



Product Specifications

M6000

Mechanical Broom Power Sweeper
Single or Twin Engine Conventional Chassis



Competitive Advantages of the Schwarze M6000 Conventional

The Schwarze model M6000 line is earning a reputation as the premier heavy duty mechanical broom sweeper in the American marketplace. This brochure describes the single and twin engine M6000 models that are mounted onto conventional chassis. Schwarze also offers twin engine M6000 sweepers that are mounted onto cabover chassis.

The versatile Schwarze M6000 series sweepers also offer many of the design innovations that have become the Schwarze hallmark, and most major components are interchangeable on all M6000 models.

On twin engine M6000s, a dependable Deutz diesel engine operates all sweeping functions. Single engine models of the M6000 are powered by the chassis engine via a New World Transmission.

The M6000 may be mounted onto either of two standard production conventional chassis. These are a Freightliner FL70 or an International IH4300. Both chassis models have a well-deserved reputation as being durable, comfortable machines to own and operate.

The M6000 model sports a number of Schwarze-only innovations designed to increase productivity and reduce downtime. The M6000's variable height dumping system leads the industry in terms of versatility. And, due to the machine's 48" long dump door, your operator doesn't have to be 'mirror-to-mirror' with a dump truck in order to offload into the center of it.

In addition to its M6000 mechanical broom sweeper models, Schwarze Industries, Inc. also offers a complete line of air sweepers. These range from the 4.3 cu. yd. model A4000, which requires no CDL to operate, to the largest, most powerful regenerative air sweeper in the industry, the 9.6 cu. yd. Schwarze A9000.

Schwarze is also America's leading manufacturer of sweepers designed for parking area applications, and maker of the first-ever high-efficiency *pavement cleaners*. Schwarze's EV sweepers are environmental particulate management machines that remove material as small as 2.5 microns.

Hopper

The M6000 hopper has a 5 cubic yard volumetric capacity. This large size requires fewer trips to a dumping facility. The M6000 offloads from the right side, using a variable height, scissor-lift system that provides strength and stability in even the most extreme applications.

The dual cylinder scissor-lift system is made from reinforced 3" x 6" steel tubing, and has a sliding-block mechanism that is self-cleaning.

The hopper may be dumped at ground level, or at any other height up to 14' 6" (11' 6" to bottom of dump door). This allows the operator to offload into a wide variety of containers or trucks, including triple axle dump trucks and dump trailers equipped with sideboards. Plus, because of the M6000's extra long 48" dump door, the sweeper doesn't need to be right next to the dumptruck when offloading.

Hopper dumping may be performed from inside the cab or via switches located outside of the sweeper. This feature provides increased safety by allowing the operator total control and excellent visibility.

The M6000's elevator is outfitted with a water flushing system to assure long life.

The M6000's hopper, like the rest of the sweeper, has been quality engineered to provide more sweeping production per day, with similar increases in sweeping productivity and debris removal per year.



Commercial Chassis

The M6000's ability to travel at normal highway speeds saves time and allows more sweeping per shift. Both the Freightliner and International chassis provide an excellent level of operator comfort.

Use of a standard production chassis requires a minimal onhand parts supply. Parts and service are readily available at your local chassis dealership.

Both of these standard production chassis meet or exceed all OSHA requirements for ride and comfort, and both have a proven track record in safety and reliability.

Air-ride seats are standard on both the left and right sides. And, because the M6000 is mounted on a standard production chassis, your operator will have an immediate familiarity with the chassis controls. This, in combination with the added comfort afforded to operators, contributes to a higher overall level of productivity.



Gutter Brooms

The M6000's hydraulically-driven gutter brooms are available in either 44" or 49" diameters and consist of five individual segments. Broom are of the forward-facing, digger-type; this design has earned a reputation as the most efficient way to transfer heavy material.

Standard features of the M6000 model include in-cab controls for both tilt and downpressure. Their large size requires fewer revolutions, compared to smaller brooms, and their free-floating design allows them to follow the contour of the pavement.

These features extend the life of the individual gutter broom segments, as well as ensure excellent transfer of debris to the main broom's sweeping path.





Auxiliary Engine

The proven performance of a Deutz auxiliary engine supplies power to all hydraulic sweeping components on the twin engine M6000 model. This engine generates a powerful 75.5 hp at 2800 rpm. During normal sweeping, the Deutz engine's noise output is extremely low.

The Deutz company's highly regarded oil cooling system eliminates the need for all the items normally associated with a water-cooled engine, including the radiator, hoses and water pump. This reduces maintenance and operating costs, as well as providing superb engine life.

The air filter is a 2-stage, dry type, and includes a centrifugal precleaner. These factors help ensure a longer engine life and a cleaner environment.



