

2012 BM624 TIER 3

SERIAL NUMBER 1-BM624-25U

SPECIFICATIONS

EXPANDABLE HOPPER SELF-PROPELLED CHIP SPREADER WITH 4 WHEEL DRIVE, POWERSHIFT TRANSMISSION, PLUS 1 RATE AND GATE CONTROL

These specifications are intended to describe a power-shift transmission, self-propelled chip spreader in enough detail to provide bids on comparable chip spreaders. These specifications do not describe each and every part of the chip spreader necessary to provide a complete unit, but address the differences necessary to include in a bid description to insure you receive the item you are requiring. It is understood that all materials and workmanship shall be to industry standards. Bids received that do not conform to these specifications will be rejected. All bidders shall conform to all requirements of these specifications unless exceptions or deviations from the specifications have been specifically authorized by the bid letting authority in writing.

The purpose of the chip spreader is to apply uniformly a cover of aggregate, natural or man made, over an emulsion that has been applied to a road surface in the process of seal coating.

1.0 CAPACITY:		YES	NO
1.1 Receiving Hopper Width	114"	YES	
Fuel Tank – gallons	80 Gal	YES	
Hydraulic Oil Tank - gallons	64 Gal.	YES	
1.2 Rear Receiving Hopper Cap. (Cu. Yd.)/ wt.	6.0 cu. yd.	YES	
2.0 ENGINE:			
Mfg. std eng....Make / Model	CAT 3126B TIER 3 CUMMINS- QSB.7 TIER 3	YES	
Gross HP/Net HP	225 HP	YES	
Fuel Type	Diesel	YES	
Current hour meter reading	161	YES	
2.1 Min. SAE J1349 <u>Net</u> Flywheel HP @ governed Rpm's	225 HP @ 2200 rpm	YES	
Gross HP	HP	YES	
@ RPM	2200 rpm	YES	
2.2 Displacement cu. in. / cm ³	402 C.I. (6.6)	YES	
Fuel Consumption, Full Load	9.4 gal/hr	YES	
Electrical System, 12 Volts (min)	Yes	YES	
2.3 No. of Cylinders	6	YES	
2.4 Alternator Output, 90 Amps.(min.)	115 amp	YES	

2.4 Battery rating, 1,000 CCA (min.) ea.	950 CCA ea. Minimum 2 Batteries	YES	
2.5 Ignition switch /prevent from starting when transmission is in gear	Yes	YES	
2.6 Diesel fuel system, factory installed:	Yes	YES	
Fuel filtration screen	Yes	YES	
Two stage filter	Yes	YES	
drain	Yes	YES	
2.7 Full-flow oil filtration system w/ bypass	Yes	YES	
2.8 Air Cleaner	Dry, dual element	YES	
2.9 Cooling w/ antifreeze protection to - 30 ° F	Yes	YES	
2.10 Muffler & exhaust	Max. Silence	YES	
2.11 List type of starting aid used, example: glow plugs, preheater or ether			
3.0 INSTRUMENTATION	Plus 1 System	YES	
3.1 Coolant temp. gauge	Yes	YES	
3.2 Oil pressure gauge	Yes	YES	
3.4 Ammeter or voltmeter gauge	Yes	YES	
3.5 Hour-meter gauge	Yes	YES	
4.0 DRIVE TRAIN:			
TRANSMISSION:			
4.1 Power-shift	Yes – FUNK LONGDROP	YES	
Drive Wheels	Four Wheel	YES	
4 Wheel Drive	Yes	YES	
Speeds Foreword	6	YES	
Speeds Reverse	3	YES	
Axle Diff.	19.03 to 1 rear	YES	
Speed - Travel Mode	0 to 21	YES	
Speed - Spreading	0-15	YES	
5.0 HYDRAULIC SYSTEM:			
5.1 Sealed system	Yes	YES	
5.2 working temp. maintained @ 110°F	Maximum 180 degrees	YES	
5.3 Safety relief valve	Yes	YES	
5.4 Replaceable hyd. Oil filter, max.10 micron	Yes	YES	
5.5 Hydraulic reservoir level sight gauge or dip stick. State type	Sight Glass	YES	
5.6 Hydraulic hoses shielded @ engine	Yes	YES	
Hydraulic tank size	64 gallon	YES	

