

North Dakota Department of Transportation
REQUEST FOR BID

NDDOT Contract # 50152288

Bid Number: 765-66-15-050	Bid Opening Date & Time: 11/19/2015 02:00 PM
Items: Hopper Spreader, Sand and Chemical	Buyer: Vanessa Brosten
Bid Mailing Address: 608 East Boulevard Avenue	Telephone Number: 701-328-4466
City, State, Zip: Bismarck, North Dakota, 58505-0700	Email: vbrosten@nd.gov
Contract Period: 11/19/2015 TO 11/30/2016	Date Prepared: 11/05/2015

Please submit your bid response on the attached forms in conformance with the instructions and specifications in the NDAC 04-12-01 - 04-12-16.

One copy of your bid response must be returned to the North Dakota Department of Transportation (NDDOT) prior to the time and date specified for bid opening. Bid responses received after the time and day specified for bid opening will be rejected. Mark envelope as instructed in "Mailing Instructions".

In consideration of the acceptance by the state of the offer made pursuant to the bid response, the vendor agrees and promises to sell, furnish, and deliver to the state, at the time, places, and prices specified in the bid response, all goods, merchandise, supplies, commodities, equipment, or other items contained in the bid response. The vendor shall fully perform in accordance with the terms and conditions contained in the bid response including all specifications, rules, or regulations mentioned therein, and shall comply with all applicable provisions of the NDAC 04-12-01 - 04-12-16 promulgated by the State Purchasing Division; such manual being made a part of this invitation by reference. The Risk Management Appendix and Appendices A and E of the Title VI Assurances, attached, are hereby incorporated into and made a part of this Request for Bid.

Bids may be rejected if the following is not signed by OWNER, PARTNER, CORPORATE PRESIDENT, VICE PRESIDENT, other AUTHORIZED CORPORATE OFFICER or a duly authorized representative. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the OWNER, PARTNER, CORP. PRES., or VICE PRES. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

By issuance of a purchase order, a contract is made and entered into by and between the North Dakota Department of Transportation and:

Vendor Name <u>Custom Truck Equipment, Inc</u>		
Mailing Address <u>1800 E. Benson Rd. Sioux Falls, SD 57104</u>		
Telephone Number <u>605-336-1727</u>	Fax Number <u>605-338-2023</u>	E-mail Address <u>mike.rush@nattinc.com</u>

Mike Rush Vice President

Name & Title (Type or Print)

[Signature]

Signature

November 18, 2015

Date

To be signed by Owner; Partner; Corp. Pres., Vice Pres., or other authorized Corp. Officer or bid may be rejected. (if signed by other authorized Corp. Officer, please attach copy of Power of Attorney or other documentation showing authority to sign.)



MAILING INSTRUCTIONS

Mail only one completed and signed request for bid document per envelope, unless instructed otherwise. Request for bid documents not signed or received after the date and time specified in the request for bid will be rejected.

BID IS: ☒ SEALED ☐ NOT SEALED

Address the envelope containing your response in the following manner:

BID NUMBER – 765-66-15-050
BID OPENING DATE/TIME – November 19, 2015; 2:00 PM
N. D. DEPT. OF TRANSPORTATION
PROCUREMENT SECTION
608 E BOULEVARD AVE
BISMARCK ND 58505-0700

BIDDERS INSTRUCTIONS

1. **Acceptance/Rejection/Waiver.** The state of North Dakota reserves the right to accept or reject any or all bids and to waive minor irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any vendor, in the judgment of the state.
 2. **Affirmative Action.** The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of individuals with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin, or disability.
 3. **Assistance to Bidders with a Disability.** Bidders with a disability and/or language assistance, contact Civil Rights Division, NDDOT, 701-328-2978 or civilrights@nd.gov or TTY 711, as soon as possible so that reasonable accommodations can be made. Additionally, the Request for Reasonable Accommodations form (SFN 60135) can be accessed at the following NDDOT website location: <http://www.dot.nd.gov/forms/sfn60135.pdf>.
 4. **Alterations and/or Corrections.** The person signing the bid response must initial any or all manual alterations and/or corrections to the bid response. Those bid responses with alterations and/or corrections that are not initialed may be rejected.
 5. **Award.** Award will be made to a responsive, responsible bidder with the lowest price considering conformity with specifications, terms of delivery, quality, and serviceability. NDDOT reserves the right to consider bids varying in minor respects from any specific requirements herein, but judged to meet the intent of this request.
- Bids are not awarded at the bid opening. Bid responses will be firm for 30 days, unless stated otherwise.
6. **Awards, Splitting of.** The state reserves the right to make awards by item, groups of items, or on the total low bid for all the items specified as indicated in the detailed specifications. Bidders interested only in the total low bid for all items are to state 'all or nothing' on their bid response.
 7. **Bidder Checklist.** HAVE YOU REMEMBERED TO:
 - Bid F.O.B. Destination (Ship To: Address) Freight Prepaid.
 - Mark envelope as indicated.
 - Review Standard Terms and Conditions contained in this solicitation.
 - Sign your bid on the cover sheet.
 - Initial all bid/pricing changes you made.
 - Bid responses must be submitted in ink or type written.
 - Review and complete all requirements contained in this solicitation to ensure compliance.

8. **Bidder's Responsibility and Late Bids.** It is the bidder's responsibility to ensure that a bid response is physically deposited with the NDDOT Procurement Office prior to the date and time specified for the opening. Late bid responses will not be opened and will be rejected and returned regardless of the degree of lateness or the reasons. It is the bidder's responsibility to comply with the State of North Dakota's laws and regulations.

9. **Bid Summary.** Bid summaries are available when the bid has been awarded. When bids are issued using the State's electronic bidding system, the bid summary will be posted and available for download from: <http://www.nd.gov/spo/>

Bid summaries will be mailed to those bidders who supply a self-addressed, stamped envelope with their bid response. A copy of the bid summary may also be obtained by visiting the NDDOT Procurement Office during normal working hours.

10. **Bid Bond.** Waived in this instance; however, bidder(s) failing to enter into a contract with this office, upon notification of award, may be subject to removal from the bidder's list.

11. **Clarifications, Bid Changes and Questions Deadline.** The Procurement Officer is the point of contact. Any irregularities, lack of clarity, requested bid changes and all questions regarding this bid and the procurement process must be addressed to the Procurement Officer referenced on the first page of this document not later than end of business November 12, 2015. (Contact information is indicated on cover page). If a bid amendment is required, it will generally be issued after this date.

The bidder is cautioned that the requirement of this solicitation can be altered only by written amendments and that verbal communications from whatever source are of no effect.

12. **Definitions.**

- Bidder - any person or firm submitting a competitive bid in response to a solicitation.
- Bid summary - a summary of all bid responses received by the NDDOT Procurement Office.
- Bid response - the executed document submitted by a bidder in response to a solicitation.
- Contract - a deliberate written agreement between two or more competent persons to perform specific act or acts.
- Contractor - any person or firm having a contract with a governmental body.
- Solicitation - the process of notifying prospective bidders that the state wishes to receive bids for furnishing goods or services.

13. **Deviation from Specifications Supplied by NDDOT.** Unless otherwise indicated by the bidder, it will be assumed that specifications will be met in all respects. Any deviation from the minimum specifications indicated herein must be clearly pointed out PRIOR TO THE DEADLINE FOR RECEIPT OF QUESTIONS; otherwise, it will be considered that the items offered are in strict compliance with these specifications, and the bidder will be held responsible.

14. **Electronic & Facsimile Bids.** Bid responses are not to be email attached or faxed to the NDDOT unless this transmittal method has been authorized by the Procurement Officer or bid document. (Contact the Procurement officer regarding additional requirements and exceptions.) Bid responses electronically submitted or faxed may be rejected as non-responsive.

15. **Freight/F.O.B. Destination.** Freight and transportation charges are to be included in the price of the products, unless otherwise specified in the solicitation. (F.O.B. - Free On Board).

16. **Indemnification.** The attached Risk Management will be incorporated into the contract. The successful Bidder may be required to furnish proof of insurance, as detailed in the Risk Management Appendix.

17. **Multiple Bid(s).** Bidders may submit more than one bid response(s) for the item(s) specified in the solicitation. Each bid submitted must comply in all aspects with the bid requirements and these instructions.

18. **Negotiation.** NDDOT reserves the right to negotiate with the successful bidder to ensure the best possible consideration is afforded to all concerned.

19. **Open Records.** After award, bid documents will be subject to the North Dakota open records law. Records are closed or confidential only if specifically stated in law. If a request for public information is received, the procurement officer will determine whether the information is an exception to the North Dakota open records law, and the information will be processed appropriately. Those interested in reviewing the bid file are to make arrangements with the NDDOT Procurement Office. The NDDOT Procurement Office hours are 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m. Monday through Friday.

20. **Packaging.** All shipments are to be packaged according to accepted commercial practices to avoid damage in shipment.

21. **Performance Bond.** Successful bidders will not be required to furnish a performance bond; however, failure to perform satisfactorily will result in the immediate termination of the contract(s) and bidders may be subject to removal from the bidder's list.

