

Vertical Beater Spreaders



TURFOLINE

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Consistent Metering, Consistent Spread.

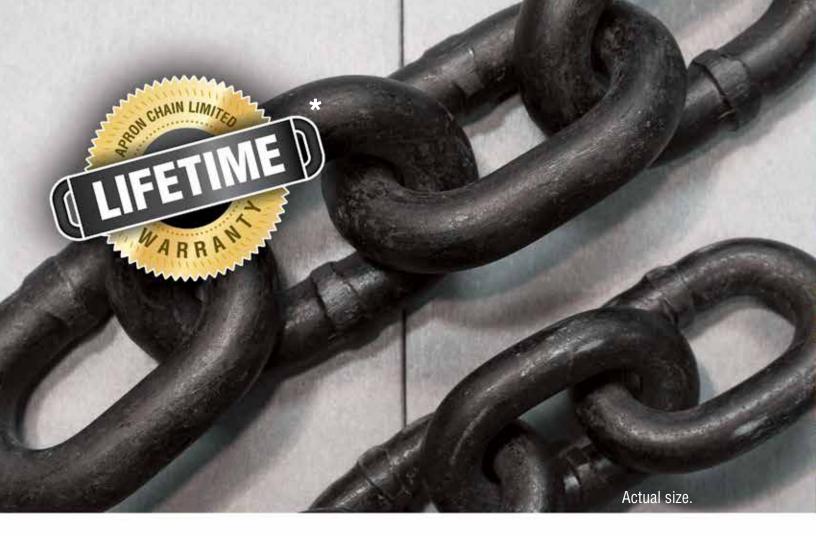
The NITRO spreader from Tubeline originally started with the 450, 600, and 750 models followed by the 950 model shortly after the initial product launch. Developed with features to ensure commercial readiness these spreaders offer slip slide poly board floors and walls, a guillotine endgate, reversible apron chain, and quick drop beaters. Engineered for commercial use, our commercial line are all scale ready. The guillotine endgate can be held in any position controling how much material is able to be moved to the beaters by the variable speed apron chain. This method of delivery provides consistent metering whether working with pen pack or semi-solids.

Responding to market demand the NITRO Rancher Series was developed to ensure smaller operations get the same metering in a format tailored to them. NITRO RS spreaders are ideal for farmers trying to keep their yards clean while delivering rich nutrients to the field. Removeable beater assemblies provide increased value and functionality, allowing the NITRO to operate as a rear discharge trailer with a live floor when not spreading.

Tubeline NITRO spreaders feature a wide variety of features, options, and models to unleash the potential of your operation.

Standard Features	Rancher Series	Commercial Series
Carrying Capacity Range	10 - 15 Ton	13 - 25 Ton
Heaped (cu. ft.)	290 - 555	453 - 950
Struck Level (cu. ft.)	220 - 407	316 - 740
Floor	3/4" Poly board	1" Poly board
Sides	10 Ga	3/4" Poly board
Axles	Single or Tandem	Single or Tandem
3 Position Axle	NA	Yes (Adj.)
Suspension Tongue	NA	Available Option
Scales	NA	Scale Ready
Stone Guard	Narrow	Wide







Hydraulic-Driven Apron Chain

The variable speed apron chain ensures that your load is delivered to the beaters at the right speed regardless of the manure consistency. This provides accurate control when metering, application speed, and thickness.

The NITRO is equipped with a fully reversible apron drive. This allows the load to be backed away from the beater assembly should foreign objects such as rocks get inbetween the beaters and jam them.



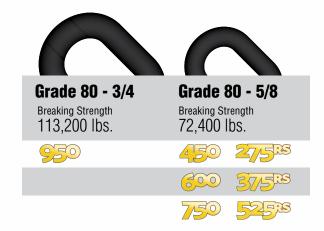
Apron Chain

The brute strength of the NITRO's apron chain system sets it apart. Truly heavy-duty, the chain and sprocket are designed to move heavy manure day after day without chain breaks.



Galvanized Slats

Apron slats are attached to the chain using a heavy tab and slot design. This free floating design minimizes stress on the joints.



^{*} See page 14 for details



Functional Versatility

All NITRO spreaders are designed to provide incredible versatility throughout the year. The NITRO is not only a capable spreader, but can be easily converted to a self unloading trailer when the beater assembly is removed.

Tubeline's Quick-Drop Beater System provides producers and custom operators an adaptive tool ideal for the transportation and processing of bulk materials.

Designed with an integrated guillotine endgate, the NITRO retains it's box even with the beaters removed leaving behind a fully functional self unloading trailer with a hydraulic endgate and live floor.

The NITRO can be used to stockpile in the field throughout the year. This keeps your barnyard clean and places valuable nutrients close at hand when its time to spread.

