

SPECIFICATIONS

**003375 CONVEYOR, SALT, TOWABLE**

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May 22, 2015 TOD

## SPECIFICATIONS

### I. GENERAL UNIT SPECIFICATIONS:

#### A. INTENT STATEMENT:

The purpose of these specifications is to describe a 30 inch by 80 foot self-contained, diesel powered, portable radial stacking salt conveyor. Shall be capable of being loaded with a Department owned 3 cu. yd. front end loader. Conveyor shall be used to fill various Department salt stockpile structures. The unit shall meet this specification, be a current production model, new and complete.

The unit shall be complete with all equipment required for immediate operation to function as listed below and the unit must meet all applicable codes and standards.

NOTE: All units must be delivered within **90** days after receipt of the purchase order by the successful bidder. Shipping shall be in accordance with normal industry standards and at FOB Destination terms. After receipt of the purchase order and prior to shipping, the successful bidder shall perform a sight visit to the FOB location to provide start up training.

#### B. SPECIFICATIONS:

Rating: Unit shall be capable of moving commercial grade road salt at a minimum rate of 300 Feet per Minute and handle 500 Tons per Hour. Unit shall not exceed 13' 6" in height when hooked to Department truck tractor fifth wheel, approximately 50 inches from ground level.

##### 1. CONVEYOR FRAME:

Conveyor frame shall be a 30 inch deep lattice / truss type design, 3" X 3" X ¼" main rails minimum and 2" X 2" X ¼" cross rails minimum. All joints shall be fully welded.

##### 2. HEAD SECTION:

Head section shall be a hydraulically controlled folding design for transport. Head drive pulley shall be a minimum of 12" diameter by 32" width, with greaseable bearings. Bearings shall be equipped with heavy duty grease lines run to a point on conveyor frame that is accessible to grease bearings from ground level. Either a grooved type or crown faced head pulley is acceptable. Shall be equipped with a self-tensioning urethane belt scraper.

##### 3. TAIL SECTION:

Tail section pulley shall be a minimum of 14" diameter by 32" width with greaseable bearings. Bearings shall be equipped with heavy duty remote grease lines. Pulley shall be adjustable with a screw type take up and be equipped with a pulley guard.

##### 4. POWER UNIT:

Engine shall be diesel powered, minimum of 46 horse power, with weather protective cover. Fuel tank shall be a minimum of 30 gallons. Shall be equipped with a minimum of 22 GPM @ 2,000 PSI hydraulic motor. If a larger unit is required to meet the rating of unit, it is the manufacturer's responsibility to provide an engine / hydraulic system capable of meeting the requirements. Engine shall be equipped with an hour meter that only operates with the engine running.

## SPECIFICATIONS

### B. SPECIFICATIONS: (continued)

#### 5. IDLERS:

All idler rollers shall be 5" diameter, polyethylene material with lube for life bearings. The hopper loading area shall have a minimum of 9 – 20 degree roller assemblies spaced a maximum of 16 inches on center. The remainder of upper rollers shall be 35 degree roller assemblies spaced a maximum of 4 feet on center. Return rollers shall be a maximum of 10 feet on center. Roller stands shall be galvanized.

#### 6. HOPPER:

Hopper shall be designed to be loaded with a 3 cu. yd. loader with a "heaped" bucket, 105 inches wide. Hopper design shall be pre-approved.

#### 7. BELTING:

Conveyor belt shall be 30 inches in width, 220 (PIW) pounds per inch of belt width, 2 ply, with 3/16 X 1/16 covers and mechanical splice.

#### 8. AXLE: (Road Portable)

Unit shall be equipped with a heavy duty truck axle assembly exceeding the GVW of the unit. Axle shall have dual wheels (1100 X 22.5 tires) equipped with service air brakes. Axle shall have pivotal axle ends and hydraulic power-fold end sections. Axle shall be equipped with power lift jacks. Tires shall be covered with high-density polypropylene round fenders with exterior anti-spray suppression.

#### 9. PAINT:

Shall be painted PennDOT yellow Ref: DuPont F9885, PPG 85246, Sherwin Williams 73266, Sikkens 4017, or NAPA 73266 for shade only. Shall be primed (with hardener) low VOC. All bare metal surfaces shall be coated using etching primer prior to paint. All surfaces shall be properly cleaned and prepared prior to paint, with all weld splatter and debris removed.