22. **Preparation of Bid.** Bids will be accepted on NDDOT forms only. If the document is located on the State Procurement Office website, then bidder is to download the document and type or write their responses as indicated by the bid document. Alteration of the bid document may be cause for bid rejection. Bidders are cautioned to examine specifications and all instructions. Failure to do so will be at the bidder's risk.

23. **Pricing.** Unit prices are to be stated in United States currency and based on the unit of measurement specified in the solicitation, F.O.B. Destination, to the NDDOT delivery locations specified herein.

In the event of mathematical differences between the unit price and extended total, the unit price will prevail.

24. **Protest of Award.** An interested party may protest the award within seven days after receiving notice in accordance with N.D.C.C. 54-44.4-12 and N.D.A.C. 4-12-14.

25. **Receipt of Bids.** All sealed bids received by the NDDOT Procurement Office will be opened and read at 608 East Boulevard Avenue, Bismarck, North Dakota, at the time specified in the solicitation.

26. **Rejection.** Bid responses may be rejected if:

- The bid response is not legible.
- The bid response is not submitted on the form supplied.
- The bid response is not completed as requested.
- The bid response is completed and/or signed in pencil.
- The bid response is faxed to the procurement office.
- The bid response is not signed by an authorized company representative.
- The bid response is not responsive to the specifications or other requirements of the solicitation.
- Changes to the bid response are not initialed.
- The bid response is received after the time and date specified.
- The bidder has not met Vendor Registration requirements or is suspended or debarred.
- The bid document has been altered by the bidder.
- The bidder is determined to be not responsible (N.D.A.C. 4-12-11-04).
- The price is not fair and reasonable
- Or a combination of above.

27. **Signature.** The bid must be signed manually in ink. The name and title of the person signing the bid response must be typed or printed above the signature. The bid must be signed by Owner, Partner, Corp. Pres., Vice Pres., or other authorized Corp. Officer or the bid may be rejected. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the Owner, Partner, Corp. Pres., or Vice Pres. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

28. **Supplemental Terms and Conditions.** Bids including supplemental terms and conditions will be accepted, but supplemental conditions that conflict with any conditions contained in this ITB or that diminish the State's rights will be considered null and void. The State is not responsible for identifying conflicting supplemental terms and conditions before issuing a contract award.

After award of contract:

- a) If a conflict arises between a supplemental term or condition included in the bid and a term or condition of the ITB, the term or condition of the ITB will prevail, and,
- b) If the State's rights would be diminished as a result of application of a supplemental term or condition included in the bid, the supplemental term or condition will be considered null and void.

Changes, modifications, additions, or alterations to the bid document could be cause for rejection of the submitted bid at the sole discretion of the NDDOT. Contact the Procurement Officer in writing prior to the deadline for clarifications.

29. **Taxes.** The State does not pay sales tax or federal excise tax. The state sales tax exemption number is E-2001. The federal tax-free transaction number is 45-0309764.

30. **Vendor Registration.** Bids will be accepted from bidders who are not currently Approved Bidders for the State of North Dakota; however, the successful bidder may be required to become approved prior to award, in accordance with N.D.C.C. 54-44.4-09. To become an Approved Bidder, you must: 1) register with the North Dakota Secretary of State (fees apply), and 2) submit a completed Bidder List Application to the ND State Procurement Office. Registration instructions and forms are available on-line at: www.nd.gov/spo/vendor. Contact the ND State Procurement Office at 701-328-2683 or infospo@nd.gov for assistance.

31. **Withdrawal or changes to a bid response prior to the bid opening date and time.** A bidder may withdraw or make a change to his bid response prior to the bid opening date and time. The request to make a change or withdraw must be in writing by a representative of the firm. The request to withdraw or change must be signed by the bidder or his designated representatives.

32. **Withdrawals after the bid opening date and time.** Withdrawals after the bid opening will be allowed only upon written approval from the NDDOT Procurement Office. Vendors continually withdrawing bids after the bid opening may be removed from the Vendor Database.

GENERAL CONTRACT TERMS AND CONDITIONS

1. **Applicable Law and Venue.** Any dispute arising out of this agreement will be resolved under the laws of the State of North Dakota.

2. **Binding Contract.** The acceptance of a bid response in writing by the purchasing agency constitutes a contract between the bidder and the State. Written acceptance from the purchasing agency will be in the form of a purchase order, notification of award, or contract. Any oral agreement or arrangement by a bidder with a State employee or purchasing agency will have no force or effect unless reduced to writing.

3. **Compliance with Laws, Nondiscrimination and Affirmative Action.** The contractor must, in performance of work under this contract, fully comply with all applicable federal, state or local laws, rules, regulations and policies, including those relating to nondiscrimination, affirmative action, accessibility and civil rights including Title VI of the Civil Rights Act of 1964. The contractor agrees to file all required reports on time, to make required payroll deductions, and to pay all taxes and premiums owed on time, including sales and use taxes and unemployment compensation and workers' compensation premiums. The contractor shall have and keep current at all times during the term of this contract all licenses and permits required by law.

4. **Contract Amendments, Waivers.** After a binding contract has been entered into, no changes (i.e. additions, substitutions, subcontracting or a price adjustment) may be made, unless prior approval has been obtained from the purchasing agency and Procurement Officer.

The terms of this contract shall not be waived, altered, modified, supplemented, or amended, in any manner whatsoever, except by written instrument signed by the parties. No waiver consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.

5. **Contract Termination.**

- a. **Termination without Cause.** This contract may be terminated by mutual consent of both parties, or by either party upon 30 days' written notice.
- b. **Termination for Lack of Funding or Authority.** The State may terminate this contract effective upon delivery of written notice to the contractor, or on any later date stated in the notice, under any of the following conditions:
 - i. If funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in the indicated quantities or term. The contract may be modified by agreement of the parties in writing to accommodate a reduction in funds.
 - ii. If federal or state regulations or guidelines are modified, changed or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this contract or are no longer eligible for the funding proposed for payments authorized by this contract.
 - iii. If any license or certificate required by law or regulation to be held by the contractor to provide the services required by the contract is for any reason denied, revoked or not renewed.

Any such termination of this contract under (i), (ii), or (iii), above, shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

- c. **Termination for Cause.** The State by written notice to the contractor may terminate the whole or any part of this contract:
 - i. If the contractor fails to provide services required by this contract within the time specified herein or any extension thereof; or
 - ii. If the contractor fails to perform any of the other provisions of this contract, or so fails to pursue the work as to endanger performance of this contract in accordance with its terms and after receipt of written notice from the State, fails to correct such failures within ten days or such longer period as NDDOT may authorize.
 - iii. The rights and remedies of the State provided in the above clause related to defaults by the contractor are not exclusive and are in addition to any other rights and remedies provided by law or under this contract.
- d. **Termination, Deliveries.** If the contract is terminated for any reason, the contractor is responsible for delivery of all commodities and services ordered prior to the termination, unless those orders had been canceled by the Purchasing Agency or Entity.

6. **Materials and Workmanship.** All material and workmanship shall be subject to inspection and testing at the discretion of the purchasing agency.

7. **Inspection and Investigations.** The State reserves the right to conduct inspections and investigations related to the bidder and offered commodities or services to make determinations regarding compliance with the bid requirements and responsibility of the bidder.

8. **Billing and Payment Procedures.** Purchase orders will be issued by NDDOT Procurement office to the awarded contractor.

Invoices are to be submitted as indicated on the purchase orders unless otherwise instructed. Failure to submit correct invoices to the appropriate NDDOT office may delay contractor payment.

Payment will normally be made within thirty days after delivery and acceptance of commodities or

services under this contract and receipt of a correct invoice. All invoice and payment inquiries must be directed to the purchasing agency.

9. **Subcontracts, Assignment.** The contractor shall not subcontract, assign or transfer the contractor's interests or duties under this contract without express written consent of the purchasing agency.

10. **Successors in Interest.** The provisions of this agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.

11. **Receiving.** Deliveries must arrive at the designated destination(s) during normal business hours unless other shipping/receiving instructions are issued by NDDOT personnel. The contractor shall contact the NDDOT to schedule delivery dates and times at least 24 hours in advance of delivery.

All NDDOT offices will be closed in recognition of State holidays. Any day declared a holiday by the President or Governor will also be recognized by office closure.

12. **Service Representative.** The contractor must provide a dedicated customer service representative to provide support for this contract. The contractor shall notify the Procurement Officer in the event the representative is changed.

NAME: Gene Schaffer
(Name of person servicing this contract)

BUSINESS NAME: Custom Truck Equipment, Inc

MAILING ADDRESS: 1800 E. Benson Rd

CITY & STATE: Sioux Falls, SD ZIP CODE: 57104

PHONE NUMBER: 605-336-1727 TOLL FREE: 800-624-0138

FAX NUMBER: 605-338-2023 E-MAIL: gene.schaffer@nattinc.com

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIFICATIONS
FOR
SAND AND CHEMICAL HOPPER SPREADER, #201 STAINLESS STEEL
(Monroe MCV, Swenson EV-150, Henderson FSH III-ND, or EQUAL)
WITH INSTALLED LEG STAND KIT AND
LIQUID PRE-WET SYSTEM, HOPPER SPREADER BODY MOUNT, GRAVITY FLOW
(VariTech, Monroe, Swenson, Henderson, or EQUAL)**

Bidder's Instructions: Indicate compliance to the specifications on the "COMPLY YES/NO" line by each specification. Indicate any deviations from the specifications whether the minimum specifications are met or not on the "SPECIFICATION DEVIATIONS" line. Failure to comply with bid specifications may result in rejection of the bid. The state reserves the right to waive minor deficiencies or technical variances.

