

Vertical TMR Mixers | 270-760 Cubic Feet

## Vertical Maxx<sup>®</sup>

5100 / VSL 200 / VT 100



[www.KuhnNorthAmerica.com](http://www.KuhnNorthAmerica.com)

**NEW**  
FROM KUHN

### VSL 200 Series

420-550 cubic foot capacities



**Invest in Quality<sup>®</sup>**

VERTICAL MAXX® TMR MIXERS 5100 / VSL 200 / VT 100

# THE VERTICAL ADVANTAGE

## QUALITY MIXING

Vertical mixers have long been known for their ability to achieve a completely uniform mix with no dead spots. Consistent processing lengths optimize rumen function and productivity. Uniform mixing and consistent processing result in a quality mix that minimizes ingredient sorting and helps ensure that the animal is getting the nutrients that it needs to excel in production.

## RATION VERSATILITY

Kuhn Knight vertical mixers offer the most versatility to process and mix the widest variety of feedstuffs. This includes round bales, square bales, baleage, forages, small grains, concentrates and other hard to handle materials.

## TIME TESTED

Kuhn Knight mixers have withstood the test of time and will continue to do the same for you and your operation. Combining years of experience with the latest technologies, Kuhn offers an exceptional line of TMR mixers.

## VERTICAL MAXX® TMR MIXERS in brief

Models	Mixing Capacity	Available Configurations	Available Door Configurations
5127	270 cu. ft.	Trailer Only	Right Side Only
5135	350 cu. ft.	Trailer Only	Right Side Only
5143	430 cu. ft.	Trailer Only	Right Side Only
VSL 242	420 cu. ft.	Trailer Only	Front, Side & Rear
VSL 250	500 cu. ft.	Trailer Only	Front, Side & Rear
VT 132	320 cu. ft.	Trailer Only	Front, Side & Rear
VT 144	440 cu. ft.	Stationary, Truck or Trailer	Front, Side & Rear
VT 156	560 cu. ft.	Truck or Trailer	Front, Side & Rear
VT 168	680 cu. ft.	Truck or Trailer	Front, Side & Rear



## CAPABLE OF HANDLING YOUR OPERATION'S WORKLOAD

With capacities ranging from 270 to 760 cubic feet, there's sure to be a Kuhn Knight mixer for you. No matter the size, all Kuhn Knight mixers come with high-quality design features giving you a strong, durable mixer that is built to last.



### RUGGED UNDERCARRIAGE

Smaller trailer models feature a heavy-duty, straight single axle. For flexibility to handle differing terrain, the larger models feature an inline tandem axle. The heavy steel framework, with rugged spindles and hubs, provides solid support and the ability to handle necessary loads.



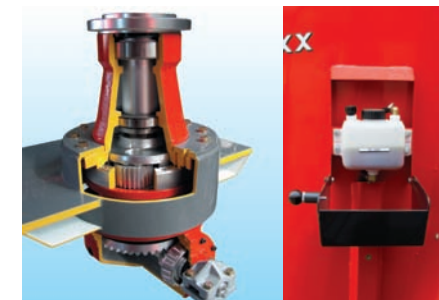
### FULLY WELDED TUB DESIGN

The completely welded body provides superior strength and durability for long life without cracking at bolted joints. The heavy-duty, reinforced floor and body help ensure dependable service and long life.



### LARGE UNLOADING DOORS

For unmatched feed flow, these mixers feature the largest discharge door available in the industry. The discharge linkage allows for rapid opening and closing of the door.



### SIMPLE, DEPENDABLE DRIVE

A planetary drive system provides simplicity for long life and heavy-duty use. The flooded top bearing eliminates the need for extra grease zerks. This proven and rugged drive system, coupled with an external oil reservoir, is virtually maintenance free with the exception of scheduled gear lube changes.



