-large farms, feedlots and ranches to feed more cows per load. With a robust and durable design, the ProFeed 100 Series delivery boxes are reliable in every feeding application.

The twin-auger design guarantees a fast, thorough cleanout every time. The choice of standard or grain augers provides you with the ability to tailor your machine to match your feeding application. High-quality drive components and controls provide faster discharge and greater one-pass feeding capabilities. The PF 100 Series includes two models: the PF 1130 & PF 1145, both available with 5.5" and 17.75" extensions, resulting in capacities ranging from 1,000 ft³ to 1,450 ft³, each with a 50,000-pound maximum net load rating.



TRUCK CONTROLS

New KUHN truck mount controls provide an operator-friendly experience for delivery box control. On-board machine parameters and diagnostics can be accessed on the machine display in order to quickly identify potential issues and monitor the system. An external fuse box provides easy access to fuses and relays. Auxiliary power capability is available in the new wiring harness, an easy power source for scale indicators.



UPGRADED HYDROSTATIC DRIVE

A variable displacement hydraulic motor reduces unloading times. The motor is capable of making incremental displacement adjustments based on requested feedout speed from the closed-loop software. Through this incremental speed adjustment, the PF delivery boxes can respond to unload speed requests earlier in the unload process, resulting in 50% faster unloading speeds compared to the previous model.



HEAVY-DUTY DRIVE COMPONENTS

The PF delivery boxes offer many proven heavy-duty components. A 40:1 planetary gearbox is used for speed reduction into the rear of the unit. A splined cast plug is used for the driveshaft-to-sprocket connection. Simple, reliable sleeve bearings are used to maintain shaft alignment. A bolted flange connection is used to mate the drive with the augers.

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DAIRY OR FEEDLOT OPTIMIZATION

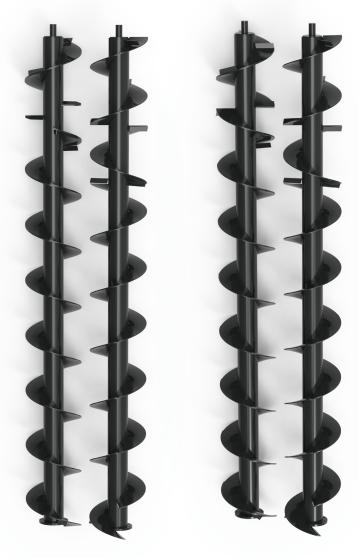
RATION VERSATILITY

Auger feed delivery boxes have been used for many years in beef feedlot applications, feeding the wetter, heavier rations that come from traditional feed mills. With the increasing use of stationary TMR mixers on dairy farms, KUHN has adjusted our auger delivery boxes to accomodate dairies looking to feed drier high roughage rations while still enjoying the benefits of an auger delivery box.

STANDARD AND GRAIN AUGER OPTIONS

The PF 100 Series delivery boxes are available with two auger options; the standard and grain auger configurations. Standard augers are designed with an open convergence area near the discharge door resulting in optimal load leveling and feedout performance in higher roughage, dairy rations. Grain augers feature a closed convergence area near the discharge door, optimized for feeding typical finishing rations.

STANDARD AUGER VS GRAIN AUGER





MULTIPLE DISCHARGE OPTIONS



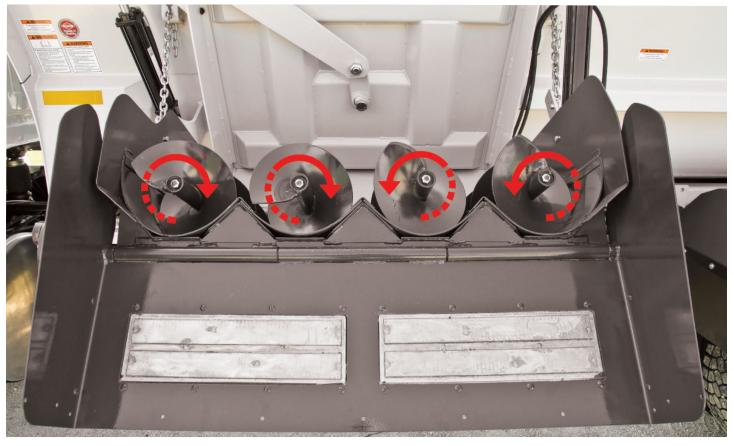


UNMATCHED EVENNESS OF DISCHARGE

Multiple discharge options are available for the BTC delivery boxes. A slide tray option is avilable for floor/ground feeding. Three incline discharges are optional; a 4-auger discharge, chain and slat conveyor, and belt conveyor. The multiple discharge options, with a variety of lengths available and with or without tipoff, allow producers to choose their preference for their application.