It is the intent of this specification to describe a stainless steel hopper spreader with pre-wet system installed. The hopper spreader shall be equipped with leg stands that are capable of easily sliding into a 7 ft wide by 2'4" high by 14 ft long dump box with a 1 ft by 1 ft dog house. The hopper spreader shall be locked into position with 2 front ratchet tie downs permanently mounted to the side of the hopper spreader on 4 stainless steel mounting brackets that have been welded to the side of the spreader body and a bar that locks into the rear tailgate pin locks. The ratchet tie downs shall include nylon straps that quickly attach to the underside of the dump box.

The gravity flow liquid pre-wet system shall apply de-icing solution directly onto the material being spread by the hopper spreader. The pre-wet system shall be compatible with a variety of de-icing solutions including sodium chloride, calcium chloride, magnesium chloride, potassium acetate, and CMA. The tanks shall fit the void area created between the hopper spreader angled side and side wall of the dump box. When mounted to the hopper body, the pre-wet system and hopper spreader shall fit inside a 7' wide dump box. The pre-wet system shall come complete with all the hardware that is required to apply liquid de-icing solution to granular material at the spreader spinner.

The hopper spreader with leg stands and pre-wet system shall be standard production of the latest model with standard accessories and in addition meet the following minimum specifications:

Hopper Size: Minimum capacity 7.0 CY, 13' top length with straight front, 50" side height, and 82" wide. The hopper sander is intended to fit into a 7'x14'x2'4" dump box with 1'x1' dog house on a 58,000 GVW tandem-axle truck.

	COMPLY YES	NO	SPECIFICATION DEVIATIONS
1. Conveyor			
a. 21,000 PSI 2 1/4" pitch riveted/roller chain or pintle type	X		
b. Minimum overall width 24"	X		
c. Chain bar flight cross section of 3/8" x 1 1/2" with maximum 4 1/2" spacing	X		
d. 4" travel chain tensioner	X		
i. 3/4" #201 stainless steel adjustment bolt with stainless steel lock nut		X	Henderson standard is 5/8"
e. Front curb side mounted chain oiler end of hopper	X		
f. Chain oiler serviceable while hopper is in dump box	X		
g. Conveyor bottom shall be replaceable 3/16" (7 gauge) #201 stainless steel of flange type construction	X		

SAND AND CHEMICAL HOPPER SPREADER, LEG STANDS AND LIQUID PRE-WET SYSTEM

SSP-95-2100-1

- | | | | | |
|----|--|----------|-------|-------|
| h. | 4-bolt flange greasable bearings | <u>X</u> | _____ | _____ |
| i. | Curb side front conveyor bearing grease fittings tubed to rear of unit | <u>X</u> | _____ | _____ |
| j. | Full width belt-type conveyor wiper | <u>X</u> | _____ | _____ |
| k. | 2" drive shaft and 2" idler shaft | <u>X</u> | _____ | _____ |
| l. | 50:1 gear box with 8 tooth sprockets | <u>X</u> | _____ | _____ |

2. Frame/Chassis

- | | | | | |
|-----|---|----------|-------|-------|
| a. | 4 - corner mounted lift hooks to facilitate handling | <u>X</u> | _____ | _____ |
| b. | Leg stand kit, stainless steel | <u>X</u> | _____ | _____ |
| i. | Adjustable legs, easily stored while in the dump box | <u>X</u> | _____ | _____ |
| ii. | Front rollers to easily slide into a dump box | <u>X</u> | _____ | _____ |
| c. | Ratchet tie downs | <u>X</u> | _____ | _____ |
| i. | Two front, one on each side, 4" nylon strap, 15,000# capacity | <u>X</u> | _____ | _____ |
| ii. | Located 8" to 12" back from the front of the spreader | <u>X</u> | _____ | _____ |
| d. | Device for locking sander into tailgate pin locks, mild steel - Painted | <u>X</u> | _____ | _____ |
| i. | 3" X 5" X 3/8" angle iron with 1 1/4" full width solid one piece cold rolled carbon steel shaft | <u>X</u> | _____ | _____ |

3. Hopper

- | | | | | |
|-----|---|----------|-------|-------|
| a. | 10 gauge #201 stainless steel sides, sills, and ends, all continuously welded | <u>X</u> | _____ | _____ |
| b. | Side wall slope 45 degrees | <u>X</u> | _____ | _____ |
| c. | Top and bottom to be reinforced, supporting sides and ends | <u>X</u> | _____ | _____ |
| d. | Side support rib spacing 24" c/c Maximum | <u>X</u> | _____ | _____ |
| e. | Fully open hopper, no cross members, unless required by design to maintain structural integrity of the hopper | <u>X</u> | _____ | _____ |
| f. | Flow gate control-rear mounted, self locking adjustable screw-jack for control of material flow | <u>X</u> | _____ | _____ |
| i. | Readily accessible from ground level | <u>X</u> | _____ | _____ |
| ii. | Graduated markings for opening height | <u>X</u> | _____ | _____ |
| g. | Rubber side spill shields, 1/8" X 24" rubber belting | <u>X</u> | _____ | _____ |

- | | | | | |
|-----|--|----------|-------|-------|
| i. | Mounted full length to side of hopper body to prevent material
spilling into the dump box | <u>X</u> | _____ | _____ |
| ii. | Mounted so nylon straps used to hold sander in place also
cover the rubber shield to hold it in place | <u>X</u> | _____ | _____ |

4. Hydraulic Components

- | | | | | |
|------|--|----------|-------|-------|
| a. | Conveyor and spinner operated by hydraulic motors | <u>X</u> | _____ | _____ |
| b. | Conveyor motor Char-Lynn or equal | <u>X</u> | _____ | _____ |
| i. | 5.9 CID | <u>X</u> | _____ | _____ |
| ii. | 1360 inch-pounds | <u>X</u> | _____ | _____ |
| iii. | 15 GPM | <u>X</u> | _____ | _____ |
| iv. | Conveyor motor or drive shaft must include 100 pulse
feedback sensor to integrate with Force America 6100
Spread Controller. | <u>X</u> | _____ | _____ |
| c. | Spinner motor Char-Lynn or equal | <u>X</u> | _____ | _____ |
| i. | 2.8 CID | <u>X</u> | _____ | _____ |
| ii. | 735 inch-pounds | <u>X</u> | _____ | _____ |
| iii. | 7 GPM | <u>X</u> | _____ | _____ |

5. Spinner Assembly

- | | | | | |
|------|---|----------|-------|-------|
| a. | All metal components shall be #201 stainless steel | <u>X</u> | _____ | _____ |
| b. | Tilt - up | <u>X</u> | _____ | _____ |
| i. | Hand winch with brake mechanism--self actuating brake
holds the load and requires minimum operation for unload | <u>X</u> | _____ | _____ |
| ii. | 1000 PSI cable | <u>X</u> | _____ | _____ |
| c. | Assembly/housing 10 gauge #201 stainless steel | <u>X</u> | _____ | _____ |
| d. | 20" spinner | <u>X</u> | _____ | _____ |
| i. | Molded one-piece polyurethane as manufactured by C.U.E.
#P0652, Thombert #1001357, or approved equal | <u>X</u> | _____ | _____ |
| ii. | Bolt on hub | <u>X</u> | _____ | _____ |
| iii. | 1/2" thick disc | <u>X</u> | _____ | _____ |
| iv. | 1 7/8" high vanes | <u>X</u> | _____ | _____ |
| v. | Direct mount to motor | <u>X</u> | _____ | _____ |

- | | | | | |
|----|---|----------|-------|-------|
| e. | Adequate baffling to keep material off truck undercarriage | <u>X</u> | _____ | _____ |
| f. | Baffle or deflectors to control width and direction of spread | <u>X</u> | _____ | _____ |
| g. | Removable assembly | <u>X</u> | _____ | _____ |