### 5-YEAR WARRANTY

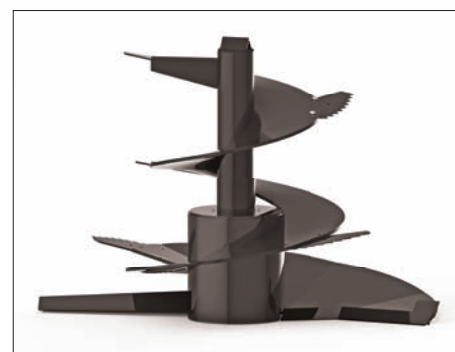
Kuhn offers a 5-year prorated warranty on planetary and 2-speed gearboxes on all vertical mixers. Kuhn also offers a 1-year warranty on all other machine components. Ask your dealer for further details.

# FASTER, MORE COMPLETE MIXING

Redesigned augers provide superior feed movement for faster, more complete mixing and processing. The cone-shaped design and angled top cover of the VSL and VT augers promote consistent material flow and improved cleanoff. Enhanced material flow also results in a lower horsepower requirement for more efficient, economical operation.



VSL Auger



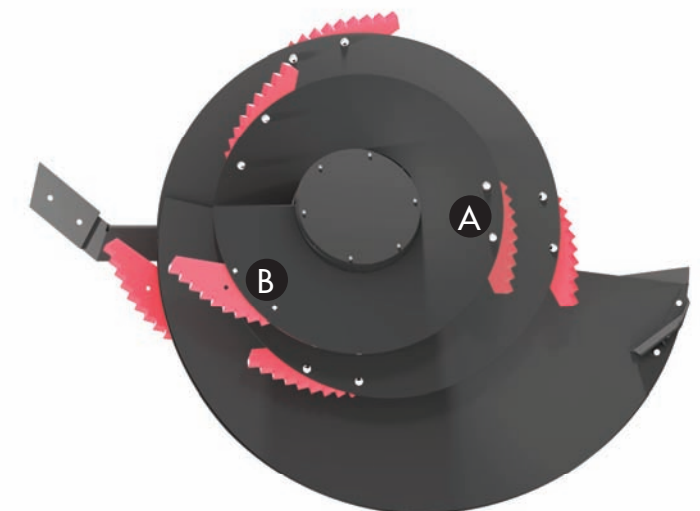
5100 Auger



VT Auger

- 1 CONTINUOUS FLIGHTING**  
Smooth, continuous flighting promotes a rolling action of the feed for more thorough mixing and lower horsepower requirements. The heavier lower flighting provides longer service life.
- 2 ADJUSTABLE, REPLACEABLE SCRAPER**  
The adjustable, replaceable lead-flighting scraper is angled to guide feed up the auger flighting for efficient movement. The scraper ensures all ingredients, even added in small amounts, are thoroughly mixed.
- 3 EFFICIENT DISCHARGE KICKER**  
The curved, bolt-on auger kicker is formed rearward to continuously charge the door with feed for even discharge and decreased unloading time.
- 4 HARDENED KNIVES**  
Large, 15" or 20", replaceable haycutting knives are available to best handle the material to be processed. The knives have two positions to adjust the aggressiveness of the knife angle. Versatility of knife length, angle and position allow for optimal setting with a wide variety of ration ingredients.

  - A** Knife set in for slicing and cutting
  - B** Knife set out for grabbing and tearing
- 5 ADJUSTABLE HAY STOPS**  
The adjustable hay stops provide flexibility in processing to provide you with the cut length necessary to reach the optimal nutritional value you're striving for. This adjustability makes hay processing more efficient and helps minimize overprocessing.