6.0 WHEELS & TIRES:			
6.0 Highway tread – std. 385/65R22.5	Yes	YES	
6.0 Min. tire ply rating – 16 ply. rated	Yes	YES	
6.0 Steel disc wheels	Yes	YES	
Mfg. std tire	385/65R22.5	YES	
6.1 Total combined load rating of tires and wheels exceeds the gross vehicle weight rating (GVWR) of the unit	Yes	YES	
6.2 Front and rear wheels do not track each other	Yes	YES	
Quantity tires / wheels:	4	YES	
Front tire size & ply rating	385/65R22.5 16 Ply rating Highway Tread 11.00 x 20 Compactor	YES	
Rear tire size & ply rating	385/65R22.5 16 Ply rating Highway Tread 11.00 x 20 Compactor	YES	
Stance-between Front tires	82"	YES	
Stance-between Rear tires	93"	YES	
Wheel Base	134"	YES	
Turning Radius- inside	20'	YES	
Ground clearance	10"	YES	
Front Drive Axle capacity	26,000 Lbs.	YES	
Front Non-Drive Axle Capacity			
Rear Drive Axle capacity	34,000 Lbs.	YES	
Rear Non-Drive Axle Capacity	.		
7.0 BRAKES:			
7.0 Service brake system	Yes	YES	
Front/ Rear type			
7.0 Secondary brake system	Yes	YES	
7.0 Parking braking system	Yes	YES	
7.1 Air braking systems, shall have: moisture evaporators, & manual slack adjusters	Yes	YES	
7.2 Secondary braking system shall stop unit if service brake fails because of engine failure or loss of air pressure	Yes	YES	
7.3 Parking brake shall hold unit stationary on any grade, while transmission is in neutral	Yes	YES	
7.4 Brake system uses common components	Yes	YES	
7.5 Brakes shielded from outside contaminants	Yes	YES	
Your standard unit braking system:			
Front	Air over hydraulic Drum For Drive Axle	YES	
Rear	“S” Cam Air Brakes / Drum	YES	
Park Brake	Spring brake	YES	

	disc on transmission		
8.0 STEERING:	Hyd. - Orbital		
8.0 Hydraulic	Yes	YES	
8.0 Orbital	Yes	YES	
8.0 Stations	Dual Station	YES	
9.0 TRUCK (TOW)HITCH:			
9.0 Positive / Self-locking	Yes	YES	
9.0 Hitch can be hooked & unhooking while unit is in motion	Yes	YES	
10.0 AGGREGATE RECEIVING HOPPER			
10.1 Min. opening , not counting top edge return	106"	YES	
10.1 Min. opening, (width for dump trucks to dump)	106"	YES	
10.2 Min. stack capacity of aggregate (cu. yds.)	6.0cu. Yds. 8.5 Tons	YES	
10.3 Adjustable feed control gate for each conveyor belt	Yes	YES	
10.4 Rubber skirting at receiver end of hopper to control spillage	Yes	YES	
11.0 CONVEYORS:			
11.1 Two conveyors	Two 24"	YES	
11.1 Conveyor with full length skirt & hooded adjustable deflectors to prevent spillage.	Yes	YES	
11.2 Conveyors powered by hydraulic motors	Yes	YES	
11.2 Conveyor speed FPM	0 to 800 FPM	YES	
11.3 Controls direct material flow to right, front, or left of hopper	Yes	YES	
11.4 Automatic conveyor controls: start/stop to control aggregate levels in spread hopper	Yes	YES	
11.4 has system override	Yes	YES	
11.5 Designed to allow convenient conveyor belt adjustment	Yes	YES	
12.0 AGGREGATE SPREAD HOPPER:			
Automatic Gate Control	Yes – Air and Hydraulic Control	YES	
Fractional Gate Control	Yes	YES	
Rate Control Range - One + Stone Thickness 3/8" Chip 20 #/ Sq. Yd.= FPM	Rate Computer controlled	YES	
Rate Control Range - Stone Thickness Range:	3/8" to 1"+ Stone	YES	
Rejection Screen Size	1 1/2 "	YES	
Computerized Flow & Rate Control	Yes	YES	
No. of Settings Computer can stored	20	YES	
Are manual installation & removable of gates required on your unit	Yes	YES	
Hopper , expandable 10 ft to 16 ft	Yes	YES	
Individual Air Gate control for Spread Width	Yes	YES	

