Botec® 4-Auger TMR Mixers

4100 SERIES / BTC 100 SERIES







MAXIMIZE EFFICIENCY AND FEEDING PERFORMANCE

THE UNIQUE DESIGN OF OUR BOTEC® 4-AUGER MIXERS ELIMINATES DEAD SPOTS FOR CONSISTENT, THOROUGH MIXING. THE EFFICIENT MATERIAL FLOW ALSO RESULTS IN FAST MIXING AND A QUICK, COMPLETE CLEANOUT, SAVING YOU TIME AND MONEY. A LOWER HORSEPOWER REQUIREMENT, COMPARED TO COMPETITIVE MODELS, MEANS LESS FUEL CONSUMPTION. ANOTHER WAY KUHN KNIGHT 4-AUGER MIXERS CAN PROVIDE COST SAVINGS TO IMPROVE YOUR BOTTOM LINE!







COST OPERATION
A lower horsepower requirement compared to competitive models means less fuel consumption. This means significant cost savings to improve your bottom line!

RATION FLEXIBILITY
Whether you're feeding a higher roughage dairy ration or a feedlot ration with higher levels of grain and byproducts, you can tailor your machine with features and options to best meet your needs.

Models	Mixing Capacity	Mixing Capacity w/ Belt Extensions	Configurations
4136	360 ft³ (10.2 m³)	410 ft³ (11.3 m³)	Stationary, Truck or Trailer
4142	420 ft³ (11.9 m³)	460 ft³ (13 m³)	Stationary, Truck or Trailer
BTC 155	550 ft³ (15.6 m³)	630 ft³ (17.8 m³)	Truck or Trailer
BTC 163	630 ft³ (17.8 m³)	720 ft³ (20.4 m³)	Truck or Trailer
BTC 172	720 ft³ (20.4 m³)	810 ft³ (22.9 m³)	Truck or Trailer
BTC 190	900 ft³ (25.5 m³)	1,000 ft³ (28.3 m³)	Truck or Trailer

Summary

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THE BOTEC® ADVANTAGE: FAST, VERSATILE & CONSISTENT

A QUALITY RATION AND COMPLETE CLEANOUT

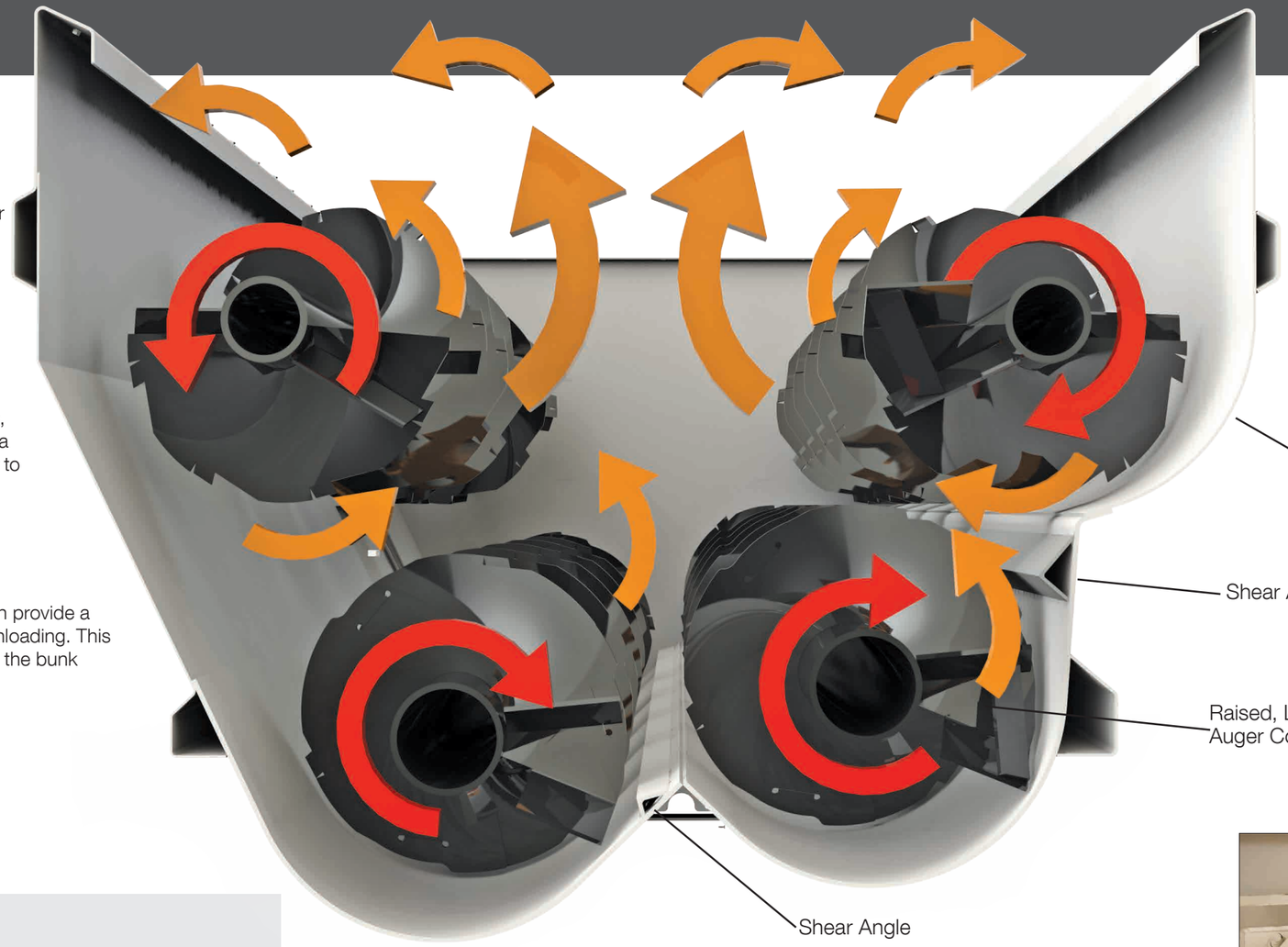
The raised lower right auger configuration, along with the close tolerance between the auger flighting and the auger troughs, results in a fast and complete cleanout. The offset upper right auger in combination with the raised lower auger requires less horsepower and provides a faster mix time.