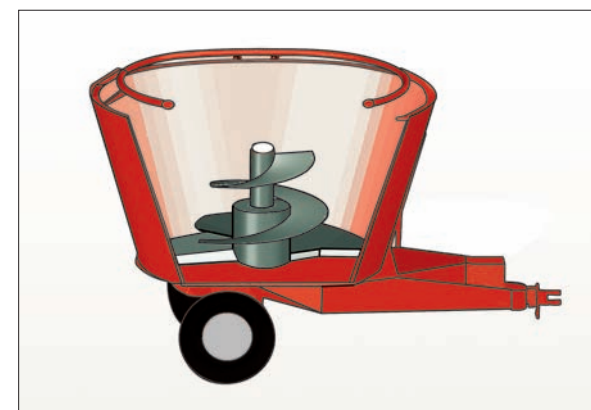




VERTICAL MAXX® 5127 / 5135 / 5143

## VERSATILE & AFFORDABLE

The Kuhn Knight 5100 Series single-auger vertical mixers are designed for small cow/calf, backgrounder and dairy operations that process and mix high percentages of hay up to 100%. These models can mix a wide variety of feedstuffs, even hard to handle round bales, large square bales and baleage.



### SINGLE-AUGER DESIGN

The freestanding, single-auger design allows for quick and efficient hay processing as well as fast, thorough cleanout.



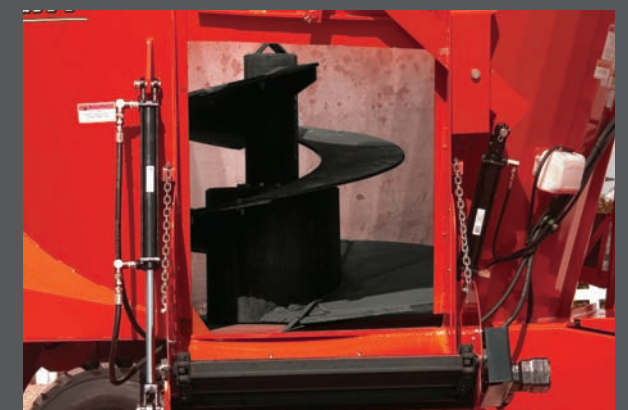
### LOW HORSEPOWER REQUIREMENT

The narrow auger design requires less horsepower.



### HIGH/LOW AXLE SETTING

The high/low axle setting provides flexibility for loading. Aircraft tires are required for the low axle setting, while skid steer tires are for the high axle position.



### INCREASED FEED FLOW

The large, right discharge opening allows for increased feed flow to save unloading time. It also helps ensure less binding in high hay rations, especially when discharging high-roughage rations.



**HEAVY-DUTY, SINGLE-AXLE TRAILER**

The single axle, dual-wheel design allows for ease of maneuverability, reduced ground pressure and overall stability. Both implement and truck tires are available.

VERTICAL MAXX® VSL 242 / 250

# REDESIGNED WITH YOU IN MIND

The new VSL 200 Series single-auger vertical mixers are designed for small- to mid-sized dairy and beef producers. Two models, with 420 and 500 cubic foot capacities, offer the versatility of front, side or rear door unloading. The low-profile VSL 200 Series is easy to load. The proven cone auger design reduces horsepower requirements, results in more efficient movement of feed and enhances final cleanoff of the auger upon loading.



**LOW-PROFILE DESIGN**

Easily loaded with a skidsteer, the low-profile design of the VSL remains a hallmark feature. Choose a VSL where low loading height or low clearance in entrances to buildings is desired.

**TWO-SPEED GEARBOX**

A shiftable, 2-speed gearbox option allows for reduced input horsepower and auger speed for easier starting and mixing, even with smaller tractors. The gearbox can be shifted manually on the machine, or with an in-cab electric shift option for operator convenience.

*Electric control shown.*

**SHEAR BOLT OVERLOAD PROTECTION**

The planetary gearbox is protected by a shear bolt from overload and torque spikes caused by foreign obstructions.

# OUTSTANDING VERSATILITY



**HEAVY-DUTY FRONT, SIDE AND REAR DOORS**

VSL 200 Series mixers feature heavily reinforced doors for tight closure and long service life. The hydraulically activated door linkage reduces the overall height of the mixer to allow clearance in barns with rafter/door limitations. It also allows for faster unloading as a result of a higher door opening height than would be possible with straight pulled doors.