When harvest time comes, the NITRO can be used to haul forage from the field to the pit. Open the endgate in front of the pit and run the apron to unload quickly.

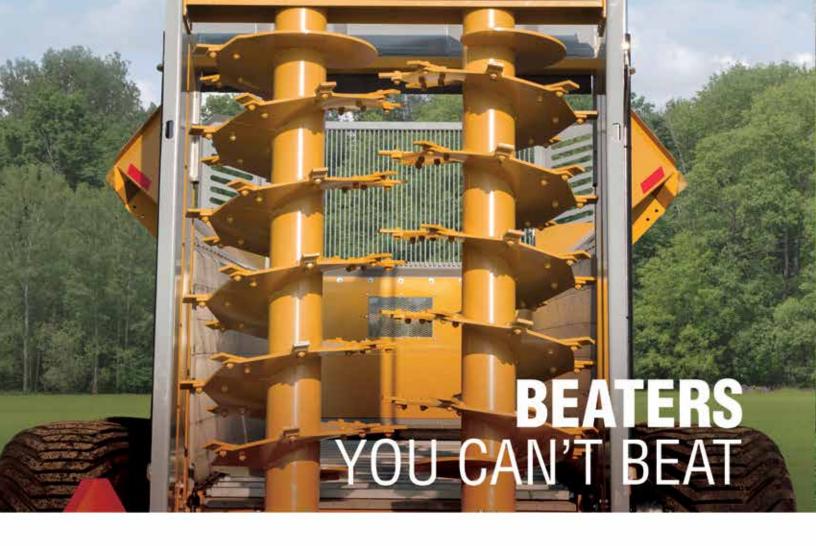
Beater Removal

Remove a beater assembly in 4 steps.

- 1. Remove the rear most PTO drive shaft from the spreader.
- 2. Connect chains from a front end loader to the lift points on the beater assembly.
- 3. Remove the retaining bolts connecting the beaters to the box.
- 4. Using the loader lift the assembly from the rear of the spreader.

Note: Always remember to store your beater assemblies safely to prevent harm and/or damage.

5





Replaceable Reversible Knives

Every NITRO model is equipped with durable AR400 knives. Each knife can be easily flipped for longer life or replaced when required.



Beater Wedge

275RS, 375RS, 525RS, 450, and 600 Models

A standard feature on 275RS, 375RS, 525RS, 450, and 600 models (not required on other models), the beater wedge helps to ensure manure is delivered to the beaters preventing large clumps from falling off the back of the unit.



Robust and Dynamically Balanced

The NITRO beaters are dynamically balanced ensuring minimal flex and vibration when running the beaters at full speed.



Paddle Kit

Optional

The optional bolt on paddle kit cups material to provide additional throw.

Driveline Protection *Standard on all models*

To protect expensive drive line components, NITRO spreaders are equipped with both an over running clutch and a torque limiter. The over running clutch allows the beaters to freewheel after the tractors PTO drive is shut down. This prevents hard stops reducing the wear on both the NITRO and your tractor.

To prevent damage to beater assemblies, a torque limiter connects the rear PTO shaft and the beater assembly. The torque limiter disengages the driveline from the beaters should the pressure build.



Poultry Litter Beater Assembly Option

For better management and spreading performance of poultry litter, NITRO spreaders can be equipped with an optional poultry litter beater assembly. The interchangeable quickdrop beater system allows operators to conveniently switch between the vertical or poultry beater assemblies offering flexibility to both producers and custom operators.



Designed to maximize distribution while metering the flow of material, the poultry beater assembly utilizes a complete gear box drive system that drives both the horizontal beaters and spinners together to ensure consistent unloading.



Dual Horizontal Beaters

The NITRO Poultry Litter Beater assembly comes equipped with two horizontal beaters to ensure a consistent amount of material is fed to the spinners.



Dual Spinners

High speed spinners hold material accelerating it to maximize the spread.



Drop-On Adjustment

The lower portion of the apron is adjustable allowing material to drop across more of the spinner for better distribution of material.





Guillotine Endgate

The guillotine endgate can be opened partially to meter the amount of material being delivered to the beater assembly. This ensures the optimal delivery of lime and various manure consistencies to the field.



LED Lights

Optional

LED lights and flashers ensure transit safety. Innovative light covers hydraulically open and close in sequence with the end gate, ensuring lights are protected while spreading.



Slip Slide Poly Boards

Poly Board Walls available only on 450, 600, 750 & 950 Models

To resist corrosion, the Nitro box integrates slip slide poly boards on the floors of RS models, and the Floors and walls of commercial models. All poly boards are secured with stainless steel hardware.



Central Grease Banks

Standard on 450, 600, 750, and 950 Models

Centrally located grease banks ensure easy lubrication of components located in hard to reach areas.