13.0 SPREAD HOPPER REJECTION SCREEN:			
13.0 Full-width rod type reject screen with min. 1 ½ in. opening	Yes	YES	
14.0 CONTROLS:			
How many operators req. to operate this unit	Two	YES	
14.3 Application Rate Control System	Yes	YES	
Manufacturer & Model No. of control system:	Danfoss Plus 1	YES	
No. of functions	20	YES	
Controller maintains rate even with changes in travel speed	Yes	YES	
Controller maintains rate even with changes in spread width	Yes	YES	
14.3.1 Application rate computer shall monitor the actual speed of the chip spreader and automatically vary gate openings in order to maintain the set application rate, in lbs./sq. yd., with accuracy to +/- two percent.	Yes	YES	
14.3.2 The application rate may be varied as desired during the operation of the unit.	Yes	YES	
15.0 BASIC DESIGN AND DIMENSIONS:			
15.1 Min. wheelbase	134"	YES	
15.2 Min. inside turning radius.	21.5'	YES	
15.3 Heavy-gauge welded steel frame	Yes	YES	
15.4 Non-skid surface on all walkways and at operator's station.	Yes	YES	
15.5 Handrails around all walkways	Yes	YES	
15.6 Safety steps with toe stops, or access ladders on each side.	Yes	YES	
15.7 Seat, cushioned, adjustable, with padded backrest, and seat belt meeting the current SEA J386 std.	Yes	YES	
15.8 Locking integral tool box.	Yes	YES	
16.0 LIGHTING:			
16.1 Two white halogen sealed-beam headlights	Yes	YES	
16.2 Two amber flashing	Yes	YES	
16.3 Two combined stop lights	Yes	YES	
16.5 Electrical wiring insulated & enclosed	Yes	YES	
17.0 SAFETY AND SPECIAL EQUIPMENT			
17.1 Horn & back-up alarm per SAE J 994	Yes	YES	
17.4 Slow moving emblem	Yes	YES	
17.5 Fire extinguisher, min. 3-A: 40B:C	Yes	YES	
Unit weight information:			
Shipping Weight (lbs.)	23500	YES	

Operating Weight w/ full tanks (lbs.)***	24,500	YES	
*** Wt. not counting rock.			
Frame thickness	6 x 3 x 3/16 rectangular tube	YES	
		YES	
Light Package: to include Headlights Stop and Tail lights, Turn Signals w/ Flashers	Yes	YES	
Front Fenders	Yes	YES	
Engine Warming System: to include, High Coolant Temp., High Hyd. Oil temp., low engine oil & low fuel.	Yes	YES	
Strobe Light	Yes	YES	
Four Wheel Drive	Yes	YES	
18.0 Axles			
Front Axle	Rockwell drive steer with hydraulic brakes	YES	
Rated	26,000 pounds	YES	
Ratio			
Rear Axle	Rockwell Rigid with S cam Brake	YES	
Rated	34,000 pounds	YES	
Differential	Yes	YES	
Ratio	19.0	YES	