

http://www.geffs.com

Geffs Manufacturing, Inc. P.O. Box 4885 Pocatello, Idaho 83205-4885 208-232-1100



# GEFFS BM624 SELF-PROPELLED CHIP SPREADER

# **OPERATOR'S AREA:**

Your operators will appreciate the years of refinement that have gone into the BM624 operator's area. Every Feature on the BM624 has been fine-tuned with safety and working comfort in mind.

Standard features include: extra-wide diamond safety plate decks to enhance both safety and noise control; Two adjustable cushion-ride seats, weatherproof, with arm rests for operator comfort; Two beneath-the-seat lockable tool boxes; Fire extinguisher mounted behind the operator's seat

### **INSTRUMENT PANEL:**

Convenience and immediate control mark the engineered-for-performance design of the GEFFS Manufacturing, Inc. instrument panel. Swing over console for left hand or right hand operation. Controls are logically located for full control of the system at all times. The standard locking cover helps prevent vandalism.

#### **C.A.R.S. – COMPUTER APPLICATION RATE SYSTEMS:**

Geffs Manufacturing, Inc.'s Alan Bradley Computer System (the same system used by NASA) powers our "CARS2X" or Computerized Application Rate System with individual gate control, allows the chip spreader operator to apply aggregate on the roadway more efficiently, with greater operator ease and less material waste. The computer can store up to 20 different settings and the application rate may be controlled by the computer or manually. The operator simply enters the amount of aggregate wanted on the roadway into the keypad in pounds per square yard and the computer maintains that amount regardless of machine speed or road conditions.



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# **BM624 CHIP SPREADER**

# **DESIGN FEATURES FOR OPERATOR CONVENIENCE AND SAFETY:**

- 1. Unitized frame construction.
- 2. Easy access to IN-LINE POWER (Drive Train).
- 3. Oscillating front axle.
- 4. 35,000 lbs. Planetary rear axle.
- 5. Reinforced lower conveyors.
- 6. Power Steering.
- 7. Over-sized oil cooler.
- 8. Four-wheel brakes with parking brake. Front: air over hydraulic Rear: "S" Cam air brakes Parking: Spring Anchorlock on transmission.
- 9. 11:00 x 20 18-ply compactor tires, or optional 385/65R 22.5 Highway Tread.
- 10. Larger capacity front hopper (various widths available) from 8 foot to 24 foot spread width.
- 11. Free standing removable front hopper allows addition of side-delivery shoulder backing attachment for higher machine production.
- 12. Final segregation screen (swing-up style).
- 13. Front seal radial gates with hydraulic openers.
- 14. Two-stage top side-mounted air cleaner.
- 15. Vandal protection and safety package includes control panel security cover, 9 padlocks keyed alike, engine security panel, and locking fuel cap.
- 16. Cushion-ride seats with arm rests.
- 17. Convenient, lockable tool boxes mounted beneath each operator's seat.
- 18. Safety decks and steps (entire decks are safety plate).
- 19. 6.5 Cu. Yd. Receiving hopper, largest capacity in the industry.
- 20. Two 24" conveyors with 20° troughing idler slope. Conveyor controls are infinitely variable (without external valving).
- 21. Ratchet-type deflector heads.
- 22. Extra wide second operator station.
- 23. Fingertip controls and swing over console for maximum operator convenience.

# **LM420 CHIP SPREADER**

Our smaller chip spreader, the LM420, is designed for those wanting the convenience and power of the Model BM624 in a smaller size.

The LM420 offers a 4 Cu.Yd. receiving hopper and two 20 inch conveyors to carry aggregate to the front hopper. The LM420 with an expandable hopper and C.A.R.S. will save up to 25% of the aggregate required per job. We are accurate at any speed with the ability to control the width transitions.

With C.A.R.S. the operator can go from computer control to manual control with the flip of a switch and still have the infinite control of the gate opening.

# **GEFFS MODEL BM624 SPECIFICATIONS:**

#### **FRAME:**

Unit welded 3" x 6" structural tubing for lower members, welded 3/8" rear and front axle holder, with front pyramid and nine cross-bracings in each conveyor's side, welded into one sturdy unit.

# **POWER TRAIN:**

Motor, transmission, rear axle and front power take-off are in line to prevent horsepower loss. The motor is mounted under the operating platform to reduce sound and heat, readily accessible for maintenance. Air compressor self-maintained. Four-wheel air brakes. All components are standard industrial production items.

# **ENGINES:**

Standard: Cummins 6BT 5.9 Diesel 152 HP or 175 HP BHT@ 2500 rpm. Cummins 6B5.9L 220 HP or 6C8.3L 215 HP, 230 HP or 240 HP Electronic Tier II. Caterpillar 3126 220 HP Diesel or 3126B 220 – 280 HP Electronic Tier II. Ask for other options available.

# **TRANSMISSION:**

Superior Power shift type: 6-speed forward, 3-speed reverse. Smoothness and ease of operation comparable or superior to hydrostatic drive. With a fully loaded Dump Truck and Chip Spreader, the Train Weight can reach weights of over 100,000 Lbs. GEFFS power shift is a gear to gear transmission which does not rely on oil to pull the load. The Power shift transmission also reduces maintenance cost with simple in house repairs in case of a failure. Parts can be replaced at lower cost than new components for hydrostatic transmissions, motors, etc

The simplicity of the power shift transmission is as easy as selecting a work gear and moving one handle from forward to reverse. Shifting is all electrical and moving from 2 wheel drive to four wheel drive is done with the flip of a switch.