# MAXIMUM MIXING EFFICIENCY

Kuhn Knight VT 100 Series, vertical twin-auger mixers feature the latest advancements in mixing technology. This series includes mid-sized models with innovative features, sleek styling and a refined finish. The optimum design of the mixing chamber and augers provide fast mixing and processing with complete cleanout. Rugged, dependable drive systems help ensure reliable service and long life. Multiple discharge options, along with the choice of truck, trailer and stationary models, provide the flexibility to match your specific needs.



## PATENTED SPLIT DRIVE

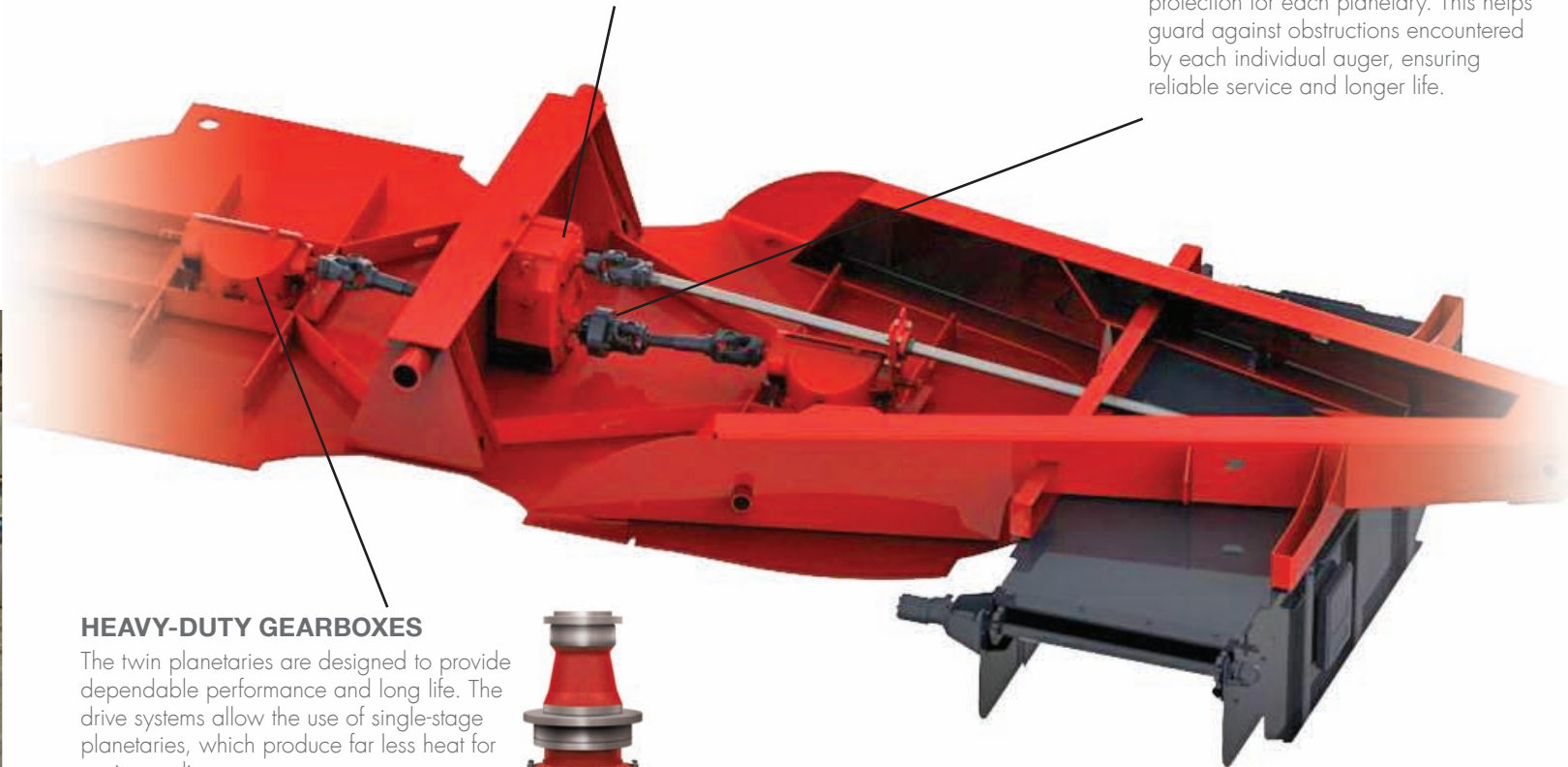
This patented drive system on the VT 156 and VT 168 models consists of a 2-speed split-drive gearbox, two planetary gearboxes and two torque-disconnect PTOs. The system provides reliable performance and long service life with a simple and quiet design.