The PF delivery boxes come standard with a 4-auger discharge. The 4-auger discharge provides excellent unloading of a wide variety of feedlot and dairy rations on larger farms and feedlots. There are three lengths (28", 36",42"), with or without tipoff, available on PF 100 Series delivery boxes.





4-AUGER DISCHARGE

Counter-rotating augers bring the feed to the center of the discharge to increase overall capacity and provide a smooth, even discharge for all ration types. (BTC & PF Models)



REMOVABLE AUGERS & POLY LINERS

The discharge augers are simple to remove for easy serviceability. Long-lasting, replaceable polyethylene chute liners prevent rust and limit wear.



SIMPLIFIED DRIVE

As with the main auger drive, the discharge auger shafts are splined for a more positive power transfer and longer service life. The simplified drive design, featuring only two chains and a remote grease bank, results in easy service and maintenance.

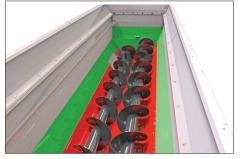
Technical Specifications

ADDITIONAL OPTIONS



CAPACITY EXTENSIONS

A belt extension added to the top of the BTC delivery boxes increases capacity by about 10%. Two steel extension options, added to the top of PF delivery boxes, increase base capacity by 10% or 30%. (BTC & PF Models)



STAINLESS STEEL LINERS

The partial liner covers the most critical wear areas in the mixer and provides added protection and longer life. Additional liners completely cover all of the high-wear areas for unmatched dependability and long service life. (BTC & PF Models)



FENDERS

PF delivery boxes are available with the choice between two fender options: the individual axle fender or the continuous tandem fender pictured above. (BTC & PF Models)



SCALE SYSTEMS

Different scale brands, models and options are available for all types of operations to accomodate the integration of various feed management programs. Optional remote indicators are available for placement that will allow easier viewing. (BTC & PF Models)



BUNK LIGHTS

Optional bunk lights are available in multiple configurations to provide additional light for late nights and early mornings. (BTC & PF Models)



FRONT AND REAR BUMPERS

PF delivery boxes are available with two front bumper options: a straight bumper or an angled bumper. A steel rear bumper comes standard. (BTC & PF Models)



GENUINE KUHN PARTS®

No part better fits a KUHN machine than an original KUHN part

Here at KUHN, we produce spare parts built to last in our very own foundries, our forges and our ultra-modern production facilities. You can trust in our longstanding know-how, based on almost two centuries of experience. With KUHN Parts, you can be assured of the highest quality parts and customer service in the agriculture equipment industry. Seven distribution centers, located strategically throughout North America, ensure that KUHN, KUHN Knight and KUHN Krause dealers have access to parts and assistance so you can get back in the tractor.