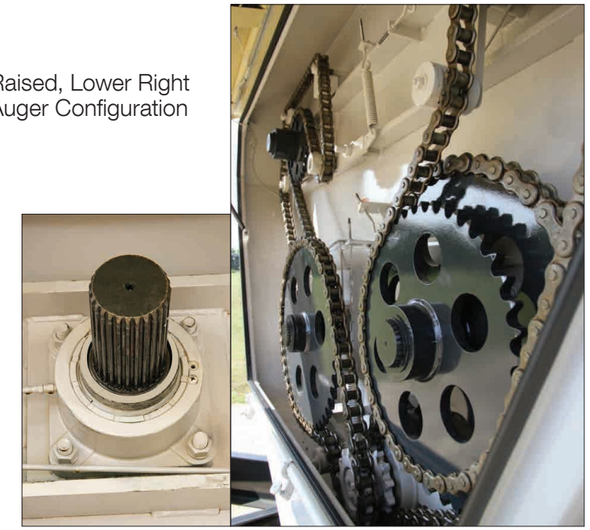
MIX FULL OR PARTIAL LOADS

Due to the cross-mixing action of horizontal auger mixers, Botec TMR mixers can properly mix batches that fill only a portion of the mixing tub providing you with the versatility to mix any size ration.

EVEN, CONSISTENT DISCHARGE

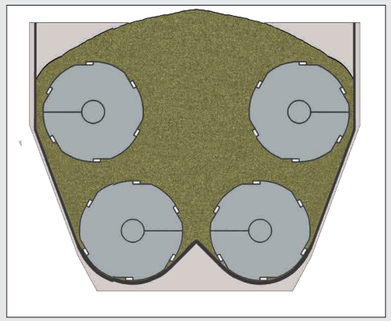
The close auger tolerances and raised lower auger design provide a fast, consistent discharge from beginning to the end of unloading. This results in even feed placement across the entire length of the bunk without a delay for mixer cleanout.





SPLINED DRIVE SHAFTS

The splined shafts allow a strong, reliable torque transfer and provide easier sprocket alignment and maintenance.



COMPETITIVE MIXERS

Having parallel lower augers creates more force between the augers without increasing mixing capability. Parallel augers also do not transition the feed from right to left as well as if the right auger was raised. This design leads to slow, incomplete cleanout, decreases the mixer's processing ability and increases the horsepower requirements.

BOTEC® 4136 / 4142

OUTSTANDING RELIABILITY & PERFORMANCE

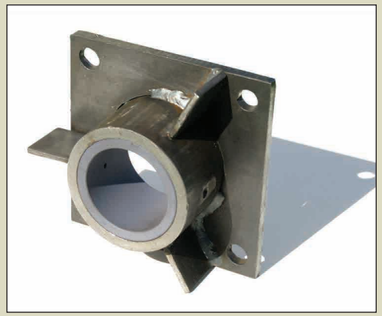
The 4136 and 4142 are designed for small- to mid-sized cattle operations with features to provide reliable, efficient and affordable mixing. The drive system, undercarriage, box construction and weight bar system have outstanding serviceability and reliability. However, one fact remains the same, the overall superior mixing performance of this machine stands out from the competition. You get genuine KUHN Knight quality with an innovative and streamlined design, durable components and a rugged build to help ensure reliability and long life.





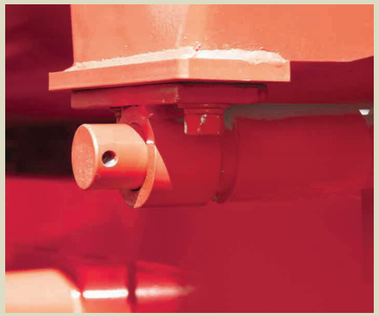
DISCHARGE DOOR & LINKAGE

The discharge door frame is more rigid and less complex for dependable day-in and day-out operation.



NYLON AUGER BEARINGS

Reliable, externally mounted nylon bearings provide simple maintenance with reduced sensitivity to contamination.



4-POINT WEIGH BAR SYSTEM

Four-point weigh bar system comes standard as a cost-effective and simple weighing system, yet still maintains 99.5% accuracy.

