

Introducing
the World's **1st**
Purpose-Built
Electric Hybrid
Sweeper...
Only from Allianz

*Helping save
more than the
planet...*

Allianz Sweeper Company
continues over a half century
of industry-leading innovative
engineering with the introduc-
tion of the World's 1st Purpose-
Built Electric Hybrid Street Sweeper.



Allianz Electric Hybrid sweeper is industry benchmark.

The Allianz Johnston 4000 Electric Hybrid is a high-performance sweeper that offers unmatched reliability, safety and ease of use.

- ▶ 40% increase in fuel economy.
- ▶ Reduced emissions.
- ▶ Reduced noise levels.
- ▶ Travel speeds up to 60 MPH.
- ▶ State-of-the-art environmental automotive technology.
- ▶ Toughest and most rugged purpose-built mechanical sweeping system ever constructed.
- ▶ Capable of removing large amounts of debris with specially designed equal-width pick-up broom and elevator system.
- ▶ Leafgate system controlled from within the cab to ingest bulky debris such as branches and leaves.
- ▶ PM-10 water system improves air quality.
- ▶ Safe design with high visibility and fingertip controls.
- ▶ Exceptional maneuverability.
- ▶ Available in high or low dump configurations.

▶ **Allianz Sweeper Company** is the World leading innovative manufacturer and distributor of mechanical, regenerative, and vacuum street sweepers and litter collection systems. Our equipment offers uncompromising performance, consistent quality, durability and reliability. Our comprehensive range of machines provides the right cleaning equipment for your application.

▶ For Over 55 Years...

- ▶ **Reliable / Durable Equipment**
- ▶ **Innovative Engineering / Design**
- ▶ **Industry Leading Reputation**
- ▶ **Dedicated Customer Service**
- ▶ **Outstanding Sales Professionals**
- ▶ **Fast Parts and Service**
- ▶ **National Dealer Network**

ISO 9001: 2008



Allianz 4000 Electric Hybrid Configuration

Engine

| | |
|-----------------|--|
| Cummins ISB-200 | 6 cylinder injected diesel, turbocharged and intercooled. EPA 2010 |
| Displacement | Diesel: 409 cu in. (6.7 L) |
| Horsepower | Diesel: 200 HP @ 2300 RPM |
| Maximum Torque | Diesel: 520 lb-ft @ 1600 RPM |
| Cooling System | 38 qt (36 L) capacity, swing-away designed radiator. |
| Engine Oil | 15 qt (14 L). |
| Air Cleaner | Two-stage dry with safety element. |

Traction Drive

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|-------------|--|
| Description | Electrical drive with two speed differential final drive. The traction system provides constant broom speed independent of vehicle speed or direction. |
| Range | Low (sweeping mode) = 0 – 14 mph High (travel mode) = 0 – 60 mph. |

Auxiliary Hydraulics

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|-------------|--|
| Description | Tandem or Triple hydraulic pump assembly utilizes separate direct mounted gear pumps to provide high torque power to elevator, main broom and gutter brooms. |
| Capacity | Total system – 20 gal (75L); One tank – 17 gal (64L) |

Sweeping

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|----------------|---|
| Swath | 91 in. (2311mm) single gutter broom, 125 in. (3175mm) dual gutter broom |
| Pickup System | Balanced components |
| Elevator Width | 58 in. (1473mm) |
| Broom Width | 58 in. (1473mm) |
| Hopper Width | 74 in. (1880mm) |

Pickup Broom

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|--------------|---|
| Type | Disposable polypropylene. |
| Size | 32 in. x 58 in. (813mm x 1473mm) |
| Drive | Direct hydraulic, variable speed |
| Displacement | 17.1 cu in./rev. |
| Speeds | Variable |
| Controls | Cab mounted hydraulically raised and lowered. |
| Position | Self adjusting for pressure and wear. |