#### 10. LIGHTS:

Lighting shall be a 12 volt system. All lights shall be L.E.D.; Trailer shall be furnished with shock proof running lights, directional signals reflectors and sealed wiring harness fully complying with ICC minimum requirements, and with the Motor Vehicle Laws and Regulations of the Commonwealth of Pennsylvania. All lights shall be recessed or otherwise provided with adequate guards to prevent accidental damage. A 7-way "pin type" receptacle shall be provided Ref. EQN-80A for guidance. Manufacture to provide marker and ICC lighting, wiring shall be Grote, Trucklite or preapproved equal. Power cord shall extend 8 feet in length beyond pintle. There shall be a Cole Hersee No. 11750 stor-a-way trailer connector plug-holder located in the tongue area. All harness pass-through locations shall be protected by a grommet. All wiring shall be of adequate capacity and protected within a frame-rail, metal enclosure or conduit, and secured every two (2) feet of run. Wiring shall not be exposed within a wheel-well. There shall be no connections outside of a sealed box, unless connections are soldered and properly sealed with heat shrink. 3M type (Scotch Lock) crimp connectors are unacceptable. All electrical connection shall be coated with dielectric grease. A color-coded electric wiring chart and schematic shall be provided.

## SPECIFICATIONS

### B. SPECIFICATIONS: (continued)

#### 11. HITCH:

Unit shall be equipped with a king pin fifth wheel hitch to be road portable with Department road tractor. Unit shall be equipped with a fold down stand to set unit for transport hook up. Unit shall also be equipped with tongue 3 inch pintle hitch for use in positioning conveyor into place within yard. A permanent label shall be affixed to tongue area "Pintle NOT for Road Transport".

#### 12. WHEEL CHOCKS:

There shall be two wheel chocks per unit Ref: buyers WC1467 or equal with a rope. Mounting location will be determined at pre-build meeting. Ref: EQN-82.

### C. IDENTIFICATION:

Each unit shall bear the manufacturer's model number and shall incorporate a non-rusting metal individual serial number properly affixed.

### D. DELIVERY:

Successful bidder shall be responsible for delivery of completed unit to:  
PennDOT District 10-5  
Jefferson County  
205 Witherow Street  
Punxsutawney, Pa. 15767

Prior to delivery, contact shall be made with the Fleet Management Division @ 717-787-1567 to coordinate delivery timeframe and logistics.

## SPECIFICATIONS

### II. DRAWINGS:

EQN-80A

EQN-82

### III. MANUALS:

The successful vendor shall furnish all applicable manuals per unit:

- 1 Operator's
- 1 Parts
- 1 Service
- 1 Wiring/Schematics
- Transmission (Automatic or Manual)
- Body and Sub-frame (Parts and Service)
- 1 Complete set of manuals for any additional items/equipment added to a piece of equipment.

The manuals listed shall be official O.E.M. publications supplemented with technical manuals for all components as published by sub-vendors/manufacturers.

Parts Manual presented must be a relative to "all" items utilized to build these units, with appropriate part numbers.

Delivery of these manuals shall be completed within a maximum of 90 days after the unit is accepted.

Manuals may be supplied on CD Disc in lieu of paper manuals.

## SPECIFICATIONS

### IV. TRAINING:

#### Mechanic:

The successful vendor shall provide services of qualified factory trained technicians for not more than 1 training sessions of not more than 7.5 hours at 1 PENNDOT locations to train personnel for in-depth preventive maintenance, overhaul and review of the proper usage of parts and service manuals, as well as component/system adjustments that need to be monitored at specified service intervals.

#### Operator:

The successful vendor shall provide services of qualified factory trained technicians for not more than 1 training sessions of not more than 7.5 hours at 1 PENNDOT locations to train personnel in the proper operation, safety and servicing of the equipment.

The successful vendor shall submit a training plan to the Equipment Division for approval within 45 days after receipt of the Purchase Order. The training plan shall consist of course outline and class schedule.

All training must be completed within 60 days after the dates established in the approved training plan unless an extension is mutually agreed to in writing by the Chief of the Equipment Division.

All training shall be coordinated with the District Equipment Managers, with the exception of Asphalt related training, which must be coordinated with the Statewide Training Coordinator (717) 787-4836, Fax (717) 783-4438.

### V. WARRANTY:

Warranty on all parts will be for minimum two (2) calendar years or manufacturer's standard commercial term (which ever is greater), from date of acceptance. If the manufacturer neglects or fails to correct defect(s) during the warranty period, their responsibility shall continue until such time as it takes to correct the defect(s). The manufacturer is expected to respond to warranty problems and administrate effective solutions in the best interest of the Commonwealth.