BOTEC® BTC 155 / 163 / 172 / 190

REDEFINING COMMERCIAL QUALITY

The BTC 100 Series Botec Commercial 4-auger mixers are ideal for large dairy and feedlot operations. They provide the ultimate ration flexibility to thoroughly mix a wide range of ingredients, including high percentages of byproducts or roughages. The unique Botec design eliminates dead spots for efficient material flow and fast mixing to save you time. A lower horsepower requirement, compared to competitive models, results in less fuel consumption. Redesigned discharge options provide fast, even feedout and enhanced reliability from the upgraded auger drive.





UPGRADED TRAILERS

The BTC 100 Series mixers feature the proven bogie axle design that provides reliable service and a solid foundation to carry the mixer. Single and tandem axle options, as well as multiple tire options, allow the mixer to be set up to meet your specific needs.



FRONT IDLER BEARINGS

Ball bearings provide the durability needed to support the heavy loads and extreme duty cycles faced in large feedlot and dairy applications, and include heavy seals to prevent contamination.



4-POINT LOAD CELL SYSTEM

4-point compression type load cell system comes standard with a heavy-duty check system to ensure long life while maintaining 99.9% accuracy.

BOTEC® BTC 155 / 163 / 172 / 190

RUGGED, DEPENDABLE DRIVE

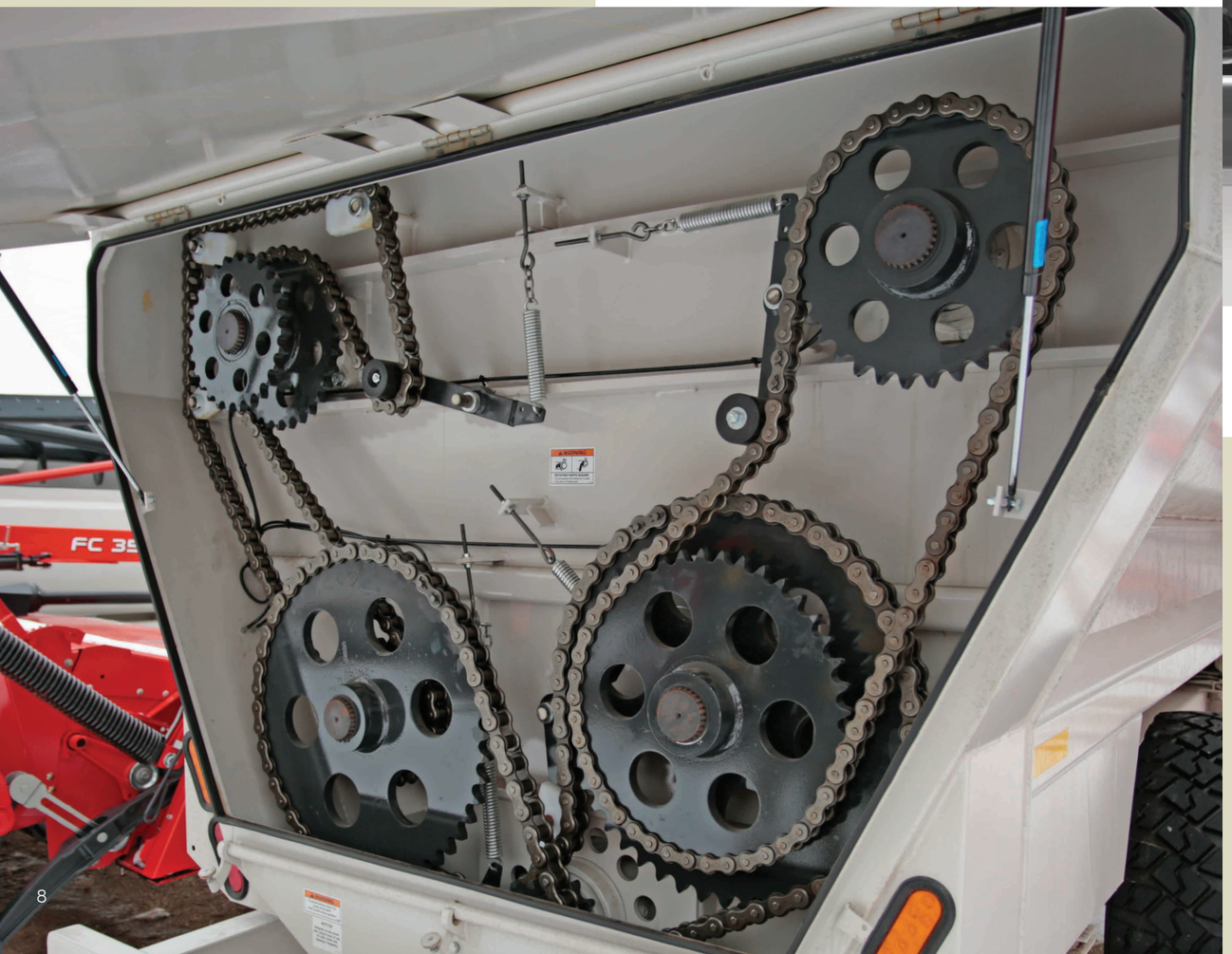
The drive on the BTC 100 Series mixers has been completely redesigned from previous generations to even better handle the torque experienced under the heaviest of commercial loads. This includes upgraded planetary gearboxes and a heavy-duty roller chain operating in a fully enclosed oil bath.