Gutter Broom

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|-------------------|--|
| Diameter | 47 in. (1194mm) |
| Speed | Variable |
| Drive | Direct high torque hydraulic. |
| Lift | Hydraulic displacement cylinders. |
| Impact Protection | Hydraulic accumulators allow vertical free floating and shock absorbers allow horizontal protection. |

Gutter Broom

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| Overload Protection | Motor mounted relief caps. |
| Adjustments | Simple "tool free" settings, in-cab controls for tilt, pressure and wear. |

Hopper

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| Capacity | 5.6 cubic volumetric yards (4.28 cu meters). |
| Lift | 12,000 lbs (5445kg). |
| Lift Method | Dual 4 in. hydraulic cylinders. |
| Dump Height | 116 in. (2945mm) high dump. |
| Dump Position | Behind rear wheels, similar to dump truck. |
| Dump Control | Cab mounted single rocker switch. |
| Safety Lockout | Hopper lift controls automatically prevent movement while dumping. |
| Location | Center mounted behind cab. |

Water Spray System

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|---------------|---|
| Capacity | 250 gal. (946L) |
| Construction | Molded Polyethylene. |
| Location | Below frame for stability. |
| Spray Nozzles | 15 nozzles at various locations. |
| Controls | Variable flow valves over each broom, master variable flow valve and shutoff switch in cab. |
| Filter | Cleanable. |
| Fill Hose | 15 ft (4572mm) hose located at right center body panel. |

Elevator

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|--------------|--|
| Type | 7 or 11 Flight squeegee. |
| Squeegee | Replaceable corded rubber tips. |
| Belts | Continuous molded rubber. |
| Drive | Direct hydraulic, variable with forward and reverse. |
| Displacement | 15.8 cu in./rev. |
| Protection | Hydraulic relief cartridge. |
| Speed | Variable forward and reverse. |
| Bearings | Four 3/16 in. triple lip sealed, high load capacity with dust seals. |
| Shaft | Split shaft design. |
| Back Plate | Adjustable/replaceable bolt-on. |
| Throw Plate | Adjustable for fill. |

Electrical System

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|------------------------------|---|
| Electrical Hybrid Components | Electrical generator, electrical drive motor, electrical hydraulic motor, generator control unit, motor control unit for drive motor, and hydraulic motor, and lithium-ion batteries. |
| Alternator | 130 amp with dust shield, 12 volt system. |
| Batteries | 2 – 900 CCA @ 0F; 12 volt system. |
| Wiring | Sealed wire harness; Solid color coded wires, numbered and function labeled every 12 in. (305mm); sealed pre-wired solenoids; Circuite breaker protected. 12 volt system. |

Chassis

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| Frame | 3" x 13" (76mm x 330mm) C-Channel with modular body; Front & rear tow hooks. |
|-------|--|

Instruments

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| Gauges | Speedometer/odometer, engine tachometer/hour-meter, hydraulic oil pump tachometer, engine oil pressure, engine water temperature, voltmeter, fuel gauge and gutter broom position indicators. |
|--------|---|

Sweeper Dimensions

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|------------|---------------------|
| Wheel Base | 130 in. (3302mm) |
| Length | 208 in. (5283mm) |
| Height | 120 in. (3048mm) |
| Width | 102 in. (2591mm) |
| Weight | 16,660 lbs (7557kg) |

Paint

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|---------------|------------------------|
| Powder Coated | 100% TGIC |
| Body | White and black matte. |

Options

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|------------------------|--|
| Stainless Steel Hopper | Lifetime warranty |
| PM-10 | Reduces harmful particulates for improved air quality. |
| In-Cab GB Tilt Control | Enhances curbline cleaning |
| Elevator Flusher | Extends elevator component life. |

Air Quality Management District

The Allianz 4000 has been deignated by the South Coast Air Quality Management District as Rule 1186 Certified for its ability to pick up and contain small-micron material. It passed the rigorous Rule 1186, PM10 Certification.

**First Purpose-Built
Electric Hybrid Sweeper**



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