

Infrastructure Solutions Group Inc.

www.InfraSolutionsGroup.com

Phone: (804) 833-8048 **Fax:** (804) 730-4242



Quote From:

ISG, Inc
8383 Old Richfood Road
Mechanicsville, VA 23116

Quote To:

NCSA

Prepared by:Pete Kurz

Atten: VSA

Product ID	Description	Quantity	Unit Price
Salt Sprader	FSH Salt/Sand Spreader	1	\$12,261.00



FSH™

Heavy-duty Precision Spreaders to Match Any Need or Budget

The legendary Henderson FSH sand and salt spreader is now available in three versions. The FSH-I, II and III, each having subtle differences to better meet customer needs and varying specification requirements.

The core features of the FSH are retained "across the board" on all three models: rugged construction, controlled delivery of material to the road surface and low maintenance design. All models come in a wide variety of

sizes to accommodate length, height and capacity requirements.

The FSH can be powered hydraulically, using an electric motor or through the use of a stand alone diesel engine. Multiple control, conveyor and pre-wet options are also available.

Henderson has a heavy-duty spreader that's perfect for any operation or budget. The FSH; built to perform.



- Inside seams are continuously welded for extreme duty. Sides and ends are 10-gauge and floor is 7-gauge steel.
- Top edge of hopper is a formed "J" channel for added rigidity and strength.
- Conveyor is 24" wide, all steel pintle-type chain. The FSH-I and II have 1/4" x 1-1/2" crossbars while the FSH-III has 3/8" x 1-1/2" crossbars. Crossbars are spaced on 4-1/2" centers. Sprockets are cast iron and are keyed to the drive and idler shafts to prevent slippage and maintain chain alignment.
- Conveyor chain is protected by a formed 10-gauge shield in the FSH-I and II. A replaceable bolt-in shield is standard on the FSH-III and optional on the FSH-II.
- Two 5/8" stainless steel chain adjusters with 4" of idler adjustment provide optimum chain tension.
- **OPTIONAL** - single or dual augers for reduced maintenance and a consistent material flow.
- **OPTIONAL** - conveyor gearbox has thru-shaft for electronic control system speed sensor hook-up.
- **OPTIONAL** - 3/4 hp electric motor and high efficiency helical bevel gearbox. Multiple control options available.
- The hydraulic or electric motor is mounted directly to the gear case to eliminate sprockets, chains and couplers for reduced maintenance.
- The telescopic chute assembly is 10-gauge steel and is totally enclosed with two internal adjustable baffles. Three external adjustable deflectors and one front fixed deflector with overlapping corners also contribute to accurate control of material spread pattern. A quick latching bypass chute diverts material behind the spinner chute for fast unloading.
- The 20" dia. spinner disk with replaceable hub and six (6) vanes are constructed of 10-gauge stainless steel. Poly disk is optional.
- All surfaces are high-pressure cleaned and degreased with a phosphate solution before being primed and finish painted with Highway Orange paint.

The Dependable Ones™

HEAVY-DUTY SALT & SAND V-BOX SPREADER

FSH DIMENSIONS & CAPACITY CHART

LENGTH	CUBIC YARD CAPACITY (struck)			WEIGHTS (Approx.)			TRUCK CHASSIS
	SIDE HEIGHT			SIDE HEIGHT			
	48" or 50"	54" or 56"	60" or 62"	50"	56"	62"	
8'	4.5	5.5	6.5	1760	1845	1930	60" CA
9'	5.1	6.2	7.4	1905	1995	2085	72" CA
10'	5.6	6.9	8.3	2070	2166	2262	84" CA
11'	6.2	7.6	9.0	2225	2327	2429	96" CA
12'	6.8	8.4	9.9	2380	2488	2596	108" CA
13'	7.3	9.0	10.7	2535	2649	2763	96" CT
14'	7.9	9.7	11.6	2690	2810	2930	108" CT
15'	8.4	10.3	12.2	2845	2971	3097	120" CT
16'	8.9	11.0	13.0	3001	3132	3264	132" CT

FEATURE	FSH-I	FSH-II	FSH-III
Lengths	8' - 16'	8' - 16'	8' - 16'
Outside Width	84"	84"	84"
Overall Height	48", 54", 60" or 66"	50", 56", 62" or 68"	50", 56", 62" or 68"
Conveyor Style	<ul style="list-style-type: none"> 6-tooth sprockets 1-1/2" dia. drive shaft with roller bearings Pintle type conveyor chain with 1/4" x 1-1/2" crossbars on 4-1/2" centers 	<ul style="list-style-type: none"> 8-tooth sprockets 1-1/2" dia. drive shaft with roller bearings Pintle type conveyor chain with 1/4" x 1-1/2" crossbars on 4-1/2" centers 	<ul style="list-style-type: none"> 8-tooth sprockets 2" dia. drive shaft with roller bearings Pintle type conveyor chain with 3/8" x 1-1/2" crossbars on 4-1/2" centers
Idler Type	<ul style="list-style-type: none"> 1-1/4" dia. shaft with roller bearings 4" idler adjustment spring loaded optional 	<ul style="list-style-type: none"> 1-1/2" dia. shaft with roller bearings 4" spring loaded idler adjustment 	<ul style="list-style-type: none"> 2" dia. shaft with roller bearings 4" spring loaded idler adjustment
Conveyor Gearbox Drive	50:1 worm gear 25:1 worm gear	50:1 worm gear 25:1 worm gear	6:1 spur gearbox 50:1 or 25:1 worm gear Electric - high efficiency helical bevel
Chain Shields	Standard: formed	Standard: formed Option: bolt-in (replaceable)	Standard: bolt-in (replaceable)