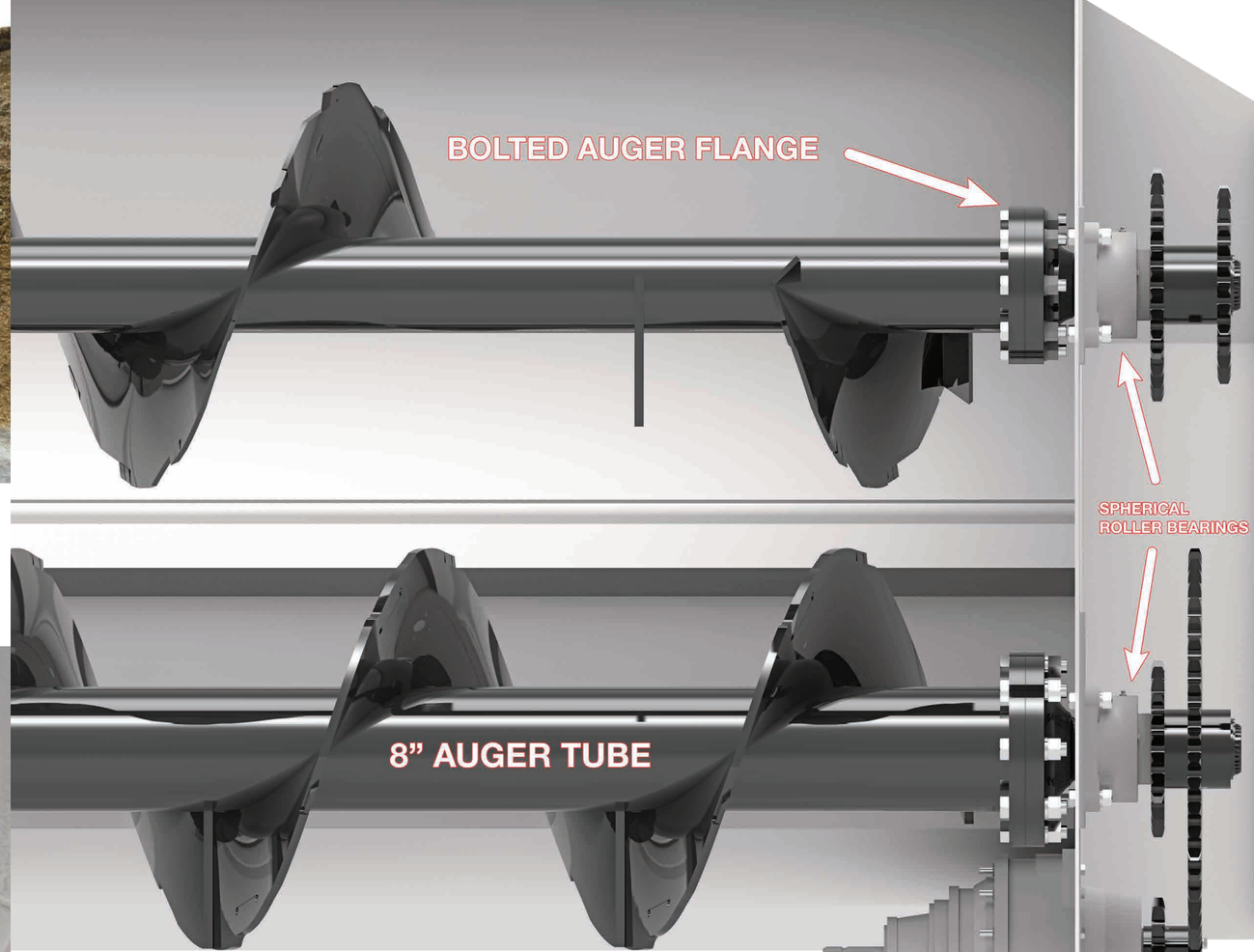
Splined shafts and sprockets, along with bolted auger flanges provide a strong connection and positive power transfer. Heavy-duty bearings are mounted on the outside of the mixing chamber for easy service and long life.



EASY ACCESS DOOR

The single-handled latch provides easy access to the oil bath. An improved seal keeps oil in, and dirt and debris out, to help minimize wear on drive components and maintain a cleaner appearance.

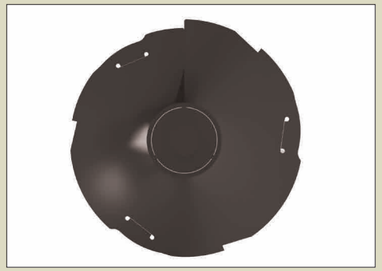




ENHANCED DRIVE SERVICEABILITY

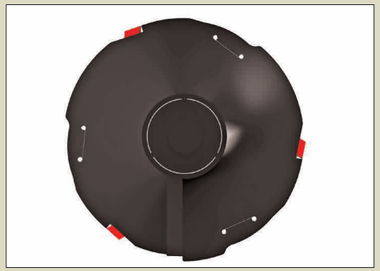
The flanged and bolted augers provide a stronger auger to drive shaft connection. Splined shafts give more positive power transfer and longer service life compared to keyed sprocket-to-shaft connections.