Industrial Jack

The strong, industrial jack, is easy to use and makes unhitching safer.



CV Shaft

Select Nitro models come equipped with a CV (Constant Velocity) Shaft allowing for a tighter turning radius.





Rubber Cushion Tongue

Optional on 450, 600, and 750 Models Standard on 950 Model

The rubber cushion suspension tongue provides operator comfort and reduces mechanical stress and fatigue of both the spreader and the tractor.



Optional Colours

Optional

In addition to the standard yellow, the NITRO lineup is available in red, green, blue and orange.



Silage Extensions

Optional on 750 and 950 Models

The NITRO 750 and 950 can easily double as a silage hauler, with the addition of optional height-extenders.

Note: Not for use with manure.



Rubber Seal Kit

Optional

The Rubber Seal Kit adds a compression seal to the front panel and the endgate to help contain semi solid materials.



Oscillating Ball Hitch

Optional

Optional on all models is the oscillating ball hitch available in various pin sizes.

THE WHEEL DEAL





High Load Bearings

The walking tandem axle pivot bearings on the Commercial Series use high load composite bearings with embedded lubricant. This eliminates the need to grease them during maintenance.



Axle Choices

Tubeline axle and tire combinations distribute the load evenly to reduce ground compaction. Our tandem axles minimize the effects of rough terrain and bumps in the road.



Brakes

Optional

When equipped with a brake system, all NITRO spreaders come with two calipers per side for a total of four. Hydraulically operated, these calipers provide the necessary clamping force to keep even our monstrous NITRO 950 in line.

Single axle shown. Braking configurations may vary with model. All models are brake ready.



Single Axle

Available on 275RS, 450, 600, and 750 Models only



Available on all NITRO models





425 x 22.5 (16 x 22.5)

550/45 - 22.5

700/50 - 26.5

750/60 - 30.5

480/70 R30

600/65 R34

710/70-38

710/70-42

For model applications please see pages 12-16. Tires are shown for approximate scale reference actual tire profile may vary.



GT 400

- Backlit LCD single line display
- External record storage option
- External printer option
- · Short field names with basic entry
- Displays weight with Start-Stop Loading, Field and Zero functions

NT 460 (with AutoLog[™])

- AutoLog[™]
- Indicator displays actual tons/acres
- View and react to tons/acre reading by speeding up or slowing down
- View/Edit 26 character field names
- View/Edit the 6 character ID
- Software to create custom reports
- Calculating the nutrient value of your manure is easy with scales on your spreader.

NT 8000i

- Complete system provides automatic and prescription based control and complete as-applied records
- Application rate control proportional to forward speed
- Automatically adjusts for variations in product density
- Easily change application rate on the go
- Data-logging options through the integral SD card or USB stick.



Optional Digi-Star® Scale System



The optional Digi-Star® 5pt 60,000 lb. differential weigh beam system is available on all Nitro models. Four of the load cells are located under the box and the fifth cell is placed on the hitch.

Accounting for environmental protection, the Digi-Star® scale system lets you know how many tons you've hauled and spread on your fields, perfect for both farmers and custom operators.

Digi-Star and AutoLog are registered trademarks of DigiStar LLC





Specifications	NITRO 275RS
Carrying Capacity	10 Ton
Heaped (cu. ft.)	293
Struck Level (cu. ft.)	220
Inside Dimensions (Inside width between flare 89")	62.5"W x 34.5"D x 143"L
Overall Length	23.5'
Overall Outside Width (Single Axle)	118"
Overall Outside Width (Tandem Axle)	117"
Loading Height (Single Axle)	69"
Loading Height (Tandem Axle)	69"

Specifications	NITRO 275RS
Wheel Hub Capacity (Tandem Axle)	12,000lbs (8-bolt) x4
Tandem Tire Sizes	425/22.5 Recap Truck Tires or 550/45-22.5 Floatation Tires
Wheel Hub Capacity (Single Axle)	16,000lbs (10-bolt) x2
Single Tire Sizes	425/22.5 Recap Truck Tires or 550/45-22.5 Floatation Tires or 480/70-30 Tractor Lug Tire
Beater Diameter	34"
Beater Speed	420 RPM
PTO Speed	1000 RPM
Apron Chain Link Dia.	5/8"
Shipping Weight	8,800lbs.
Required Tractor PTO HP	80
Brakes Available	Yes





Specifications	NITRO 375RS	NITRO 525RS
Carrying Capacity	12 Ton	15 Ton
Heaped (cu. ft.)	410	555
Struck Level (cu. ft.)	281	407
Inside Dimensions (Inside width between flare 89")	62.5"W x 34.5"D x 175"L	62.5"W x 45.5"D x 218"L
Overall Length	25'	27.5'
Overall Outside Width (Single Axle)	Call for availability	Call for availability
Overall Outside Width (Tandem Axle)	115"	116"
Loading Height (Single Axle)	Call for availability	Call for availability
Loading Height (Tandem Axle)	75"	80"