6. Liquid Reservoir

- | | | | | |
|-----|---|----------|-------|--------------------------|
| a. | 2 - polyethylene rotationally molded or equal tanks with molded internal baffles, one for each side of the hopper spreader | <u>X</u> | _____ | _____ |
| b. | Tank capacity – 180 - 200 gallons per side | <u>X</u> | _____ | <u>200 Gals Per Side</u> |
| c. | Trapezoidal, triangular type shape that fills the void created between the hopper spreader angled side and side wall of the dump box | <u>X</u> | _____ | _____ |
| d. | UV stabilized | <u>X</u> | _____ | _____ |
| e. | 3/8" wall thickness or design liquid rating of 14.5 lbs per gallon | <u>X</u> | _____ | _____ |
| f. | Anti-slosh baffle built into top of tank at opening(s) if tank has top fill ports | <u>X</u> | _____ | _____ |
| g. | 3" fill port with spin on lids and rubber gaskets if tanks have top fill ports, accessible from the rear of the truck | <u>X</u> | _____ | _____ |
| h. | Spin on lids shall be tethered to prevent being separated from the tank if tank has top fill ports with lids | <u>X</u> | _____ | _____ |
| i. | 1 1/4" bottom quick fill port located on both ends of the tanks | <u>X</u> | _____ | _____ |
| j. | 1" gravity drain port located on both ends of the tanks for discharge (Note: if the 1 1/4" port is used for discharge, the port must be necked down to 1") | <u>X</u> | _____ | _____ |
| k. | 1" vent at top of tank | <u>X</u> | _____ | _____ |
| i. | Vent to be located towards the front end of the tank nearest the truck cab with 90 degree elbow and hose plumbed up and towards the front of the truck or vent to be located in the middle of the tank with 90 degree elbow and hose plumbed up and towards the front of the truck to prevent liquid spillage due to water hammer when stopping, accelerating, or when the body is raised | <u>X</u> | _____ | _____ |
| ii. | Spin on lids shall not be vented if tanks have lids | <u>X</u> | _____ | _____ |

7. Hardware

- | | | | | |
|------|---|----------|-------|-------|
| a. | All parts in contact with the de-icing solution shall be of non corrosive material | <u>X</u> | _____ | _____ |
| b. | four #201 stainless steel mounting brackets per tank to support the full weight of the tank without a cradle that are lined with rubber or equal belting material to prevent tank wear due to vibration | <u>X</u> | _____ | _____ |
| c. | Tanks shall be plumbed together with 1½" hose to fill and dispense equally with manual ball valves to control flow to each tank | <u>X</u> | _____ | _____ |
| d. | 1½" plumbing with 2" male cam lock fitting with female cover cap for quick bottom fill plumbed to driver's side of the truck accessible by standing on the ground | <u>X</u> | _____ | _____ |
| e. | Glass reinforced PVC fittings | <u>X</u> | _____ | _____ |
| f. | Clear 1" polyester braid reinforced plastic discharge hose for cold weather use | <u>X</u> | _____ | _____ |
| g. | Remote control electric ball valve, 1" full port flanged fittings with stainless steel clamps | <u>X</u> | _____ | _____ |
| i. | Spray Systems Co. model 344BEC-24-C (NO EXCEPTIONS) | <u>X</u> | _____ | _____ |
| ii. | 1" flanged connections with stainless steel clamps | <u>X</u> | _____ | _____ |
| iii. | Single pole double throw switch (3 wire) | <u>X</u> | _____ | _____ |
| iv. | Wetted parts of nylon, teflon, polypropylene, or viton | <u>X</u> | _____ | _____ |
| h. | Three 1½" standard ball valves with flanged fittings | <u>X</u> | _____ | _____ |
| i. | Polypropylene | <u>X</u> | _____ | _____ |
| i. | 1" standard ball valve with flanged fittings | <u>X</u> | _____ | _____ |
| i. | Polypropylene | <u>X</u> | _____ | _____ |
| j. | 1" schedule 80 mild steel threaded pipe nipple or equal non corrosive fitting | <u>X</u> | _____ | _____ |
| k. | 1" poly 90 degree elbow | <u>X</u> | _____ | _____ |
| l. | 1" Banjo or equal quick coupler with cover caps | <u>X</u> | _____ | _____ |

8. Manuals, as applicablea. Two operators manuals X _____b. Two parts books X _____**9. Standards**Unit shall meet OSHA standard. X _____**10. Paint**All mild steel components must be primed and painted black with corrosion resistant industrial epoxy style paint – Powder Coating Preferred X _____**11. Warranty**Manufacturer's one-year full warranty, manufacturer's standard warranty shall apply if it is for a longer period X _____

The hopper spreader with leg stands and pre-wet system installed shall be delivered ready for mounting into the dump box of a tandem axle truck. The complete unit shall be delivered free of any defects due to shipping or workmanship. Product literature should be submitted with the bid. The award vendor must provide technical assistance if necessary.

SPREADER MAKE: Henderson MODEL: FSH 134857, 201XLEG STAND KIT MAKE: Henderson MODEL: 134880PRE-WET SYSTEM MAKE: Henderson MODEL: 134875PARTS/SERVICE DEALER: Custom Truck Equipment, Inc TELEPHONE: 800-624-0138
(If different than above)

(The award will be based on low bid to furnish and deliver the hopper spreader with leg stands and pre-wet system installed as a complete unit to the following location.)

BIDDER Custom Truck Equipment, Inc

BID RESPONSE

ITEM NO.	QTY.	UNIT	DETAILED SPECIFICATIONS	TOTAL PRICE
1	HOPPER SPREADER, LEG STANDS AND LIQUID PRE-WET SYSTEM			
	1	EACH	FOB NDDOT Dickinson District 1700 3 rd Avenue West Dickinson, ND	\$ 15,789.00
2	HOPPER SPREADER, LEG STANDS AND LIQUID PRE-WET SYSTEM per specification Extended Pricing LESS THE DELIVERY CHARGE Bidder agrees to hold this price through November 30, 2016. Delivery location and freight to be determined at time of purchase.			
	1	EACH	Supply the price for one unit without freight. Actual purchase quantity is unknown. No guarantee of purchase.	\$ 14,524.00
3	Option 1: 400 GALLON PRE-WET TANKS PER SIDE IN LIEU OF 180 GALLON Bidder agrees to hold this price through November 30, 2016. Delivery location and freight to be determined at time of purchase.			
	1	EACH	Supply the price for one unit without freight. Actual purchase quantity is unknown. No guarantee of purchase.	No Bid - 400 Gals Per side \$ Not Recommended for 13' length / 82" width

ANY ALTERATIONS OR CORRECTIONS MADE TO THE UNIT OR TOTAL PRICE MUST BE INITIALED BY THE BIDDER. FAILURE TO DO SO MAY BE CAUSE FOR BID REJECTION.

Delivery - 120-150 Days ARO

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX A OF THE TITLE VI ASSURANCES**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials; or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.
5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.



**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX E OF THE TITLE VI ASSURANCES**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).



Risk Management Appendix

Supply Contracts with Private Individuals, Companies, Corporations, Etc.:

Each party agrees to assume its own liability for any and all claims of any nature including all costs, expenses and attorney's fees which may in any manner result from or arise out of this agreement.

Contractor, or Contractor's delivery agent, shall secure and keep in force during the term of this agreement, from insurance companies, government self-insurance pools or government self-retention funds authorized to do business in North Dakota, the following insurance coverages:

- 1) **Commercial general liability and automobile liability** insurance.
- 2) **Workers compensation** insurance.

Contractor shall produce certificates of insurance or copies of insurance policies upon request by the State.

When a portion of a Contract is sublet, the Contractor shall obtain insurance protection (as outlined above) to provide liability coverage to protect the Contractor and the State as a result of work undertaken by the Subcontractor. In addition, the Contractor shall ensure that any and all parties performing work under the Contract are covered by public liability insurance as outlined above. All Subcontractors performing work under the Contract are required to maintain the same scope of insurance required of the Contractor. The Contractor shall be held responsible for ensuring compliance with those requirements by all Subcontractors.

RM Consulted 2007
Revised 6-07



Amendment No. 1

To: ALL INTERESTED SUPPLIERS
From: North Dakota Department of Transportation
Date: November 17, 2015
Re: Amendment to Bid 765-66-15-050, Hopper Spreader, Sand and Chemical

Bidders Instruction #11 of the solicitation established a deadline for receipt of questions. The responses to these questions are provided as addenda to the solicitation. When necessary, the solicitation has been amended.

Question 1: Reference Page 8, Section 2Cii. Is it acceptable to have the ratchet tie downs shipped loose as exact mounting location may vary?

Answer 1: Tie down straps may be shipped loose, but mounting bracket (if applicable) must be mounted 8"-12" back from front of spreader box as per spec. (no amendment necessary)

Question 2: Reference Page 9, Section 5Di. Is a 20" one-piece polyurethane spinner manufactured by Fall Line Part# 5210-202-422 acceptable?

Answer 2: Fall Line Spinner 5210-202-422 spinner will be considered an approved equal if it meets all specifications in section 5 of SSP-95-2100-1. (No amendment necessary at this time)

Question 3: Reference Page 9, Section 5Diii. Is a 3/8" Thick Disc acceptable?

Answer 3: NDDOT will only accept a 3/8" thick spinner disc if it is reinforced with steel or other rigid material to prevent it from crowning. A 3/8" thick, poly only, spinner will not be accepted as history has shown discs fabricated with < 1/2" thickness tend to crown or concave in shape after initial usage and this can cause clearance issues with the hydraulic motor mounting causing the poly disk to rub and prematurely wear out. (no amendment necessary)

Question 4: Reference Page 9, Section 5Div. Is a disc with 1-7/8" high vanes acceptable?