TAILOR YOUR MACHINE TO MEET YOUR RATION'S NEEDS



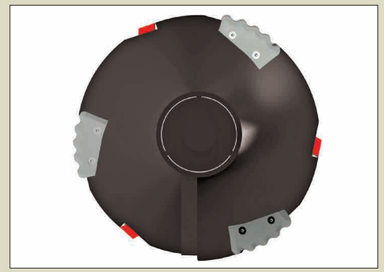
GRAIN-AUGER OPTION

The grain-auger option provides gentle handling of more delicate feeds like flaked corn to maintain ration quality and prevent fines.



ROUGHAGE-AUGER

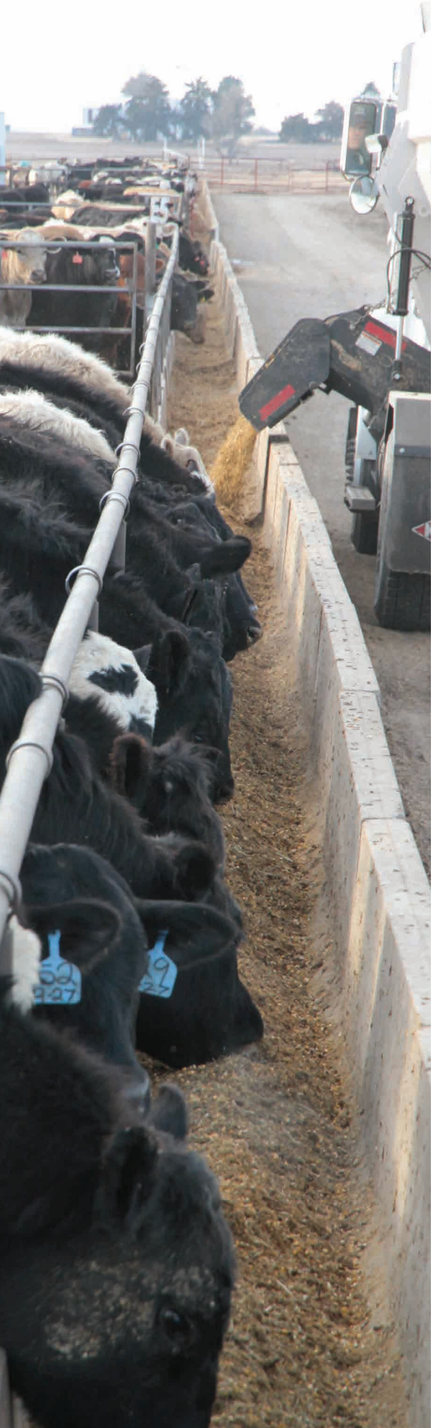
The roughage-auger option features notched, sectional flighting with welded-in, self-sharpening, hardened knives for better hay handling.



ROUGHAGE MAXX®

With the Roughage Maxx System, scalloped knives are added to the lower augers to maximize hay processing. The knives provide a more consistent particle length and more even blending of the ration.

MULTIPLE DISCHARGE OPTIONS





UNMATCHED EVENNESS OF DISCHARGE

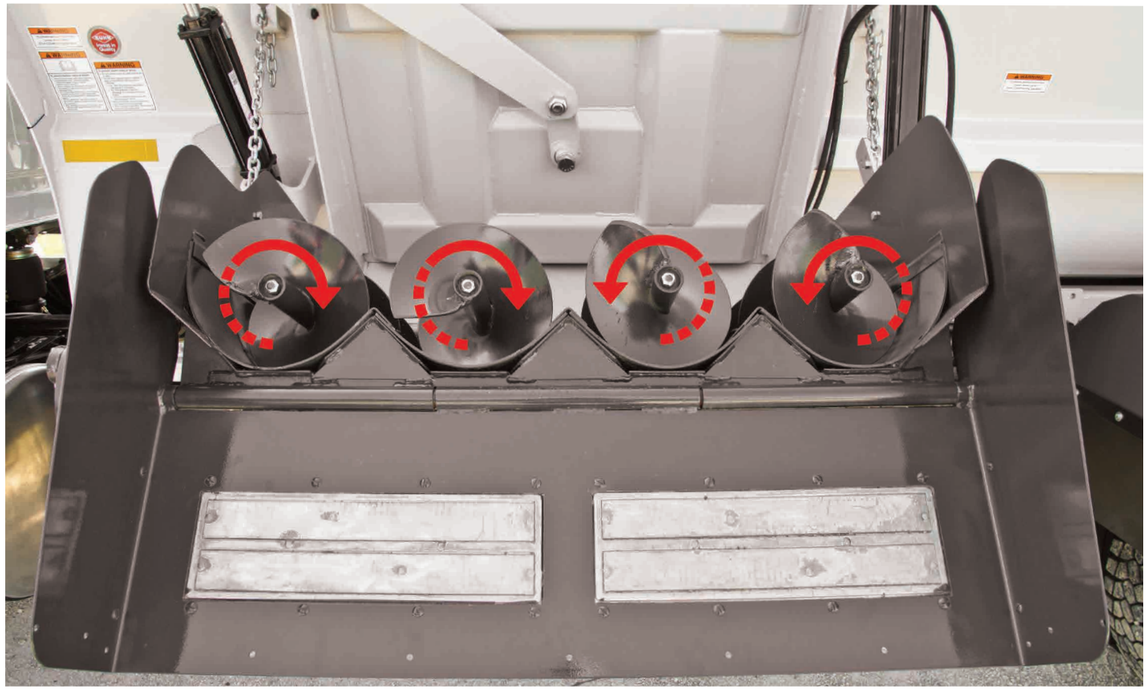
The auger discharge allows adjustment for feeding into higher bunks. It has a simple, hydraulic drive that provides smooth, even discharge and the augers are easy to remove for fast service. Long lasting poly chute liners help prevent rust and limit wear.