Specifications	NITRO 375RS	NITRO 525RS
Wheel Hub Capacity (Tandem Axle)	12,000lbs (8-bolt) x4	12,000lbs (8-bolt) x4
Tandem Tire Sizes	425/22.5 Recap Truck Tires or 550/45-22.5 Floatation Tires	425/22.5 Recap Truck Tires or 550/45-22.5 Floatation Tires or 700/50-26.5 Floatation Tires
Wheel Hub Capacity (Single Axle)	Call for availability	Call for availability
Single Tire Sizes	Call for availability	Call for availability
Beater Diameter	34"	34"
Beater Speed	420 RPM	420 RPM
PTO Speed	1000 RPM	1000 RPM
Apron Chain Link Dia.	5/8"	5/8"
Shipping Weight	9,139lbs.	11,000lbs.
Required Tractor PTO HP	90	125
Brakes Available	Yes	Yes

Note: Specifications are subject to change without notice. Capacities determined by ASAE Std S324.1









Specifications	NITRO 450	NITRO 600
Carrying Capacity	13 Ton	17 Ton
Heaped (cu. ft.)	453	593
Struck Level (cu. ft.)	316	436
Inside Dimensions (Inside width between flare 102.5")	62"W x 40"D x 201"L	62"W x 50"D x 227"L
Overall Length	27'	29.5'
Overall Outside Width (Single Axle)	115"	131"
Overall Outside Width (Tandem Axle)	116"	131"
Loading Height (Single Axle)	77"	90"
Loading Height (Tandem Axle)	79" (550/45-22.5) 77" (425/22.5 recap truck)	85" (550/45-22.5) 92" (700/50-26.5) 87" (425/22.5 recap truck)

Specifications	NITRO 450	NITRO 600
Wheel Hub Capacity (Tandem Axle)	12,000lbs (8 bolt) x4	16,000lbs (10 bolt) x4
Tandem Tire Sizes	550/45-22.5 or 425/22.5 recap truck	550/45-22.5, 700/50-26.5 or 425/22.5 recap truck
Wheel Hub Capacity (Single Axle)	16,000lbs (10 bolt) x2	20,000lbs (10 bolt) x2
Single Tire Sizes	600/65-34	710/70-38
Beater Diameter	34"	34"
Beater Speed	420 RPM	420 RPM
PTO Speed	1000 RPM	1000 RPM
Apron Chain Link Dia.	5/8"	5/8"
Shipping Weight	11,355lbs	13,930lbs
Required Tractor PTO HP	125+	150+
Brakes Available	Yes	Yes



Under the **Apron Chain Limited Lifetime Warranty**, Tubeline will replace a broken apron chain or connecting link on any NITRO model manure spreader. Apron Chain Limited Lifetime Warranties are non-transferable.

For more information contact Tubeline Manufacturing.









Specifications	NITRO 750	NITRO 950
Carrying Capacity	20 Ton	25 Ton
Heaped (cu. ft.) (with Optional Silage Extension)	791 1,033	950 1,220
Struck Level (cu. ft.) (with Optional Silage Extension)	602 832	740 997
Inside Dimensions (Inside width between flare 102.5")	67"W x 58"D x 252"L	67"W x 58"D x 297"L
Overall Length	32.5'	35.25'
Overall Outside Width (Single Axle)	136"	N/A
Overall Outside Width (Tandem Axle)	136"	142"
Loading Height (Single Axle) (with Optional Silage Extension)	100" 116"	N/A N/A
Loading Height (Tandem Axle) (with Optional Silage Extension)	102" 118"	109" 125"

Specifications	NITRO 750	NITRO 950
Wheel Hub Capacity (Tandem Axle)	16,000lbs (10 bolt) x4	20,000lbs (10 bolt) x4
Tandem Tire Sizes	700/50-26.5	750/60-30.5 Floatation Tires or 750/60-30.5 Floatation Tires (Radial)
Wheel Hub Capacity (Single Axle)	20,000lbs (10 bolt) x2	N/A
Single Tire Sizes	710/70-42	N/A
Beater Diameter	36"	36"
Beater Speed	420 RPM	420 RPM
PTO Speed	1000 RPM	1000 RPM
Apron Chain Link Dia.	5/8"	3/4"
Shipping Weight	16,195lbs	19,890lbs
Required Tractor PTO HP	180+	200+
Brakes Available	Yes	Yes

Note: Specifications are subject to change without notice. Capacities determined by ASAE Std S324.1

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