Answer 4: 1-7/8" is NDDOT's current specification for spinner vane height (no amendment necessary)

Question 5: Reference Page 10, Section 6g. Is 2" fill ports acceptable?

Answer 5: NDDOT uses 2" couplers for filling of pre-wet tanks, so 2" fill port will be accepted.

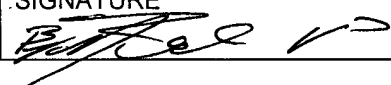
Amend specification 6g to read: "Minimum of 2" fill port with spin on lids and rubber gaskets if tanks have top fill ports, ports must be accessible from the rear of the truck".

Vendors are instructed to acknowledge receipt of and compliance with this amendment by signing below and returning this acknowledgement with your bid or proposal.

Any questions regarding this amendment must be submitted in writing to the undersigned Procurement Officer.

Vanessa Brosten, Procurement Officer
PHONE: 701-328-4466
FAX: 701-328-0310
E-MAIL: vbrosten@nd.gov

By my signature below, I hereby acknowledge receipt of and compliance with this amendment to the above referenced solicitation.

PRINTED NAME OF BIDDER OR OFFEROR and TITLE Mike Rush Vice President	
SIGNATURE 	DATE November 18, 2015

FSH™

HEAVY DUTY • SAND & SALT SPREADER

Henderson®

History repeats itself... three times. Meet the FSH-I, II and III precision spreaders.

The legendary Henderson FSH sand and salt spreader is now available in three versions. The FSH-I, II and III have subtle differences (see specification chart on back) to better meet varying specification requirements and specific customer needs.

The important features of the FSH are retained "across the board" on all three models. The rugged

dependability, precision delivery of materials to the road surface and low maintenance so ingrained in the FSH have all been retained. It's available in a variety of sizes to exactly conform to your specifications.

So now you don't have to settle for less than a Henderson FSH Spreader... regardless of your budget.

The Henderson FSH-I, II and III... they're what you'd expect from...

The Dependable Ones™



All photos shown with optional equipment.

- Inside seams are continuously welded for extreme duty. Sides and ends are 10 ga. and floor is 7 ga. 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.
- **OPTIONAL** single or dual augers for reduced maintenance and smoothness of material flow.
- Conveyor chain is protected by a formed 10 ga. 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 adjustment provide optimum chain tension.
- **OPTIONAL** conveyor gearbox has thru-shaft for electronic control system speed sensor hook-up.
- The hydraulic motor is mounted directly to the gearcase to eliminate sprockets, chains and couplers for reduced maintenance.
- The telescopic chute assembly is 10 ga. 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 precise control of material spread pattern. A quick latching bypass chute diverts material behind the spinner chute for fast unloading.
- The 20" spinner disk is 10 ga. steel with stainless steel fins. Polyurethane optional.
- All surfaces are high-pressure cleaned and degreased with a phosphate solution before being primed and finish painted with Highway Orange paint.

FEATURES & SPECIFICATIONS

LENGTH	CUBIC YARD CAPACITY (Struck / Rounded)			WEIGHTS (Approx.)			RECOMMENDED GAB TO AXLE (Inches)
	Side Height			Side Height			
	48" or 50"	54" or 55"	60" or 62"	50"	55"	62"	
8'	4.5 / 5.6	5.5 / 5.6	6.5 / 7.6	1760	1845	1930	60
9'	5.1 / 6.3	6.2 / 7.3	7.4 / 8.5	1905	1995	2085	72
10'	5.6 / 6.9	6.9 / 8.2	8.3 / 9.6	2070	2166	2262	84
11'	6.2 / 7.6	7.6 / 9.0	9.0 / 10.4	2225	2327	2429	96
12'	6.8 / 8.3	8.4 / 9.9	9.9 / 11.4	2380	2488	2596	108
13'	7.3 / 9.0	9.0 / 10.7	10.7 / 12.4	2535	2649	2763	96 C.T.
14'	7.9 / 9.8	9.7 / 11.4	11.6 / 13.3	2690	2810	2930	108 C.T.
15'	8.4 / 10.3	10.3 / 12.2	12.2 / 14.1	2845	2971	3097	120 C.T.
16'	8.9 / 10.9	11.0 / 13.0	13.0 / 15.0	3001	3132	3264	132 C.T.

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 standard 25:1 optional	50:1 worm gear standard 25:1 optional	6:1 spur gearbox 50:1 or 25:1 worm gearbox optional
Chain Shields	standard: formed	standard: formed bolt-in optional	standard: bolt-in replaceable

SPECIFICATIONS

BODY

Sides, ends and side supports are of 10 ga. 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 ga. steel. Longsills are 7 ga. 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 ga. 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".

SPINNER CHUTE ASSEMBLY

Completely enclosed telescopic design is of 10 ga. 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 ga. steel with replaceable hub. Six (6) 10 ga. 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.

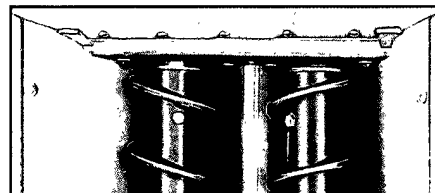
CONTROL VALVE - OPTIONAL

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.



SINGLE AUGER CONVEYOR - OPTIONAL

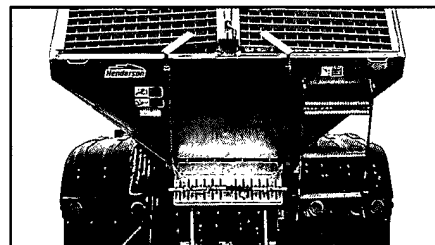
Seven-inch (7") auger conveyor provides a more even flow than a standard chain conveyor with less maintenance. A patented safety interlock feature helps prevent personal injury from the auger.



DUAL AUGER CONVEYOR - OPTIONAL

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.



SAFETY INTERLOCK

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

TOP GRATE SCREENS - OPTIONAL

Hinged, 3/8" welded rod heavy duty mesh screens keep unwanted larger materials out of the spreader.

FRONT IDLER & GREASE TUBE EXTENSIONS - OPTIONAL

Grease and adjustable tension easily from the rear of unit.

OPTIONS

201 or 304 Stainless Steel • Top Grate Screens • Inverted Vee • Extended Front Idler Adjusters • Extended Front Idler Grease Tubes • Hold Down Kit • 18 HP Engine Group • Rubber Side Spill Shields • Roller Chain • Cab Shield • 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

Consult your local Henderson Distributor for all available options.

This literature may not meet your exact specifications. The product will be built to specifications unless deviations are noted.



1800 E Benson
Road
Sioux Falls, SD
57104



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1085 S. Third St., P.O. Box 40, Manchester, IA 52057
Toll Free: (800) 359-4970
www.hendersonproducts.com



HP-040 5M 8/11

History repeats itself... three times. Meet the FSH-I, II and III precision spreaders.

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11'	6.2 / 7.6	7.6 / 9.0	9.0 / 10.4	2225	2327	2429	96
12'	6.8 / 8.3	8.4 / 9.9	9.9 / 11.4	2380	2488	2596	108
13'	7.3 / 9.0	9.0 / 10.7	10.7 / 12.4	2535	2649	2763	96 C.T.
14'	7.9 / 9.8	9.7 / 11.4	11.6 / 13.3	2690	2810	2930	108 C.T.
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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"> • 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 • 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 standard 25:1 optional	50:1 worm gear standard 25:1 optional	6:1 spur gearbox 50:1 or 25:1 worm gearbox optional
Chain Shields	standard: formed	standard: formed bolt-in optional	standard: bolt-in replaceable

SPECIFICATIONS

BODY

Sides, ends and side supports are of 10 ga. 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 ga. steel. Longsills are 7 ga. 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 ga. 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".

SPINNER CHUTE ASSEMBLY

Completely enclosed telescopic design is of 10 ga. 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 ga. steel with replaceable hub. Six (6) 10 ga. 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.

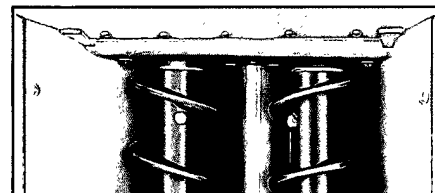
CONTROL VALVE - OPTIONAL

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.



SINGLE AUGER CONVEYOR - OPTIONAL

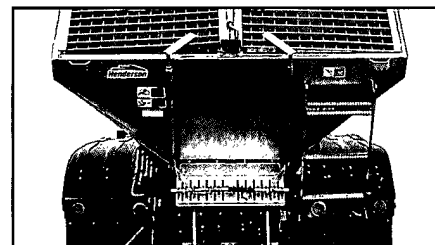
Seven-inch (7") auger conveyor provides a more even flow than a standard chain conveyor with less maintenance. A patented safety interlock feature helps prevent personal injury from the auger.



DUAL AUGER CONVEYOR - OPTIONAL

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.



SAFETY INTERLOCK

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

TOP GRATE SCREENS - OPTIONAL

Hinged, 3/8" welded rod heavy duty mesh screens keep unwanted larger materials out of the spreader.