## 2-SPEED SPLIT-DRIVE GEARBOX

The 2-speed split-drive gearbox provides the flexibility of high and low speeds without adding another gearbox. It allows for a lower horsepower and easier starting speed (28 rpm in low) while also having a high speed for fast mixing and more complete clean out (41 rpm in high).

## TORQUE-DISCONNECT PTOs

Two automatically resetting torque-disconnect PTOs provide independent protection for each planetary. This helps guard against obstructions encountered by each individual auger, ensuring reliable service and longer life.

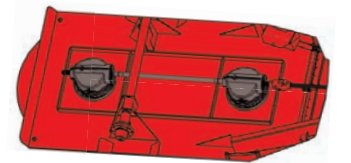


## HEAVY-DUTY GEARBOXES

The twin planetaries are designed to provide dependable performance and long life. The drive systems allow the use of single-stage planetaries, which produce far less heat for easier cooling.

## STRAIGHT DRIVE

VT 132 and VT 144 models feature a straight-drive planetary system that provides simplicity for lower torque applications.



# EFFICIENT MIXING CHAMBER

Improvements to the mixing chamber work in combination with the redesigned augers to increase feed movement. Straighter sides, smoother curves and steeper baffles help promote a fast, complete mix for a fluffy, palatable ration. No preprocessing or special loading is required for round or square bales making it easy to load and use. Faster auger speeds also provide quicker, more complete cleanout.



# TAILORED TO YOUR OPERATION

Multiple discharge configurations give you the flexibility to choose the setup that best matches your needs.



## FRONT DISCHARGE

The redesigned front cross conveyor uses rugged components for unmatched dependability. A heavy-duty steel floor along with the heaviest conveyor chain in the industry, help ensure long life and less downtime. New options provide the ultimate versatility to match most feeding situations.



## FLAT CONVEYOR

The flat front conveyor option is simple to operate and offers convenient feeding from either side of the machine on trailer models. Hydraulic side shift is standard and gives you the ability to shift the conveyor a total of 16" from side to side for accurate feed placement.

*Truck models – left discharge only, with 10" side shift.*

## INCLINE EXTENSION

The incline conveyor option is available with the choice of either right or left side unloading on trailer models. This option allows the flexibility for both floor feeding and feeding into bunks of various heights where a longer or higher reach is needed for precise feed placement.

*Truck models – left discharge only.*

## REAR DISCHARGE

A rear commodity door is available on VSL and VT models. The large opening provides fast discharge, even with high-roughage premixes. A discharge tray is included on truck models to direct material flow for clean, accurate feed placement.



## SIDE DISCHARGE

Side-discharge options are available for both truck and trailer models. Truck models offer a left-side door, while trailer models offer doors on either or both sides. The large door openings, unmatched by competition, allow fast unloading.

*VT mixers are available with both side doors, VSL mixers are one side only (right or left), 5100 Series mixers are right side only.*



## SIMPLE SLIDE TRAY

The side-discharge slide tray option has simple hydraulic controls and helps guide the feed further away from the tire path. Discharge magnets help catch metal fragments to prevent hardware.

