

VT

Vertical Maxx[®]

Twin-Auger TMR Mixers



320 – 1100 Cubic Feet



WORLD-WIDE LEADER IN TMR MIXERS



VT 100 SERIES

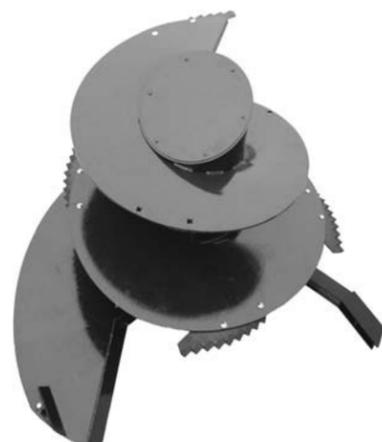
High-Quality Features

VT 100 SERIES

The new Kuhn Knight VT 100 Series, vertical twin-auger mixers are the latest advancement in mixing technology with innovative features, sleek styling and a refined finish. Four new mid-sized models have been added to the lineup, following the success of the previously introduced larger machines, for a complete line to serve any size operation. Improvements to the mixing chamber and redesigned augers provide quicker mixing and processing with more 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 each customer's specific needs.

Fastest, Most Complete Mixing!

In a crowded field with many competitors, the VT 100 Series mixers set the new standard, with the fastest, most complete mixing of any machine in its class. Vertical mixers have long been known for their ability to handle the widest variety of ingredients. These machines now combine this versatility with an evolution in mixing performance to help ensure a consistent, high-quality mix with every batch.



VT 180 – VT 1100 Auger



Substance and Style

The fully-welded body provides superior strength and durability for long life without worry of cracking at bolted joints. The updated tub design has smoother curves for better feed movement, and enhanced styling completes the ideal combination of form and function.

Rugged Undercarriages

Smaller trailer models feature a heavy-duty, straight single axle, while the larger sizes offer the options of an inline tandem axle or a walking-tandem bogie axle for flexibility to handle differing terrain. The heavy steel framework with rugged spindles and hubs provides solid support and the ability to navigate rough ground.