FRONT IDLER & GREASE TUBE EXTENSIONS - OPTIONAL

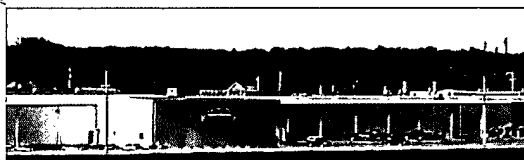
Grease and adjustable tension easily from the rear of unit.

OPTIONS

201 or 304 Stainless Steel • Top Grate Screens • Inverted Vee • Extended Front Idler Adjusters • Extended Front Idler Grease Tubes • Hold Down Kit • 18 HP Engine Group • Rubber Side Spill Shields • Roller Chain • Cab Shield • 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

Consult your local Henderson Distributor for all available options.

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HP-040 5M 8/11



HENDERSON SPREADER STANDS

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Heavy-duty Precision Spreader Stands to Match Any Need or Budget

The Henderson Spreader Stands make the loading and unloading process of V-box spreaders, combination units, and liquid systems from dump bodies easy and efficient, while providing a safe storage location that can change each time the truck returns.

Using only the hoist of your dump body, the spreaders can be loaded and unloaded, eliminating the use of forklifts and overhead hoist systems. By simplifying this previously dreaded task, you can free up dedicated spreader trucks for other uses on fair weather days.

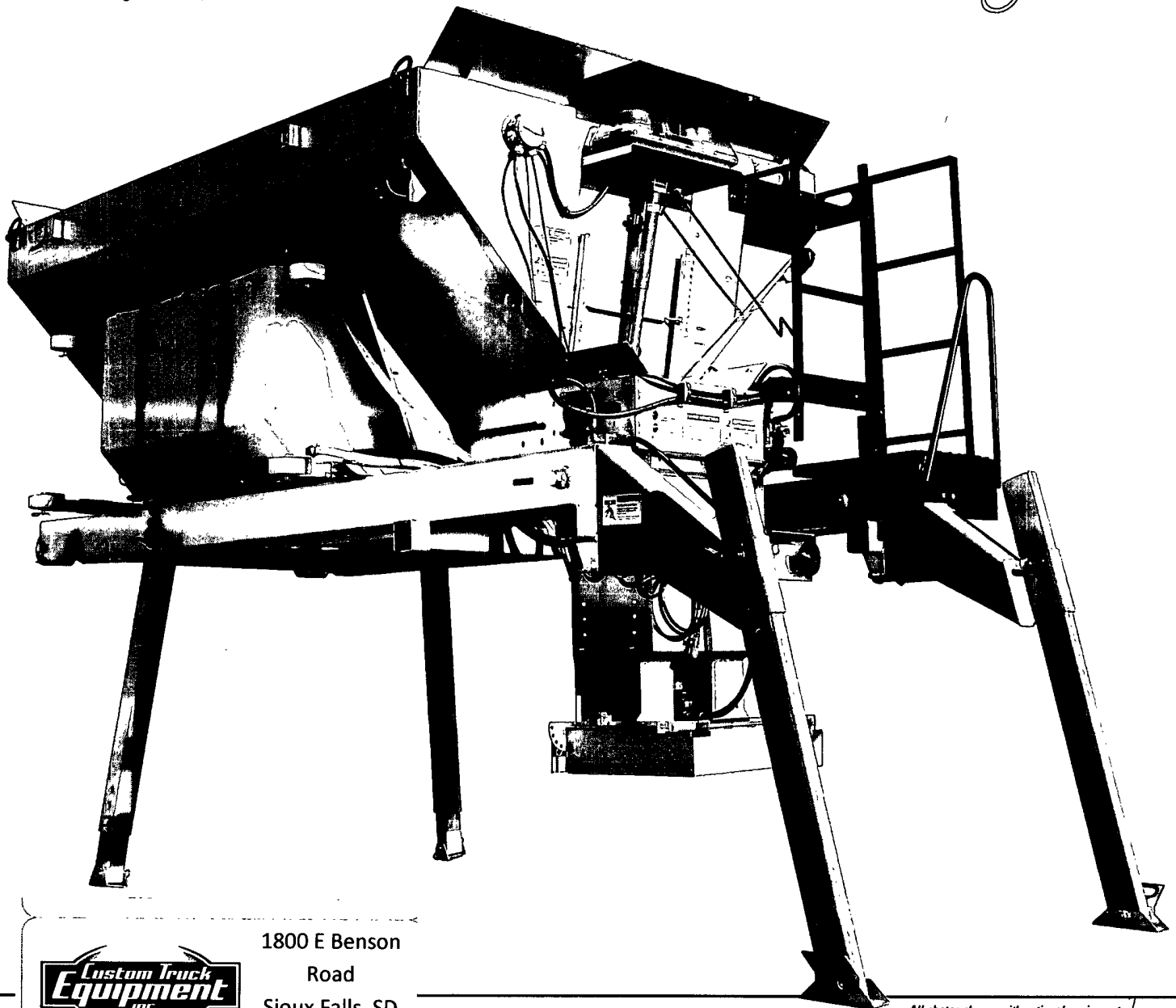
HSS are constructed in three different models:

- SLS (Slant-Leg Stand) welded structural tubing
- HD (Heavy-Duty) welded structural tubing
- IS (Integral Stand) bolt-on with no subframe

All models are available with adjustable legs to fit various truck bed heights. The HSS are also constructed to fit most existing V-box spreaders utilizing 24" side support spacing. All are available in powder-coated mild steel or 201 stainless steel.

Choose one of the three models in either material to get the longevity and operation you need to meet your budget. When you're ready for top quality truck equipment that consistently performs at the highest levels, turn to...

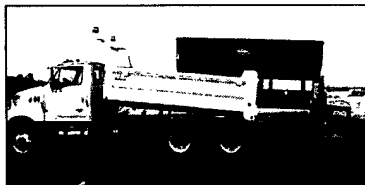
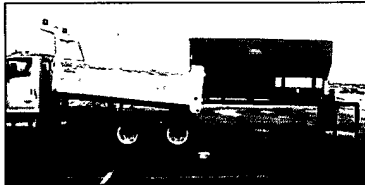
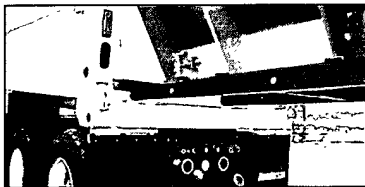
The Dependable Ones™



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Road
Sioux Falls, SD
57104

All photos shown with optional equipment.

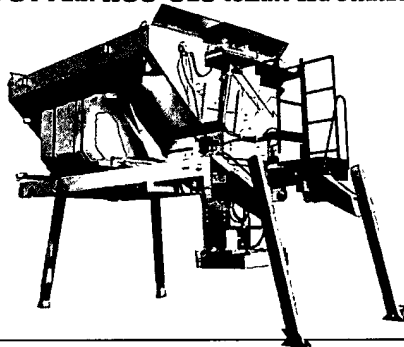
FEATURES & SPECIFICATIONS



Henderson spreader stands safely store equipment until it is needed. These stands all allow easy installation into a dump body truck, and remain under or along-side the spreader until it is needed again for storage.

All stands are designed to have little or no material in them during loading, unloading, and storage.

FSH STYLE: HSS-SLS (SLANT LEG STAND)



SPECIFICATIONS

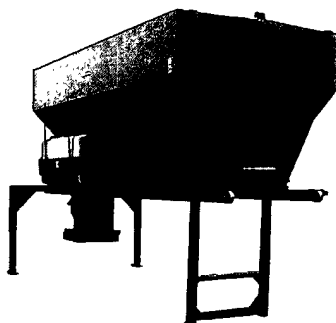
- Fabricated & structural channels & tubing - very stable design
- Main hat channels: 7-1/2" x 6-1/8" x 7-ga.
- Adjustable front legs with pivoting feet: 4" x 4" x 3/16"
- Adjustable rear legs with pivoting feet: 5" x 2" x 1/4"
- 6" x 5.5" poly/steel wheels with roller bearings
- Center-mounted legs avoid interference with liquid tanks
- Painted mild steel or 201 stainless steel
- Accepts pre-wet tanks on spreader
- Can be used with FSH w/pre-wet systems

OPTIONS

- Body guides or guide wheels
- Ladder

Shown with some optional equipment

FSH STYLE: HSS-HD (HEAVY-DUTY)



SPECIFICATIONS

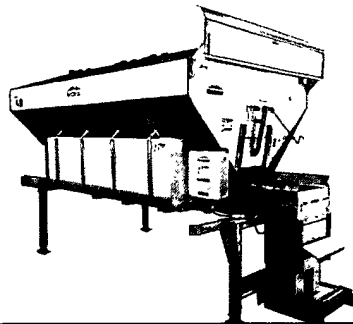
- All welded structural tubing - very stable design
- Main rails: 5" x 3" x 1/4"
- Adjustable legs constructed of 4" x 4" x 3/16" tube
- 7-ga. cross channels transfer load to dump body floor
- 5" steel wheels with roller bearings and lubrication points
- Center-mounted legs avoid interference with liquid tanks
- Painted mild steel only
- Provides added protection of spinner chute
- Can be used with FSH w/pre-wet systems