Slide tray & chain and slat conveyor discharge options also available on all models.



3-AUGER DISCHARGE

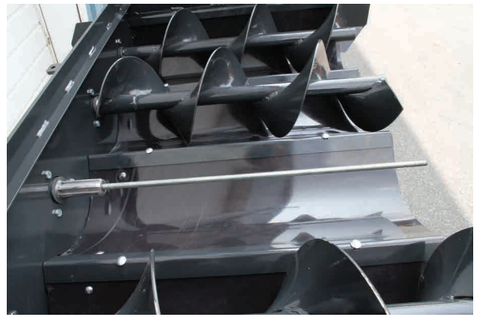
4100 Models Only.



4-AUGER DISCHARGE

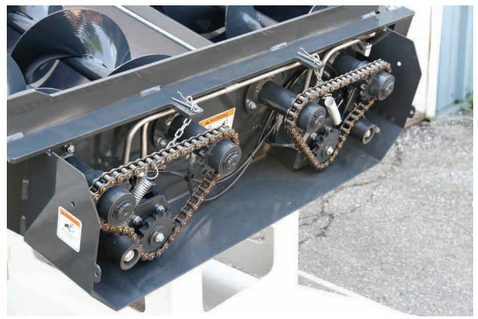
Counter-rotating augers bring the feed to the center of the discharge to increase overall capacity and provide a smooth, even discharge for all ration types.

BTC Models Only.



REMOVABLE AUGERS & POLY LINERS

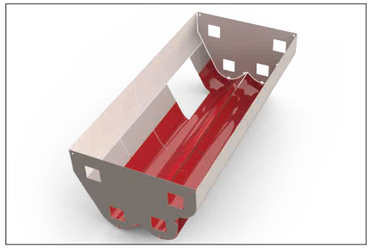
The discharge augers are simple to remove for easy serviceability. Long-lasting, replaceable polyethylene chute liners prevent rust and limit wear.



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.

ADDITIONAL OPTIONS



PARTIAL OR FULL STAINLESS STEEL LINER

The partial liner covers the most critical wear areas in the mixer and provides added protection and longer life. The full liner completely covers all of the high wear areas for unmatched dependability and long service life.



ROUGHAGE MAXX®

The Roughage Maxx System incorporates scalloped knives on the lower auger to maximize hay processing. The knives provide a more consistent particle length and more even blending. The result is a more uniform and palatable ration with reduced sorting for improved feed efficiency.



CAPACITY BELT EXTENSION

A belt extension added to the top of the mixing tub increases capacity by about 10%. It also improves hay containment, and the rubber construction is durable and pliable for long life.



SCALE SYSTEMS

Different scale brands, models and options are available for all types of operations, ranging from the very basic to high-end feed-tracking programs that use a remote scoreboard display. Optional remote indicators are available for placement that will allow easier viewing.



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.



TRUCK MOUNT OPTIONS

Kuhn North America proudly offers complete factory mounting of mixer to truck chassis. In addition, we are able to alter customer supplied truck chassis to fit your specific feeding needs through modifications in our truck shop.

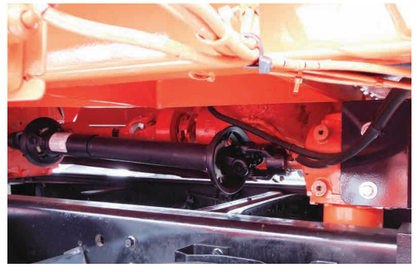


FULLY CONTAINED HYDRAULIC COMPONENTS

Hydraulic components are contained in a cabinet mounted to the side of the BTC mixers. This cabinet keeps the components clean and protected, while allowing for easy service. On hydrostatic units the oil cooler is also mounted in this cabinet, preventing buildup of debris while allowing maximum airflow.

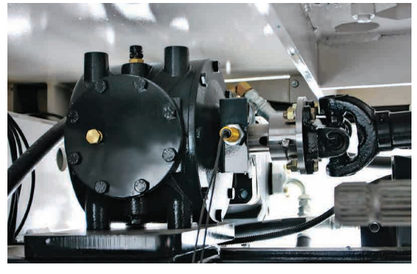


DRIVE SELECTION FOR MAXIMUM PERFORMANCE



MECHANICAL DRIVE

Due to the low horsepower requirement of the Botec design, a mechanical drive powered by a transmission PTO works well in many feeding situations, at a lower cost than alternative drive options. Mechanical drives are available in a number of different configurations, including front and mid-unit gearbox mounting in order to match up to nearly any truck chassis.