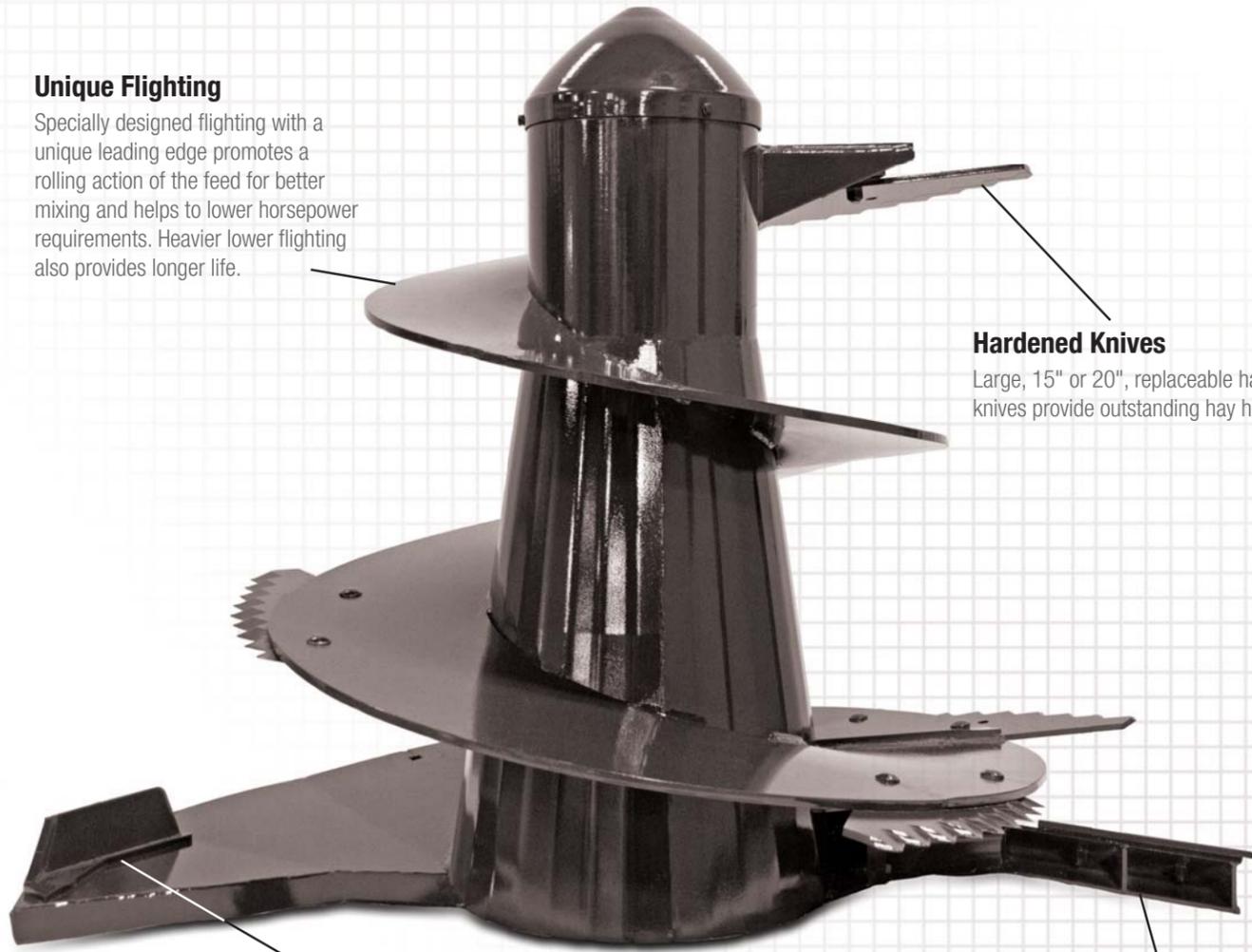


ADVANCED AUGER DESIGN

Redesigned augers provide superior feed movement for faster, more complete mixing and processing. The cone-shaped design of the augers in the VT 132 – VT 168 and the angled top cover of the VT 180 and VT 1100 augers promote consistent material flow and improve clean off. Enhanced material flow also results in a lower horsepower requirement for more efficient, economical operation.

Unique Flighting

Specially designed flighting with a unique leading edge promotes a rolling action of the feed for better mixing and helps to lower horsepower requirements. Heavier lower flighting also provides longer life.



VT 132 – VT 168 Auger

Hardened Knives

Large, 15" or 20", replaceable hay-cutting knives provide outstanding hay handling.



Adjustable, Replaceable Scrapers

The adjustable, replaceable lead-flighting scraper is angled to guide feed up the auger flighting for efficient movement.