## RUGGED SIDE CONVEYORS

The optional side conveyors provide the ultimate in durability and long life. Heavy-duty components ensure reliable service, even in extreme use conditions. Multiple conveyor length options offer unmatched flexibility to tailor the discharge to your needs.



## 8' BELT CONVEYOR

An optional 8' belt conveyor can be added for easy placement of feed at varying heights including the filling of mobile feed carts. The belt offers quiet operation and consistent feed flow.

*Available on VT 156/168 models only.*



# OPTIONAL EQUIPMENT



### HAY-RETENTION RING

The steel hay-retention ring helps contain large round bales during processing and reduces hay spillage more effectively compared to similar options on competitive models.



### 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.



### VIEWING PLATFORM OR LADDER

All models feature a standard observation ladder to easily view the inside of the mixing chamber. Front door trailer models also offer an optional viewing platform for a convenient, comfortable place to check mixing progress.

*Platform available on VT Models Only*



### TIP-OFF WITH MAGNETS

A fixed tip-off with magnets can be added to both the flat and inclined front conveyors, as well as the side conveyor options. The magnets work to catch small metal fragments present in the feed and help prevent hardware.



### HANGING BELT WITH MAGNETS

Either or both ends of the flat conveyor can be fitted with a hanging belt with magnets to catch small metal fragments. The hanging belt also helps to even feed flow off the end of the conveyor.

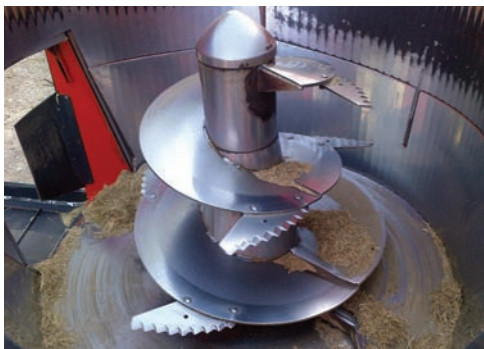
*VSL and VT Front Conveyor Models Only*



### MULTIPLE SHIFTING OPTIONS

The gearbox can be shifted manually on the machine or with an in-cab electric shift option for operator convenience.

*VSL and VT Models Only*



### HIGH-WEAR AUGER

The DuraMix™ hardened auger flights provides enhanced wear resistance and longer auger life in the toughest conditions. The flights are made of high-carbon steel throughout with hardened outer edges for unmatched durability.

*VT 156/168 Models Only*



### STAINLESS STEEL LINER

A stainless steel liner provides extra protection in the lower part of the chamber where most wear occurs. Stainless steel baffle liners are also available.

*VT Models Only*



### SCALE SYSTEMS

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



## GENUINE KUHN PARTS

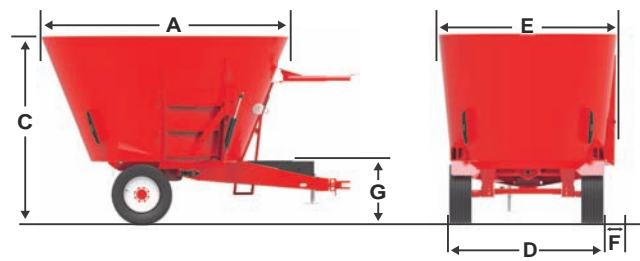
No part better fits a Kuhn machine than an original Kuhn part

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 North America 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.