OPTIONS

- Body guides or guide wheels
- Ladder

Shown with some optional equipment

FSH STYLE: HSS-IS (INTEGRAL STANDS)



SPECIFICATIONS

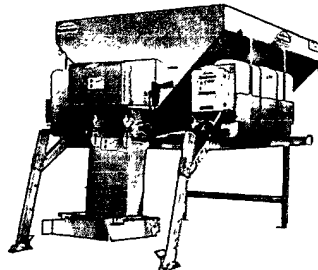
- Low mounting height - doesn't increase overall spreader height
- Fits spreaders 10' + in length
- 1/4" front box section construction
- Adjustable front legs: 3" x 3" x 3/16"
- Adjustable rear legs constructed: 3.5" x 3.5" x 3/16"
- 5" steel wheels with roller bearings and lubrication points
- Stainless steel pins to resist corrosion and ease adjustment
- 201 stainless steel or painted mild steel
- Can be used with FSH w/pre-wet systems

OPTIONS

- Body guides or guide wheels
- Ladder

Shown with some optional equipment

FSM STYLE: HSS-SLS (SLANT LEG STAND)



SPECIFICATIONS

- Fabricated & structural channels & tubing - very stable design
- Main rails: 2" x 4" x 10-ga.
- Front legs with pivoting feet: 2-1/2" x 2-1/2" x 3/16"
- Adjustable rear legs with pivoting feet: 2" x 4" x 10-ga.
- 5" steel wheels with roller bearings
- Center-mounted legs avoid interference with liquid tanks
- Powder-coated mild steel or 201 stainless steel
- Accepts pre-wet tanks on spreader
- Can be used with FSM w/pre-wet systems

FSP stands also available. Consult your Henderson distributor.



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HP-075 2.5M 04/15



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Heavy-duty Precision Spreader Stands to Match Any Need or Budget

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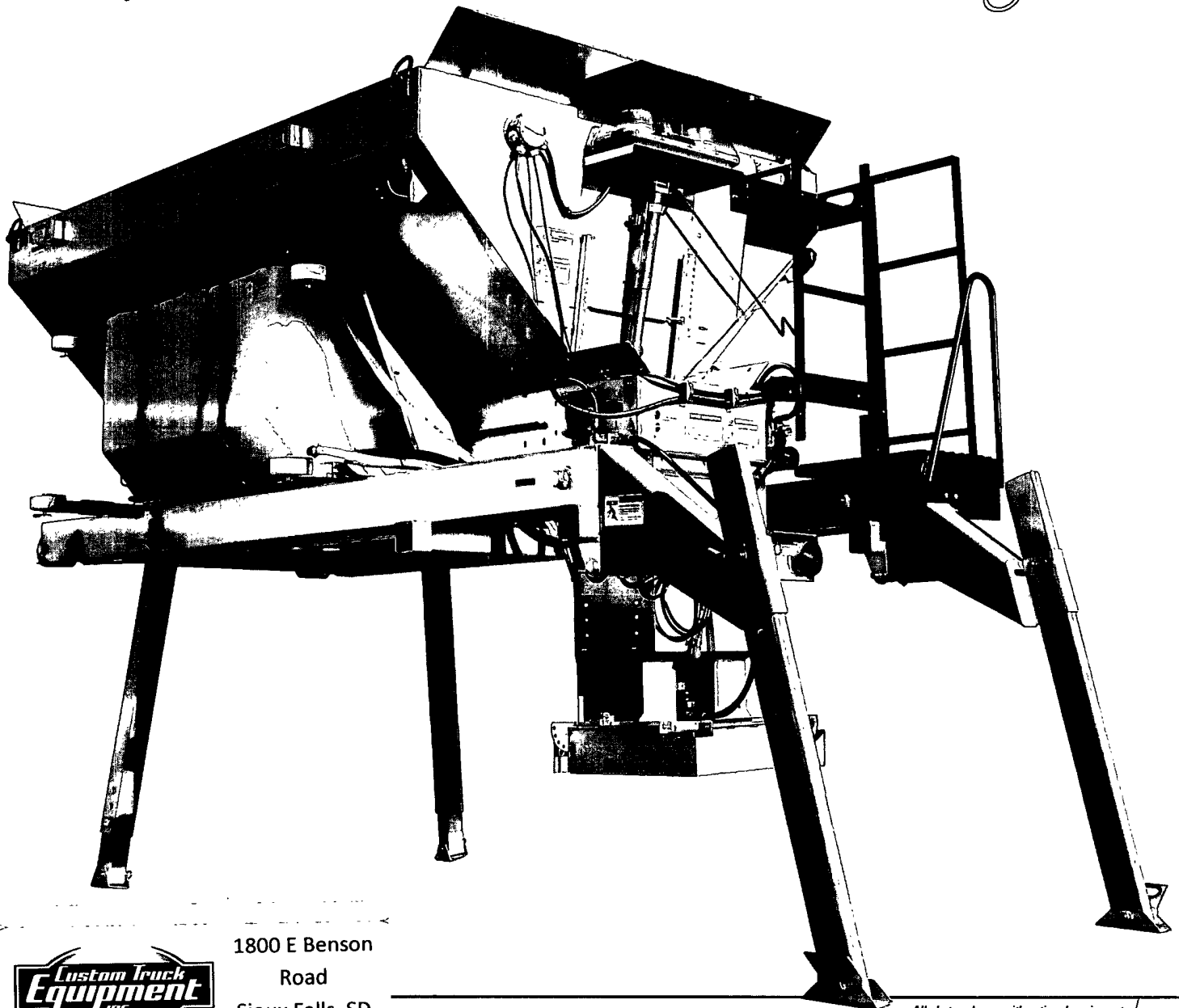
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- SLS (Slant-Leg Stand) welded structural tubing
- HD (Heavy-Duty) welded structural tubing
- IS (Integral Stand) bolt-on with no subframe

All models are available with adjustable legs to fit various truck bed heights. The HSS are also constructed to fit most existing V-box spreaders utilizing 24" side support spacing. All are available in powder-coated mild steel or 201 stainless steel.

Choose one of the three models in either material to get the longevity and operation you need to meet your budget. When you're ready for top quality truck equipment that consistently performs at the highest levels, turn to...

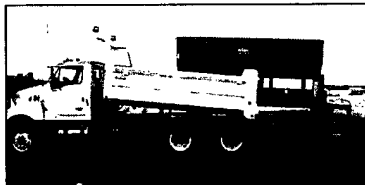
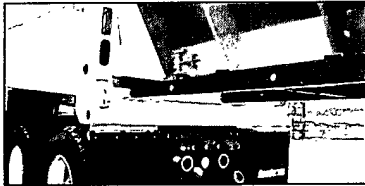
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All photos shown with optional equipment.

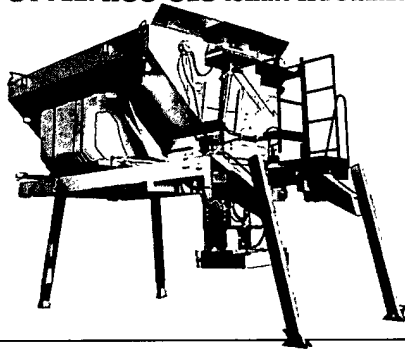
FEATURES & SPECIFICATIONS



Henderson spreader stands safely store equipment until it is needed. These stands all allow easy installation into a dump body truck, and remain under or along-side the spreader until it is needed again for storage.

All stands are designed to have little or no material in them during loading, unloading, and storage.

FSH STYLE: **HSS-SLS** (SLANT LEG STAND)



SPECIFICATIONS

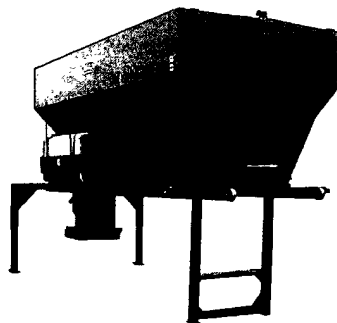
- ☐ Fabricated & structural channels & tubing - very stable design
- ☐ Main hat channels: 7-1/2" x 6-1/8" x 7-ga.
- ☐ Adjustable front legs with pivoting feet: 4" x 4" x 3/16"
- ☐ Adjustable rear legs with pivoting feet: 5" x 2" x 1/4"
- ☐ 6" x 5.5" poly/steel wheels with roller bearings
- ☐ Center-mounted legs avoid interference with liquid tanks
- ☐ Painted mild steel or 201 stainless steel
- ☐ Accepts pre-wet tanks on spreader
- ☐ Can be used with FSH w/pre-wet systems

OPTIONS

- ☐ Body guides or guide wheels
- ☐ Ladder

Shown with some optional equipment

FSH STYLE: **HSS-HD** (HEAVY-DUTY)