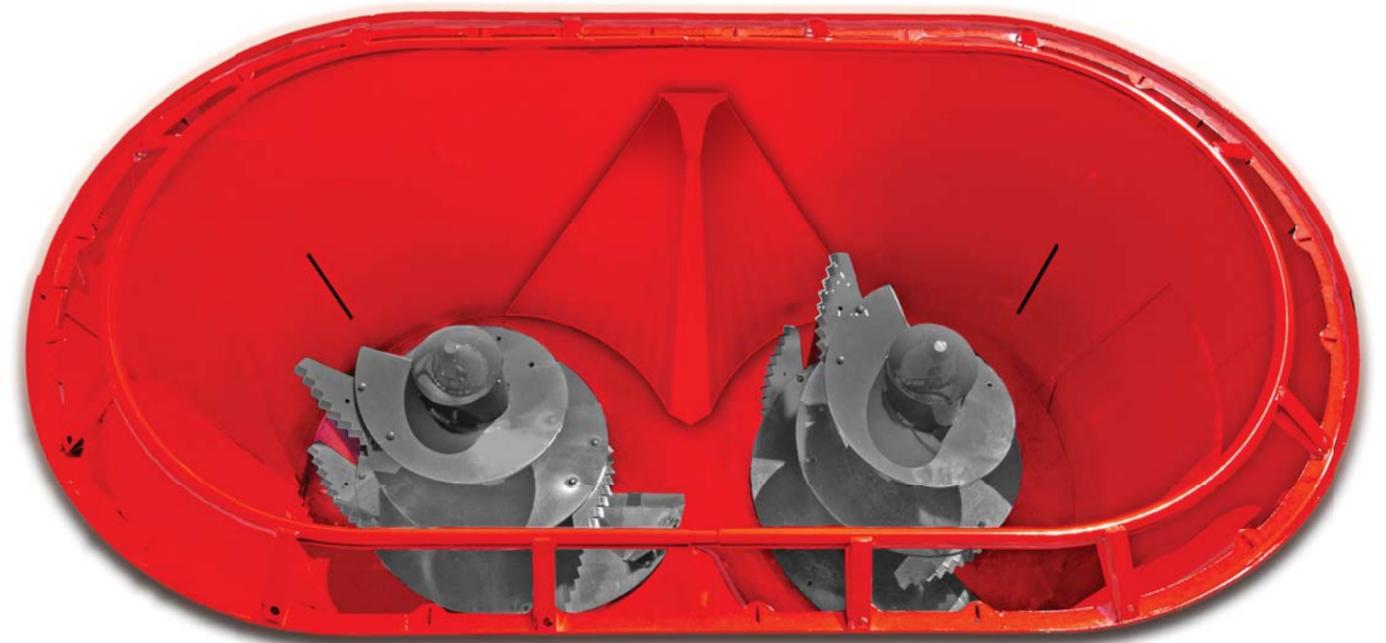


Efficient Discharge Kicker

The curved, bolt-on auger kicker is formed rearward to efficiently charge the door with feed the entire way on each pass for even discharge and decreased unloading time.

EFFICIENT MIXING CHAMBER

Improvements to the mixing chamber work in coordination with the redesigned augers to increase feed movement. Straighter sides, smoother curves on the ends, baffles and doors, as well as steeper baffles help promote a fast, complete mix and a fluffy, palatable ration. Faster auger speeds also provide quicker, more complete cleanout.



Steeper Baffles

Steeper baffles allow for greater feed exchange from the top of the chamber to the bottom, resulting in a quick, thorough mix without dead spots.

Rugged, Durable Floor

The thick, one-piece floor has significantly more bracing than competitive models providing a solid structure for years of trouble-free service.

Stainless Steel Liner

An optional stainless steel liner provides extra protection in the lower part of the chamber, where most wear occurs. Optional stainless steel baffle liners are also available.



VT 100 SERIES

Simple, Dependable Drives

Patented Split Drive

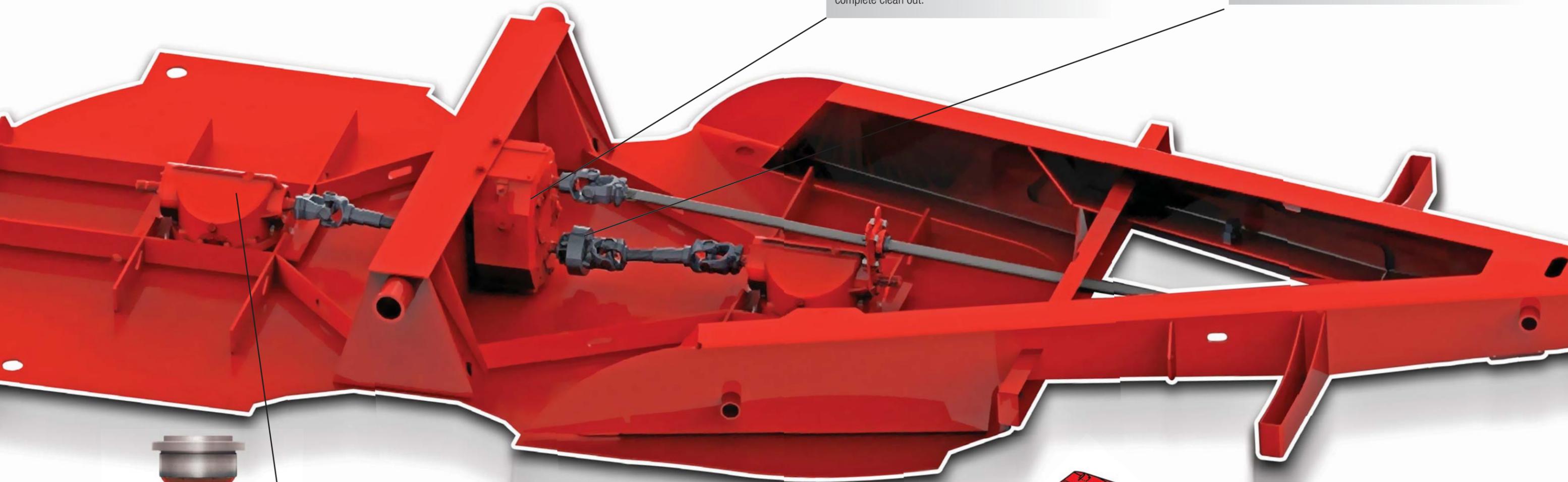
This patented drive system on the VT 156 – VT 1100 models consists of a 2-speed splitter gearbox, two planetary gearboxes and two torque-disconnect PTOs. The system provides reliable performance and long service life with a simple and quiet design.