HYDROSTATIC DRIVE

In addition to mechanical drives, the BTC 100 Series is also available with a hydrostatic drive. This hydrostatic system is driven off of either a front engine (FEPTO) or rear engine (REPTO) power take-off. Driven off of the engine instead of transmission, hydrostatic drives allow for the mixer speed to be controlled independent of ground speed. The hydrostatic drives also allow for gentler mixer startup, which is especially important in larger units mixing heavier loads.

Technical Specifications

	4136 TRAILER	4136 TRUCK	4142 TRAILER	4142 TRUCK	BTC 155 TRAILER	BTC 155 TRUCK	BTC 163 TRAILER	BTC 163 TRUCK	BTC 172 TRAILER	BTC 172 TRUCK	BTC 190 TRAILER	BTC 190 TRUCK
Capacity	360 ft³ (10.2 m³)		420 ft³ (11.9 m³)		550 ft³ (15.6 m³)	550 ft³ (15.6 m³)	630 ft³ (17.8 m³)		720 ft³ (20.4 m³)		900 ft³ (25.5 m³)	
Capacity with Extensions	400 ft³ (11.3 m³)		460 ft³ (13 m³)		630 ft³ (17.8 m³)	630 ft³ (17.8 m³)	720 ft³ (20.4 m³)		810 ft³ (22.9 m³)		1,000 ft³ (28.3 m³)	
Maximum Net load	10,800 lbs (4,900 kg)		12,600 lbs (5,715 kg)		15,600 lbs (7,075 kg)	15,600 lbs (7,075 kg)	18,900 lbs (8,575 kg)		21,600 lbs (9,800 kg)		27,000 lbs (12,250 kg)	
Overall Height	98" (249 cm)	116" (295 cm)	98" (249 cm)	116" (295 cm)	Single 106" (269 cm) / Tandem -	117" (297 cm)	Single 106" (269 cm) / Tandem 114" (290 cm)	117" (297 cm)	Single 114" (290 cm) / Tandem 114" (290 cm)	125" (318 cm)	Single - / Tandem 130" (330 cm)	136" (345 cm)
Overall Height - With Extensions	–		–		Single 114" (290 cm) / Tandem -	125" (318 cm)	Single 108" (274 cm) / Tandem 116" (295 cm)	125" (318 cm)	Single 122" (310 cm) / Tandem 122" (310 cm)	133" (338 cm)	Single - / Tandem 138" (351 cm)	144" (366 cm)
Overall Length	223" (566 cm)	172" (437 cm)	246" (625 cm)	195" (495 cm)	267" (678 cm)	215" (546 cm)	291" (739 cm)	239" (607 cm)	291" (739 cm)	239" (607 cm)	295" (749 cm)	242" (615 cm)
Mixing Chamber Length	144" (366 cm)		168" (427 cm)		192" (488 cm)	192" (488 cm)	216" (549 cm)	216" (547 cm)	216" (547 cm)		216" (547 cm)	
Overall Width - Mixer Only (No Discharge)	90" (229 cm)		90" (229 cm)		96" (244 m)	96" (244 m)	96" (244 m)		96" (244 m)		101" (257 cm)	102" (259 cm)
Tread Width - Single Axle	87" (221 cm)	96" (244 cm)	87" (221 cm)	96" (244 cm)	91" (231 cm)	96" (244 m)	91" (231 cm)	96" (244 m)	91" (231 cm)	96" (244 m)	-	96" (244 m)
Tread Width - Tandem Axle					–	–	106" (269 cm)	–	106" (269 cm)	–	102" (259 cm)	–
PTO Minimum Power Requirement	60 hp (45 kW)	–	80 hp (60 kW)	–	100 hp (75 kW)	–	110 hp (82 kW)	–	120 hp (90 kW)	–	130 hp (97 kW)	–
Lower Auger Flighting Diameter	24" (61 cm)		24" (61 cm)		28" (71 cm)	28" (71 cm)	28" (71 cm)		28" (71 cm)		28" (71 cm)	
Lower Auger Tube - Outside Diameter	5 9/16" (14 cm)		5 9/16" (14 cm)		8 5/8" (22 cm)	8 5/8" (22 cm)	8 5/8" (22 cm)		8 5/8" (22 cm)		8 5/8" (22 cm)	
Lower Auger Drive Shaft Diameter	3" (7.6 cm)		3" (7.6 cm)		3 1/2" (8.9 cm)	3 1/2" (8.9 cm)	3 1/2" (8.9 cm)		3 1/2" (8.9 cm)		3 1/2" (8.9 cm)	
Lower Auger Flighting Thickness - Front / Rear	1/2" (1.3 cm)		1/2" (1.3 cm)		3/4" (1.9 cm) / 5/8" (1.6 cm)	3/4" (1.9 cm) / 5/8" (1.6 cm)	3/4" (1.9 cm) / 5/8" (1.6 cm)		3/4" (1.9 cm) / 5/8" (1.6 cm)		3/4" (1.9 cm) / 5/8" (1.6 cm)	
Upper Auger Flighting Diameter	24" (61 cm)		24" (61 cm)		28" (71 cm)	28" (71 cm)	28" (71 cm)		28" (71 cm)		28" (71 cm)	