BODY

Sides, ends and side supports are of 10-gauge steel and are continuous-seam welded from the inside. Side slope is 45° with front slope at 18° and rear slope at 9°. Floor is replaceable 7-gauge steel. Longsills are 7-gauge steel continuous-seam welded to the sides on mild steel units. Top edge of hopper is formed "J" channel, 1-5/8" x 3/4". Feedgate is 10-gauge 10" x 18", screwjack adjustable from curb side. Download pressure is reduced by an adjustable inverted vee (optional) to reduce material compaction.

CONVEYOR

Rear discharge pintle chain conveyor is 24" wide. Chain tension adjusting rod is 5/8" stainless steel. Idler adjustment is 4" and spring-loaded.

SPINNER CHUTE ASSEMBLY

Completely enclosed telescopic design is of 10-gauge steel. Top-mounted hydraulic spinner motor is enclosed in the chute to maximize material flow to the spinner disk, improving spread pattern. It is mounted directly to the spinner for elimination of shaft and bearings. Two (2) internal baffles direct material flow onto the spinner disk for directional spread control.

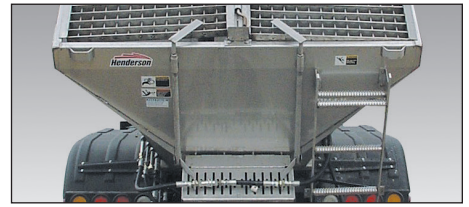
Three (3) external adjustable deflectors and one front fixed deflector with overlapping corners contribute to precise control of material spread pattern. The adjustable spinner deflectors are easily replaceable without tools for easy servicing. A quick latching spreader bypass chute diverts material behind the spinner chute for fast unloading. Spinner disk is 20" dia., 10-gauge steel with replaceable hub. Six (6) 10-gauge stainless steel vanes are bolt-on and replaceable.

PAINT

All metal surfaces are high pressure cleaned with a phosphate solution to remove slag, spatter, oxide and oil residue. The entire body is primed with high quality catalyzed primer and then finished with Highway Orange grade enamel. The 201 & 304 stainless steel units are unpainted.

CONTROL VALVE - OPTIONAL

Speed of conveyor and spinner motors is controlled by a dual pressure compensated control valve with a relief pre-set at 1,500 PSI. Valve has twelve (12) detent settings for each circuit and an independent on/off valve to allow start/stop without changing application rate.

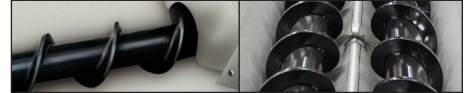


SAFETY INTERLOCK

Required with optional single or dual augers. For safety, auger motors must be disabled before operator can open top grate screens.

OPTIONS

- 201 or 304 stainless
- Top grate screens
- Inverted vee
- Extended front idler adjusters
- Extended front idler grease tubes
- Hold down kits
- 18 HP engine group
- Rubber side spill shields
- Roller chain
- Chain oiler
- Cab shields
- Spacer bars
- Ladders
- Bumpers
- Centerline diverter chute
- Catwalks and frame mount kit
- Side tubes and rear hoses
- Short hose kit with quick couplers
- Automatic control systems
- Tilt-Up Spinner Chute
- Conveyor motor sensor
- 20" poly spinner disk
- Tailgate trunnion latch
- Spinner chute extension
- Quick couplers
- Body guides



OPTIONAL SINGLE AUGER CONVEYOR

Seven-inch (7") auger conveyor provides a more even flow than a standard chain conveyor with less maintenance. A patented safety interlock feature helps prevent personal injury from the auger.

OPTIONAL DUAL AUGER CONVEYOR

Two counter-rotating augers create a smooth spread, breaking up clumps and prevents bridging of material. Auger shafts utilize a polyurethane bushing at both ends of each auger to eliminate seizing and ensure ease of maintenance.

COMPLETE MUNICIPAL SNOW & ICE CONTROL SOLUTIONS

PLOWS • WINGS • UNDERBODY SCRAPERS • SAND & SALT SPREADERS • STANDARD & PRECISION SPINNERS • DUMP BODIES • COMBINATION (MUNICIPAL) BODIES
BRINE PRODUCTION & MANAGEMENT SYSTEMS • ANTI-ICE SYSTEMS • PRE-WET SYSTEMS • SLURRY SYSTEMS • COMPLETE TURNKEY PACKAGES



© Henderson Products, Inc., A division of Douglas Dynamics, L.L.C., reserves the right in pursuit of continuous product improvement to change specifications used herein. As a custom manufacturer of truck bodies, truck equipment and brine systems, additional product options may be available that are not shown here.



1085 S. Third Street, Manchester, IA 52057
Toll Free: (800) 359-4970
www.HendersonProducts.com

Sourcewell 
CONTRACT: 080818-HPI



HP-072 01/22