2-Speed Split-Drive Gearbox

The 2-speed splitter gearbox provides the flexibility of high and low speeds without adding another gearbox. It allows the operator to shift between lower horsepower and faster mixing options, and the high speed also offers faster, more complete clean out.

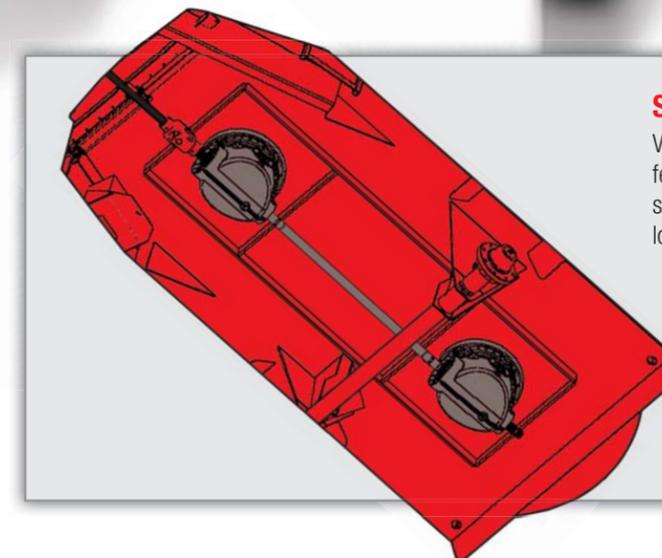
Torque-Disconnect PTOs

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. The high speed has been increased to 41 rpm for superb cleanout.



Straight Drive

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



FRONT DISCHARGE

The redesigned front cross conveyor uses rugged components for unmatched dependability. A heavy-duty steel floor on the VT 132 – VT 168 and stainless steel floor on the VT 180 and VT 1100, along with the heaviest conveyor chain in the industry, help ensure long life and less down time. New options provide the ultimate in 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 allows 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 static 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)



SIDE DISCHARGE

Side-discharge options are now 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 openings allow fast unloading with comparable feed flow out of one door that many competitive machines get with two.



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 promote herd health.



Rugged Side Conveyors

The optional side conveyors have been redesigned and strengthened to 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 best match varied needs.



REAR DISCHARGE

A rear commodity door is available on VT 144 – VT 1100 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.





CUSTOMIZED OPTIONS



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.



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 promote herd health.



Hanging Belt with Magnets

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

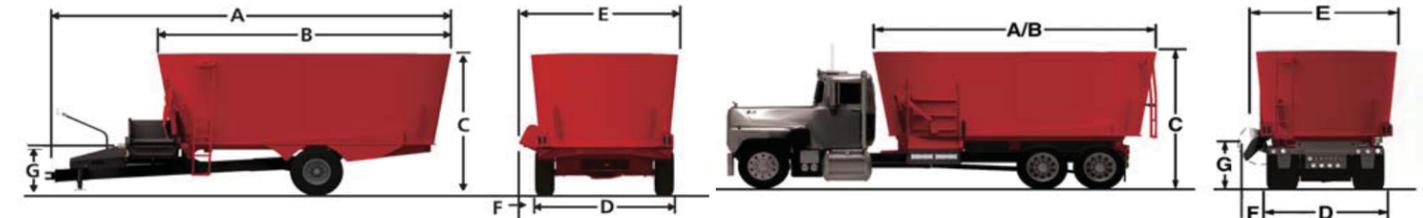


Viewing Platform

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

MODEL SPECIFICATIONS

For truck chassis information on mounting Vertical Maxx mixers, or for stationary specifications, call or see your dealer or visit our Web site at www.KuhnNorthAmerica.com