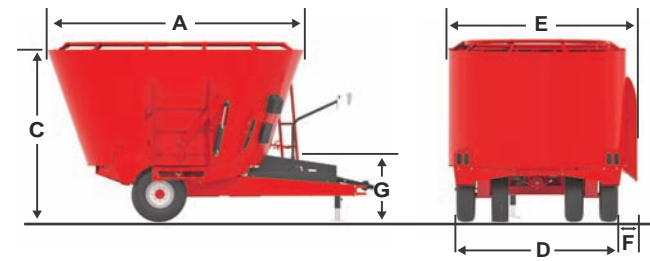


INVEST IN QUALITY®

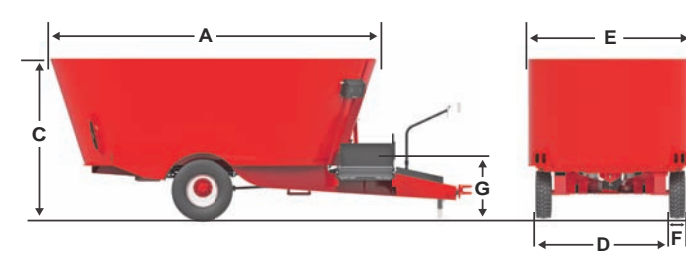




5100 SERIES



VSL 200 SERIES



VT 100 SERIES



Model Specifications

	5127	5135	5143	VSL 242	VSL 250	VT 132	VT 144	VT 156	VT 168		
	Trailer			Trailer	Trailer	Trailer	Truck	Trailer	Truck	Trailer	Truck
<b>DIMENSIONS (Inches)</b>											
A – Overall Length (Front/Side)	164"	174"	178"	214"/194"	218"/198"	235"/210"	238"/212"	188"/181"	284"/253"		
B – Mixing Chamber Length	120"	140"	148"	151"	159"	164"	169"			219"	
C – Overall Height <sup>1</sup>											
– Tire Option Used <sup>2</sup>	30X11.5X14.5/33X15.5X16.5			12.5X16		33X15.5X16.5	385-65 R22.5	–	385-65 R22.5	–	385-65 R22.5
– No Extensions (High/Low Axle Position)	91"/95"	101"/105"	113"/117"	–							
– No Extensions (Front/Side)	–			98"/95"	108"/105"	90"	101"	124"	102"	102"/119"	110"/127"
– Extensions (High/Low Axle Position)	97"/101"	107"/111"	118"/122"	–							
– Extensions (Front/Side)	–			104"/101"	114"/111"	96"	107"	130"	108"	108"/125"	116"/133"
D – Tread Width <sup>2</sup>	82"/88"			100"		88"	96"	–	–	104"	–
E – Overall Width <sup>1</sup> (Front/Side)	100"			113"/117"		88"	92"	92"	–	104"	–
F – Max Discharge Reach – Front Cross Conveyor – Flat	–			10"		8"		–	–	8"	–
F – Max Discharge Reach – Front Cross Conveyor – Incline – 36°/48°	–			29°/39°		20°/31°		–	–	20°/31°	–
F – Max Discharge Reach – Side Conveyor – 24°/36°/48°/60°/72°	36°/44°/55°/62°/N/A			40°/50°/60°/69°/79°		20°/31°/41°/50°/62°		–	–	22°/33°/43°/52°/64°	–
F – Max Discharge Reach – Side Slide Tray	25"			24"		8"		–	–	8"	–
G – Max Discharge Height – Front Cross Conveyor – Flat	–			28"		26"		–	–	26"	–
G – Max Discharge Height – Front Cross Conveyor – Incline – 36°/48°	–			48°/55°		39°/45°		–	–	42°/48°	–
G – Max Discharge Height – Side Conveyor – 24°/36°/48°/60°/72°	38°/43°/48°/53°/N/A			33°/40°/46°/53°/60°		27°/33°/39°/45°/52°		–	–	29°/35°/41°/47°/54°	–
G – Max Discharge Height – Side Slide Tray	14"			14"		13"		–	–	16"	–
<b>SPECIFICATIONS</b>											
Unit Weight <sup>3</sup>											
Front Discharge	–			9,700 lbs	10,200 lbs	9,900 lbs	10,500 lbs	–	10,000 lbs	13,300 lbs	12,200 lbs
Side Discharge	5,100 lbs	5,700 lbs	6,180 lbs	8,400 lbs	8,900 lbs	9,100 lbs	9,700 lbs	10,000 lbs	12,200 lbs	11,300 lbs	13,900 lbs
Maximum Net Load	6,750 lbs	8,750 lbs	10,750 lbs	14,100 lbs	16,500 lbs	10,800 lbs	14,850 lbs	18,900 lbs	22,800 lbs		
Cubic Foot Mixing Capacity											
– Without Extensions	270 cu.ft.	350 cu.ft.	430 cu.ft.	420 cu.ft.	500 cu.ft.	320 cu.ft.	440 cu.ft.	560 cu.ft.	680 cu.ft.		
– With Extensions	310 cu.ft.	400 cu.ft.	480 cu.ft.	470 cu.ft.	550 cu.ft.	360 cu.ft.	495 cu.ft.	630 cu.ft.	760 cu.ft.		
Augers											
– Number	1			1		2		2			