SPECIFICATIONS

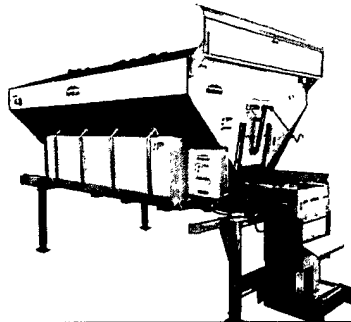
- ☐ All welded structural tubing - very stable design
- ☐ Main rails: 5" x 3" x 1/4"
- ☐ Adjustable legs constructed of 4" x 4" x 3/16" tube
- ☐ 7-ga. cross channels transfer load to dump body floor
- ☐ 5" steel wheels with roller bearings and lubrication points
- ☐ Center-mounted legs avoid interference with liquid tanks
- ☐ Painted mild steel only
- ☐ Provides added protection of spinner chute
- ☐ Can be used with FSH w/pre-wet systems

OPTIONS

- ☐ Body guides or guide wheels
- ☐ Ladder

Shown with some optional equipment

FSH STYLE: **HSS-IS** (INTEGRAL STANDS)



SPECIFICATIONS

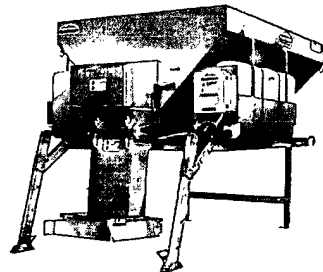
- ☐ Low mounting height - doesn't increase overall spreader height
- ☐ Fits spreaders 10'+ in length
- ☐ 1/4" front box section construction
- ☐ Adjustable front legs: 3" x 3" x 3/16"
- ☐ Adjustable rear legs constructed: 3.5" x 3.5" x 3/16"
- ☐ 5" steel wheels with roller bearings and lubrication points
- ☐ Stainless steel pins to resist corrosion and ease adjustment
- ☐ 201 stainless steel or painted mild steel
- ☐ Can be used with FSH w/pre-wet systems

OPTIONS

- ☐ Body guides or guide wheels
- ☐ Ladder

Shown with some optional equipment

FSM STYLE: **HSS-SLS** (SLANT LEG STAND)



SPECIFICATIONS

- ☐ Fabricated & structural channels & tubing - very stable design
- ☐ Main rails: 2" x 4" x 10-ga.
- ☐ Front legs with pivoting feet: 2-1/2" x 2-1/2" x 3/16"
- ☐ Adjustable rear legs with pivoting feet: 2" x 4" x 10-ga.
- ☐ 5" steel wheels with roller bearings
- ☐ Center-mounted legs avoid interference with liquid tanks
- ☐ Powder-coated mild steel or 201 stainless steel
- ☐ Accepts pre-wet tanks on spreader
- ☐ Can be used with FSM w/pre-wet systems

FSP stands also available. Consult your Henderson distributor.



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Henderson PWS™ PRE-WETTING SYSTEM

Electric & Hydraulic Pre-Wetting Systems

Increase the effectiveness of your ice control program, while reducing overall costs with Henderson PWS - Pre-wetting Systems. These on-board liquid pre-wetting systems coat the material with various pre-wetting agents as it's being spread. The PWS provides the following benefits to your snow and ice removal plan:

- Quicker formation of a brine solution.
- Brine forms and melts ice at lower temps
- Helps adhere granular material to pavement
- Reduces salt spread rates along with the number of applications

With the PWS, precise measuring and distribution is easy. Simply dial in the application rate and the PWS does the rest, including notifying you when its empty. It's one smart machine. And there are models available for any application.

Consider the intelligent engineering of the PWS systems for your pre-wetting applications. You'll find once again, the smart money is on...

*The
Dependable
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V-BOX TRUCK FRAME MOUNTING




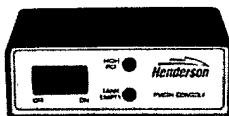
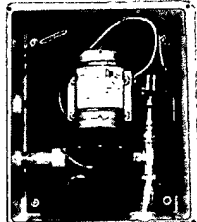
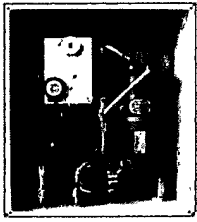
V-BOX DUMP BODY MOUNTING



1800 E Benson
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57104

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FEATURES & SPECIFICATIONS

	ELECTRIC	HYDRAULIC
	Henderson PWS-E controls a 12 volt DC pump rated up to 3 GPM. It delivers constant flow to the variable displacement orifice.	Henderson PWS-H pre-wet systems are driven by the exhaust oil from the spreader conveyor/auger drive motor. This keeps the liquid/ton proportional to the granular material regardless of conveyor speed.
IN-CAB CONTROLS	<p>PWS-E</p>  <ul style="list-style-type: none"> • ON/OFF switch. • Variable speed control allows for increasing or decreasing material saturation (gal./ton). • High pressure LED to alert operator of clogged nozzles. • Tank empty LED alerts operator of clogged filter/tank empty. 	<p>PWS-H-I</p>  <ul style="list-style-type: none"> • ON/OFF switch. • High pressure LED to alert operator of clogged nozzles. • Tank empty LED alerts operator of clogged filter/tank empty.
DRIVE SYSTEMS	 <ul style="list-style-type: none"> • 12 volt DC electric motor/pump combination. • Drive system is completely enclosed by a molded fiberglass housing with a sealed removable lid. 	 <ul style="list-style-type: none"> • The gal./ton is easily set by adjusting the manual flow divider in the rear mounted control box • Sealed enclosures, utilize compression fittings and all plumbing and electrical components. • Stainless steel high pressure tubing.

RESERVOIR

- ☐ 75 gallon rotation molded polyethylene tank with 5" diameter vented fill cap standard on V-box and tailgate spreader applications.
- ☐ Stainless steel fender-mounted tanks are standard on MuniBody applications.
- ☐ Corrosion-resistant components used throughout.
- ☐ Replaceable in-line screen strainer.
- ☐ Shut-off valves.
- ☐ Supplied with bulk tank fill quick couplings.

METERING ORIFICE

- ☐ Two variable displacement orifices provide an extended range of material output, while significantly outperforming fixed displacement orifices.
- ☐ Eliminates clogging and wear associated with conventional nozzles.

OPTIONS

- ☐ Additional tanks for increased capacity
- ☐ Tank options available for full-size spreaders, pickup spreaders, tailgate spreaders & Muni-Body spreaders
- ☐ 100-gallon polyethylene tanks for V-box spreaders
- ☐ 200-gallon tanks polyethylene tanks for V-box spreaders
- ☐ Fixed displacement brass nozzles
- ☐ Hydraulic pump assembly with in-line flow meter



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- Brine forms and melts ice at lower temps
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The Dependable Ones™



V-BOX TRUCK FRAME MOUNTING




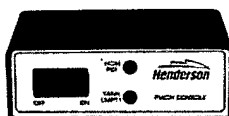
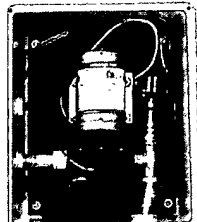
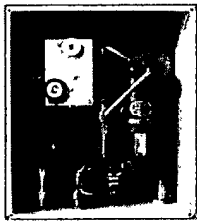
V-BOX DUMP BODY MOUNTING



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57104

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RESERVOIR

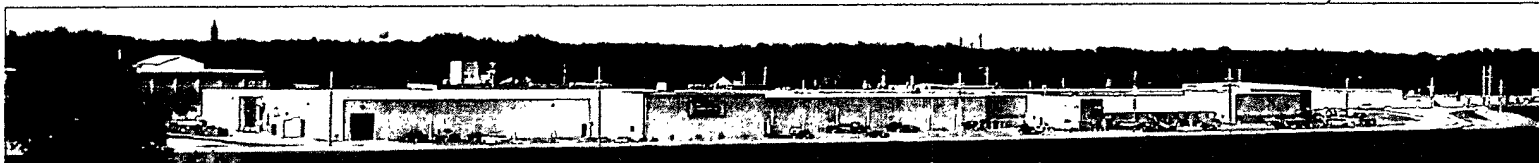
- ☐ 75 gallon rotation molded polyethylene tank with 5" diameter vented fill cap standard on V-box and tailgate spreader applications.
- ☐ Stainless steel fender-mounted tanks are standard on MuniBody applications.
- ☐ Corrosion-resistant components used throughout.
- ☐ Replaceable in-line screen strainer.
- ☐ Shut-off valves.
- ☐ Supplied with bulk tank fill quick couplings.

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- ☐ Two variable displacement orifices provide an extended range of material output, while significantly outperforming fixed displacement orifices.
- ☐ Eliminates clogging and wear associated with conventional nozzles.

OPTIONS

- ☐ Additional tanks for increased capacity
- ☐ Tank options available for full-size spreaders, pickup spreaders, tailgate spreaders & Muni-Body spreaders
- ☐ 100-gallon polyethylene tanks for V-box spreaders
- ☐ 200-gallon tanks polyethylene tanks for V-box spreaders
- ☐ Fixed displacement brass nozzles
- ☐ Hydraulic pump assembly with in-line flow meter



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1085 S. Third St., P.O. Box 40, Manchester, IA 52057
Toll Free: (800) 359-4970
www.hendersonproducts.com



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