TRAILER -TR TRUCK -TK

MODEL	VT 132	VT 144	
DIMENSIONS (INCHES) ¹	TR	TR	TK ¹
A - Overall Length - front door / side door	235 / 210	238 / 212	NA / 212
B - Mixing Chamber Length	164	169	
C - Overall Height ^{1,2}			
- Tire Option Used ²	33 x 15.5 x 16.5	385-65 R-22.5	NA
- Base Machine	90	101	124
- 6" Belt Extensions	96	107	130
- Hay Retention Ring	95	106	129
D - Tread Width ²	88	96	98
E - Transport Width - front conveyor / side conveyor	88 / 106	92 / 108	NA / 112
F - Max Discharge Reach			
- Front Cross Conveyor - flat	8		NA
- Front Cross Conveyor - incline - 36° / 48°	20 / 31		NA
- Side Conveyor - 24° / 36° / 48° / 60° / 72°	20 / 31 / 41 / 50 / 62		17 / 28 / 38 / 48 / 58
- Side Slide Tray	8		8
G - Max Discharge Height			
- Front Cross Conveyor - flat	26		NA
- Front Cross Conveyor - incline - 36° / 48°	39 / 45		NA
- Side Conveyor - 24° / 36° / 48° / 60° / 72°	27 / 33 / 39 / 45 / 52		50 / 56 / 62 / 68 / 74
- Side Slide Tray	13		33

SPECIFICATIONS

Mixing Capacity ³			
- Cubic Feet - no extensions	320	440	
- Cubic Feet - extensions	360	495	
Unit Weight ⁴ - front discharge - pounds	9,900	10,500	NA
Unit Weight ⁴ - side discharge - pounds	9,100	9,700	8,800
Maximum Net Load - pounds	10,800	14,850	
Augers			
- Number		2	
- Diameter		69"	
- RPM		41	
- Upper Flighting Thickness		1/2"	
- Lower Flighting Thickness		5/8"	
- Knives - adjustable - per auger	3	4	
Drive			
- Planetary		straight-drive	
- PTO Drive	540 RPM		mechanical
- Protection		shear-bolt	
Discharge			
- Door Opening			
- Front	36" x 40"		NA
- Side		36" x 40"	
- Rear	NA	36" x 40"	
- Conveyor Width - front / side	30" / 36"		NA / 36"
- Front Cross Conveyor Travel - left or right	8"		NA
Tube and Trailer Construction			
- Floor Thickness		1/2"	
- Sidewall Thickness		1/4"	
- Trailer or Subframe	single-axle		NA
- Spindle Diameter	2 1/8"		NA
- Scale System	3-point		4-point
Tongue Weight - % gross	10%	13%	NA
Tractor Requirement - PTO HP ⁵	75	90	NA

¹ Contact the factory for truck mount dimensions.

² Heights and widths vary depending on tire size.

³ Model number reflects capacity without extensions.

⁴ Unit equipped with most common options.

⁵ PTO horsepower requirement may vary with different materials. Consult operator's manual for proper tractor sizing.

We reserve the right to change any equipment specifications, design, or materials without notice. These mixers are designed for agricultural use only with materials estimated up to 30 lbs. per cubic foot. Contact factory for non-agricultural use or heavier materials. US and foreign patents filed.



Always read and understand the Operator's Manual and all Safety Decals before using the equipment.