– Diameter	86"			108"		69"		86"			
– Speed (rpm)	36			41 (1 Speed)/41/27 (2 Speed)		41		20/28		41/27	
– Upper Flighting Thickness	1/2"			5/8"		1/2"		1/2"		1/2"	
– Lower Flighting Thickness	5/8"			5/8"		5/8"		5/8"		5/8"	
– Knives - Adjustable (Standard/Maximum)	3/5	4/7	5/8	5/6	6/7	6/10	8/12	10/14			
Door Opening Size (Width x Height)											
– Front	–			42" X 37"		36" X 40"		–		42" X 40"	
– Side	36" X 39"			35" X 36"		36" X 40"		36" X 40"		42" X 40"	
– Rear	–			42" X 37"		–		36" X 40"		42" X 40"	
Drive											
– Planetary	Yes			Yes		Planetary/Straight		Planetary/Split-Drive		Planetary/Split-Drive	
– PTO Drive	540 rpm			540/1,000 rpm		540 rpm		Mechanical		1,750 rpm	1000 rpm
– Protection	Shear-Bolt			Shear-Bolt		Shear-Bolt		Torque-Disconnect		1000 rpm	Mech or Hydro
Tub and Trailer Construction											
– Floor Thickness	1/2"			5/8"		1/2"		5/8"			
– Sidewall Thickness	3/16"			1/4"		1/4"		1/4"			
– Trailer	Single-Axle			Inline Tandem		Single-Axle		–		Single	–
– Scale System	3-Point			4-Point		3-Point		4-Point		3-Point	4-Point
Tractor Requirement – PTO <sup>4</sup>	50 hp	75 hp	90 hp	90 hp	100 hp	75 hp	90 hp	–	90 hp	110 hp	–

<sup>1</sup> Truck dimensions based on 41" truck frame height. <sup>2</sup> Heights and widths based on tire size listed. <sup>3</sup> Unit is equipped with most common options. <sup>4</sup> Horsepower requirement may vary with different materials. Consult operator's manual for proper tractor sizing.

# COMPLEMENTARY PRODUCTS

## MORE PRODUCTS TO MEET YOUR NEEDS

With over 690 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.



1. Mowers
2. Tedders
3. Round Balers
4. Bale Processors
5. Manure Spreaders
6. Primary Tillage Systems

For more information about your nearest Kuhn Knight dealer and other Kuhn Knight products, visit our website

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Visit our YouTube channel to watch our latest product videos.



[www.KuhnNorthAmerica.com](http://www.KuhnNorthAmerica.com)

Your Kuhn Knight dealer

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Our machines comply with the North American safety regulations. In our leaflets, to better illustrate certain details of the machines some safety devices could have been removed. Conforming to the assembly and operator's manual, in no circumstances must machine be operated without these safety devices in place. All machines are equipped with safety devices which comply with the regulations of the countries in which they are delivered. In the interest of progress, we reserve the right to change without notice any specifications, design or materials listed. Patents filed in several countries.

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