# **REAR AXLE:**

Differential all Planetary Drive, 35,000 Lbs. capacity. Air brakes -16-1/2" x 5". This planetary axle puts the heavy torque in the wheel in place of ring gear and pinion.

#### **FRONT AXLE:**

Oscillating 21,000 Lbs. capacity.

Air brakes – 15" x 4".

Front Wheel or 4 Wheel Drive units: Oscillating 26,000 Lbs capacity. Brakes 17 x 4.

# **OPTIONAL 4-WHEEL DRIVE:**

An optional feature on the Model BM624 is 4-wheel drive, for minimum slippage and maximum traction under all conditions.

# **STEERING:**

Orbital type, full hydraulic powered, independent of engine speed.

# **BRAKES:**

Front: Air over Hydraulic Drum brakes 15" x 4"
FWD or 4X4 Air over Hydraulic Drum 17" x 4"
Rear: "S" Cam Air brakes 16-1/2" x 5"

# **WHEELS & TIRES:**

Budd type disc wheels. Standard tires are 11:00 x 20, 18-Ply compactor. Optional size 385/65R 22.5 Highway Tread.

# **TRUCK HITCH:**

Positive locking, hydraulic release truck hitch, controlled from operator's station enables hooking and releasing of all aggregate trucks without stopping.

Motion range 8"-20" Height, 10" range in and out.

# **CONVEYOR SYSTEM:**

Two 24" conveyor belts independently controlled by built-in variable speed controls (Standard). Fulllength

side lining, self-cleaning tail pulleys with eight troughing idlers pitched at 20 degrees and three return rollers per conveyor.

# HYDRAULIC SYSTEMS / CONVEYORS HOPPER DRIVE & SPREAD ROLL:

The Hydrostatic drive system consists of 3 variable displacement axial piston pumps connected in a closed circuit to a fixed displacement, low-speed, hi-torque motor.

- The variable displacement pumps are driven by the main power control lever and are infinitely variable between zero and maximum speed (without external valving).
- Fixed displacement low-speed, high-torque motors
- **Each system has its own shut-off valves and suction filters with a common reservoir.**

- Oversized oil cooler.
- Vandalism proof fill spout and magnetic dip stick.
- All components and fittings are standard S.A.E. mountings & configuration.
- Service convenience The shut-off valves isolate the reservoir for easy filter changes or pump service.

# **AGGREGATE RECEIVING HOPPER:**

The large operating area above the motor is designed to keep heat and noise where it belongs – under the deck. An exclusive feature of the BM624 is improved ground clearance to 10" for easy loading on standard tilt-bed trailers. Self cleaning hopper does not require folding wings for ease of cleanout.

- 1. 6.5 Cubic Yard capacity (the largest capacity in the industry) with adjustable feed control gates and rubber skirting to prevent spillage.
- 2. Designed to handle all sized trucks.
- 3. The receiving hopper is 114" wide, 75" horizontal depth, and 40" vertical depth.
- 4. Large capacity feed areas, with 24" x 36" openings over conveyor belts.
- 5. Reinforced conveyors.
- 6. Ruggedly constructed cleaning pulleys, with removable shafts.
- 7. Service convenience The shut-off valves isolate the reservoir for easy filter changes or pump service.

# FRONT SPREAD HOPPER & CUT-OFF GATES:

Geffs Manufacturing, Inc. offers several types of spread hoppers. All are stand-alone, removable hoppers which allow use of Geffs Side-Delivery shoulder backing attachment for increased machine productivity.

Geffs <u>EXPANDABLE HOPPER</u> is a single large capacity box with hydraulic expanding ends that retract down for transportation and extend for maximum spread width. Individual gates are supplied to provide flexibility of desired selected width:

1. Operator has the ability to control each gate on demand with manual override capability from the computer.

- 2. Spread width range of 9-1/2 in. to 16 ft.
- 3. Spread rate range of 1 lb. To 90+ lbs. at any speed up to 1,200 feet per minute.
- 4. Offered in three sizes:
  - a. 10' to 16' Spread Width
  - b. 12' to 18' Spread Width
  - c. 12' to 20' Spread Width

Geffs Manufacturing, Inc. offers 5 <u>TWIN HOPPER SYSTEMS</u>. Each has a variable spread width from 0 to hopper width in infinitely variable increments, with 12" gates across and two 6" gates on each side of hopper for smoother curves. These 6" gates can be replaced by one 12" gate on each end if desired. The variable spread width is controlled from the operators station with Geffs CARS2X Computer Application Rate System which includes both application rate controls and individual gate controls.

- 1. 8' to 16' THS variable spread hopper.
- 2. 9' to 18' THS variable spread hopper.
- 3. 10' to 20' THS variable spread hopper.
- 4. 11' to 22' THS variable spread hopper.
- 5. 12' to 24' THS variable spread hopper.

Each hopper in the Twin Hopper System comes complete with spread rolls, augers, and agitators.

GEFFS <u>STANDARD FIXED HOPPER</u> widths from 10' 6" to 18'. Cut-off gates are adjustable by presetting to spread from a minimum of 6 in. to full width of hopper:

- 1. Cut-off gates front-closing radial type controlled from operator's control deck. These gates open in 1/16" increments from 0" to 3-1/2".
- 2. All aggregate spread hopper gates are made of 3/16 AR plate for long life.
- 3. Spread roll is 6-1/2" in diameter, hydrostatically driven and operator controlled.

# **FRONT HOPPER REJECT SCREEN:**

A full width rod screen (grizzly) with 1-1/2" openings retain all oversized and foreign objects. Final segregations are also available.