MODEL SPECIFICATIONS

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TRAILER -TR TRUCK-TK¹

MODEL	VT 156		VT 168		VT 180		VT 1100	
	TR	TK	TR	TK	TR	TK	TR	TK
DIMENSIONS (INCHES)¹								
A - Overall Length - front door / side door	284 / 253	243 / 215	284 / 253	247 / 219	328 / 295	262 / 234	330 / 297	264 / 239
B - Mixing Chamber Length	215		219		234		239	
C - Overall Height ^{1,2}								
- Tire Option Used ²	385-65 R-22.5	NA						
- Base Machine ³	102	119	110	127	107 / 110	119	122 / 125	134
- Belt Extensions ³	108	125	116	133	115 / 118	127	130 / 133	142
- Hay Retention Ring ³	108	124	116	132	113 / 116	125	128 / 131	140
D - Tread Width ²	104	98	104	98	105	98	105	98
E - Transport Width - front flat-flat / side door slide tray	106 / 108	102 / 102	106 / 108	102 / 104	116 / 120	116 / 120	118 / 122	118 / 122
F - Max Discharge Reach								
- Front Cross Conveyor - flat	8		8		8	10	8	10
- Front Cross Conveyor - incline - 24° / 36° / 48°	NA / 20 / 31	NA / 23 / 33	NA / 20 / 31	NA / 22 / 33	17 / 28 / NA	19 / 28 / NA	17 / 28 / NA	19 / 28 / NA
- Side Conveyor - 24° / 36° / 48° / 60° / 72°	22/33/43/52/64	25/36/46/55/67	22/33/43/52/64	25/36/46/55/67	31/42/52/61/73	35/46/56/65/77	31/42/52/61/73	35/46/56/65/77
- Side Slide Tray	8	14	8	14	17	21	17	21
- Side Belt Extension	NA	NA	NA	NA	6	6	6	6
G - Max Discharge Height								
- Front Cross Conveyor - flat	26	45	26	45	42	50	42	50
- Front Cross Conveyor - incline - 24° / 36° / 48°	NA / 42 / 48	NA / 60 / 66	NA / 42 / 48	NA / 60 / 66	50 / 55 / NA	60 / 65 / NA	50 / 55 / NA	60 / 65 / NA
- Side Conveyor - 24° / 36° / 48° / 60° / 72°	29/35/41/47/54	46/52/58/64/70	29/35/41/47/54	46/52/58/64/70	32/38/44/50/57	43/49/55/61/68	32/38/44/50/57	43/49/55/61/68
- Side Slide Tray	16	32	16	32	19	30	19	30
- Side Belt Extension	NA	NA	NA	NA	42	50	42	50

SPECIFICATIONS

Mixing Capacity ⁴	560		680		800		1000	
- Cubic Feet - no extensions	560		680		800		1000	
- Cubic Feet - extensions	630		760		880		1100	
Unit Weight ⁵ - front discharge - pounds	13,300	12,200	13,900	12,800	21,000	17,900	23,100	20,000
Unit Weight ⁵ - side discharge - pounds	12,200	11,300	12,900	11,900	20,000	16,900	22,100	19,000
Maximum Net Load - pounds	18,900		22,800		26,400		33,000	
Augers								
- Number					2			
- Diameter			86				104	
- RPM - standard / high speed	27 / 41	27 / 41	27 / 41	27 / 41	27 / 41		25 / 38	
- Upper Flighting Thickness			1 1/2"				5 7/8"	
- Lower Flighting Thickness			5 5/8"				3 3/4"	
- Knives - adjustable - per auger					5			
Drive					split-drive			
- Planetary								
- PTO Drive	1000 rpm	Mech. or hydro	1000 rpm	Mech. or hydro	1000 rpm	Hydro	1000 rpm	Hydro
- Protection					torque-disconnect			
Discharge								
- Door Opening								
- Front	42" x 40"						48" x 40"	
- Side	42" x 40"						42" x 40"	
- Rear	42" x 40"						48" x 40"	
- Conveyor Width - front / side	36" / 44"						36" / 44"	
- Front Cross Conveyor Travel - left or right	8"	8" (left only)	8"	8" (left only)	8"	10" (left only)	8"	10" (left only)
Tub and Trailer Construction								
- Floor Thickness	5 7/8"				3 3/4"			
- Sidewall Thickness			1 1/4"					
- Trailer or Subframe	single-axle	NA	single-axle	NA	tandem-axle	NA	tandem-axle	NA
- Spindle Diameter	3 3/4"	NA	3 3/4"	NA	4 1/2"	NA	4 1/2"	NA
- Scale System	3-point	4-point	3-point		4-point			
Tongue Weight - % gross	10%	NA	12%	NA	10%	NA	10%	NA
Tractor Requirement - PTO HP ⁶	110	NA	120	NA	140	NA	150	NA

¹ Truck mount dimensions based on 41" truck frame height.

² Heights and widths vary depending on tire size.

³ For VT 180 and VT 1100 trailer models, heights shown are for inline tandem / oscillating tandem undercarriage options.

⁴ Model number reflects capacity without extensions.

⁵ Unit equipped with most common options.

⁶ PTO horsepower requirement may vary with different materials.

Consult operator's manual for proper tractor sizing.

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SAFETY FIRST

Always read and understand the Operator's Manual and all Safety Decals before using the equipment.

YOUR KUHN KNIGHT DEALER

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