Upper Auger Flighting Thickness	3/8" (1 cm)		3/8" (1 cm)		3/8" (1 cm)	3/8" (1 cm)	3/8" (1 cm)		3/8" (1 cm)		3/8" (1 cm)	
Upper Auger Tube - Outside Diameter	5 9/16" (14 cm)		5 9/16" (14 cm)		6 5/8" (16.8 cm)	6 5/8" (16.8 cm)	6 5/8" (16.8 cm)		6 5/8" (16.8 cm)		6 5/8" (16.8 cm)	
Upper Auger Drive Shaft Diameter	3" (7.6 cm)		3" (7.6 cm)		3 1/2" (8.9 cm)	3 1/2" (8.9 cm)	3 1/2" (8.9 cm)		3 1/2" (8.9 cm)		3 1/2" (8.9 cm)	
Lower Auger Tube - Wall Thickness	1/2" (1.3 cm)		1/2" (1.3 cm)		1/2" (1.3 cm)	1/2" (1.3 cm)	1/2" (1.3 cm)		1/2" (1.3 cm)		1/2" (1.3 cm)	
Upper Auger Tube - Wall Thickness	1/2" (1.3 cm)		1/2" (1.3 cm)		9/16" (1.4 cm)	9/16" (1.4 cm)	9/16" (1.4 cm)		9/16" (1.4 cm)		9/16" (1.4 cm)	
Roller Chain Drive	100-120		100-120		120 - 140H	120 - 140H	120 - 140H		120 - 140H		120 - 140H	
Axle Configuration	Single axle		Single axle		Single axle	Single axle	Single or tandem axle	Single or tandem axle	Single or tandem axle	Tandem axle	Tandem axle	
Hitch	Clevis	–	Clevis	–	Clevis	–	Clevis	–	Clevis	–	Clevis	–
Unit Weight	9,400 lbs (4,264 kg)	7,710 lbs (3,500 kg)	10,340 lbs (4,690 kg)	12,600 lbs (5,715 kg)	17,350 lbs (7,870 kg)	16,100 lbs (7,303 kg)	17,600 lbs (7,983 kg)	16,300 lbs (7,394 kg)	18,000 lbs (8,165 kg)	16,650 lbs (7,552 kg)	22,600 lbs (10,250 kg)	17,600 lbs (7,983 kg)
Tongue Weight- % Gross	–		–		7%	–	7%	–	7%		7%	
Weighing System	Four-Point		Four-Point		Four-Point	Four-Point	Four-Point		Four-Point		Four-Point	
Door Opening Size	31.5" x 32.25" (80 x 82 cm)		31.5" x 32.25" (80 x 82 cm)		40" x 31" (102 x 79 cm)	40" x 31" (102 x 79 cm)	40" x 31" (102 x 79 cm)		40" x 31" (102 x 79 cm)		40" x 31" (102 x 79 cm)	
Sidewall Thickness	3/16" (0.5 cm)		3/16" (0.5 cm)		Right - 1/4" (0.6 cm) Left 3/16" (0.5 cm)	Right - 1/4" (0.6 cm) Left 3/16" (0.5 cm)	Right - 1/4" (0.6 cm) Left 3/16" (0.5 cm)		Right - 1/4" (0.6 cm) Left 3/16" (0.5 cm)		Right - 1/4" (0.6 cm) Left 3/16" (0.5 cm)	
End Panel Thickness - Front and Rear	7 GA (0.5 cm)		7 GA (0.5 cm)		1/4" (0.6 cm)	1/4" (0.6 cm)	1/4" (0.6 cm)		1/4" (0.6 cm)		1/4" (0.6 cm)	
Auger Hopper Thickness	5/16" (0.8 cm)		5/16" (0.8 cm)		3/8" (0.4 cm)	3/8" (0.4 cm)	3/8" (0.4 cm)		3/8" (0.4 cm)		3/8" (0.4 cm)	
Highway Light Kit	Standard	–	Standard	–	Standard	–	Standard	–	Standard	–	Standard	–

MyKUHN

THE LINK TO MY SUCCESS

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Mixers	Complete Rations					Ration Ingredients		
Mixer Type & Model	All haylage, corn silage, concentrates	Up to 20% *dry hay, haylage, corn silage, concentrate	20%-40% *dry hay, haylage, corn silage, concentrate	Over 50% *dry hay, haylage, corn silage, concentrate	Baleage, haylage, corn silage, concentrates	Premixing of concentrates	Round bales (unprocessed)	Square bales (unprocessed)
4-Auger								
Reel								
Vertical								

*Dry hay is good-quality alfalfa hay, both small or large square bales

This chart is a general guideline. Individual rations vary for every operation and will affect your mixer choice.

Best | Good | Not Recommended

Most complete TMR mixer line on the market



1. Single-auger vertical TMR mixers 2. Twin-auger vertical TMR mixers 3. 4-auger horizontal TMR mixers 4. Reel TMR mixers

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