	BTC 155 B		ВТС	C 163 BTC		C 172 BT		C 190	
	Trailer	Truck	Trailer	Truck	Trailer	Truck	Trailer	Truck	
CAPACITY	·						'		
Capacity (Standard/Extensions)	550 ft ³ /630 ft ³ 630 ft ³ /720 ft ³ 720 ft ³ /810 ft ³ 90		900 ft ³ /	00 ft ³ /1,000 ft ³					
Maximum Net Load	18,0	00 lbs	20,700 lbs		23,700 lbs		29,700 lbs		
SPECIFICATIONS*									
Overall Length	267"	215"	291"	239"	291"	239"	295"	242"	
Unit Shell Length	19	92"	21	6"	2	16"	2	16"	
Overall Height (Add 8" for extensions)	106"	117"	108"	117"	114"	125"	130"	136"	
Overall Width (Unit Shell Only)	9	96"	9	6"	96"		101"		
Tread Width (Single/Tandem)	91"/-	96"	91"/106"	96"	91"/106"	96"	-/102"	96"	
Unit Weight	14,950 lbs	13,700 lbs	15,200 lbs	13,900 lbs	15,550 lbs	14,250 lbs	20,200 lbs	15,200 lbs	
BOX CONSTRUCTION									
Lower Auger Flighting Thickness - Front/Rear				3/4" /	5/8"				
Upper Auger Flighting Thickness - Front/Rear	34" / 5/8"								
Auger Hopper Thickness		3/8"							
Sidewall Thickness - Right/Left	1⁄4" / 7 GA								
Stainless Steel Auger Bottom Liners	12 GA								
Door Opening Size	40" × 31"								
PTO Minimum Power Requirement	100 hp	_	110 hp	_	120 hp	_	130 hp	_	
DISCHARGE DIMENSIONS**									
4-Auger Discharge 28"/36"/45"									
Maximum Reach to Tip-Off Pivot Point	13"/19"/26"	10"/17"/24"	13"/19"/26"	10"/17"/24"	6"/12"/19"	10"/17"/24"	10"/17"/24"	15"/22"/29	
Maximum Reach to Tip-Off End	28"/35"/42"	27"/33"/40"	28"/35"/42"	27"/33"/40"	21"/28"/35"	27"/33"/40"	26"/33"/40"	31"/38"/45	
Maximum Height to Tip-Off Pivot Point	36"/41"/46"	47"/52"/57"	36"/41"/46"	47"/52"/57"	38"/43"/48"	47"/52"/57"	42"/46"/51"	48"/53"/58	
Maximum Height to Tip-Off End	30"/35"/40"	43"/48"/53"	30"/35"/40"	43"/48"/53"	32"/37"/42"	43"/48"/53"	37"/42"/47"	44"/49"/54	
Transport Width	105"/108"/112"	105"/108"/112"	105"/108"/112"	105"/108"/112"	110"/113"/117"	105"/108"/112"	111"/115"/118"	111"/114"/11	

^{*}Truck dimensions are based on a 41" truck frame height and a 96" tread width. **Single axle configuration for BTC 155 & 163 and tandem axle for BTC 172 & 190.

Technical Specifications

ProFeed® Delivery Boxes

	PF 1130	PF 1145		
CAPACITY				
Capacity	1,000 ft ³	1,100 ft ³		
Capacity - With 5.5" / 17.75" Extensions	1,100 ft³ / 1,300 ft³	1,200 ft ³ / 1,450 ft ³		
Maximum Net Load	50,000 lbs			
SPECIFICATIONS*				
Overall Length	421"	445"		
Unit Shell Length	269"	293"		
Overall Height	132"			
Overall Height - With 5.5" / 17.75" Extensions	138" / 150"			
Overall Width - Unit Shell and 5.5" Extensions	102"			
Overall Width - Unit Shell With 17.75" Extensions	118"			
Unit Weight	17,960 lbs	19,410 lbs		
BOX CONSTRUCTION				
Lower Auger Flighting Thickness - Front/Rear	3/4" / 1/2"			
Upper Auger Flighting Thickness	1/2"			
Auger Hopper Thickness	1/4"			
Sidewall Thickness	1/4"			
Stainless Steel Auger Bottom Liners	12 GA			
Door Opening Size	31" x 41"			
DISCHARGE DIMENSIONS				
4-Auger Discharge 28"/36"/45"				
Maximum Reach to Tip-Off Pivot Point	8"/14"/22"			
Maximum Reach to Tip-Off End	29"/36"/43"			
Maximum Height to Tip-Off Pivot Point	48"/52"/57"			
Maximum Height to Tip-Off End	36"/41"/46"			
Transport Width	113"/118"/123"			
*Dimensions are based on a 41" truck frame height and a 96" tread widt	h.			

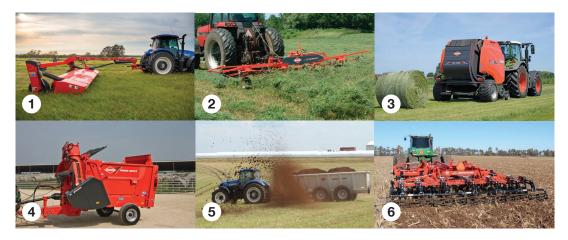
^{*}Dimensions are based on a 41" truck frame height and a 96" tread width.

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COMPLEMENTARY PRODUCTS

MORE PRODUCTS TO MEET YOUR NEEDS

With over 700 models of equipment, we have the most complete implement line in the industry. Whether you have a small or large operation, we have a broad range of models and options to help fit your diverse needs.



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- 2. Tedders
- 3. Round Balers
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Your KUHN Knight dealer

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