Fuel Tank

On twin engine conventional models, the M6000's 50 gallon fuel tank is mounted inside the rear doors of the sweeper body.



Main Broom

The Schwarze M6000 features a full-floating, rear-mounted main broom and carbide-insert skids. The broom size is standard, 58" wide by 36" in diameter.

The main broom comes equipped with 2.5" pneumatic cylinders. These allow instant main broom pattern adjustment from in the cab, so it's easy to maximize performance in any application.



To assure contour sweeping, the cylinder lowers with no resistance. This allows the main broom to follow road contours seamlessly. The broom is driven by a hydraulic motor via an efficient chain drive system.

The broom cover raises easily and is held in place by twin gas shocks. This allows for easy access for inspection, removal and replacement of the rear broom.



Squeegee-Type Elevator

The 58" wide elevator has 13 flights and a heavy duty pivot frame that eliminates elevator twist during raise/lower. Chain tensioning takes just a few minutes and requires no tools.

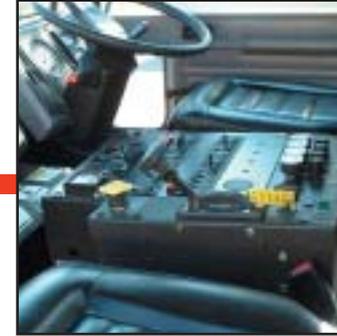
For leaf sweeping, elevator height may be controlled 6"-9" from inside the cab. Direction of rotation is reversible for ease in cleaning and for dislodging debris that may have stalled or jammed the elevator.



Hydraulic System

Hydraulics feature a load-sensing, variable displacement pump. All components are easy to access, have built-in LED diagnostics and are field-proven.

Broom hydraulics have priority flow, diverting to cylinder functions momentarily as required. Valves are isolated and grouped, with sweeping functions located on the left side of the sweeper and cylinder functions on the right.



Control/Instrument Panel

The instrument panel on the Schwarze M6000 is designed to be user friendly. The sweeper's control switches are located in succession for ease of operation.

All controls are well lighted for nighttime operation, and are easy to reach from either operating position. The panel has a switch for the lights, optional controls and each sweeper function.

It also includes a tachometer and gages for oil temperature and oil pressure. To eliminate the potential for engine damage due to high oil temperature or low oil pressure, the M6000 is also equipped with an automatic shutdown system.

Water and Dust Suppression

The polyethylene material used for water tanks on the M6000s is extremely durable and lightweight. Water capacity varies depending upon whether the M6000 model chosen is a single engine or twin engine machine.

Water flow to each spray bar is independently controlled from inside the cab. There are 7 nozzles located on the front bumper and 3 on each of the gutter brooms.

The optional spray bar for the main broom has 5 nozzles. The water pump automatically disengages when the water supply is depleted. The 25-foot fill hose, with a quick detachable 2.5" NST hydrant coupling, is included.

The water filter is easily accessible for cleaning. To eliminate the possibility of damage to water lines in freezing weather, an air purge system is included as standard equipment.

A twin engine-powered Schwarze M6000 is also available on a Sterling SC8000 cabover chassis. Ask your Schwarze representative for a brochure on the M6000TE/CO model.



M6000 Specifications

GENERAL:

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|----------------------------------|----------------------------|
| Wheelbase | Maximum of 131" (3,227 mm) |
| Length | Maximum of 266" (6,756 mm) |
| Travel Width | 96" (2,438 mm) |
| Sweeping Width (brooms extended) | 120" (3,048 mm) |
| Overall Height | 113" (2,870 mm) |
| GVWR | 33,000 lbs. (14,969 kgs) |

GUTTER BROOMS:

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|------------------|--|
| Location | Behind cab |
| Diameter | 44" (1,245 mm) or 49" |
| Type | 5 segment; plastic, disposable |
| Speed | Variable (optional) |
| Flex | Free-floating with air suspension |
| Drive | Full hydraulic |
| Adjustments | In-cab remote for tilt (optional) and lift (hydraulic) |
| Bristles | 26" (660 mm) wire |
| Center Deflector | Raises and lowers automatically |

MAIN BROOM:

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|--------------|-----------------------------|
| Diameter | 36" (914 mm) |
| Length | 58" (1,473 mm) |
| Bristles | Replaceable |
| Lift Control | In-cab hydraulic lift |
| Drive | Chain drive hydraulic motor |
| Mounting | Full-floating |
| Speed | Variable (optional) |
| Bearings | Self-aligning |
| Dirt Shoes | Carbide; 2" wide |
| Support | Air suspension |

DEBRIS HOPPER:

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|------------------------|-------------------------------------|
| Volumetric Capacity | 5.0 cu. yds. (3.82 m ³) |
| Lift Capacity | 14,000 lbs (6,350 kg) |
| Dumping | Scissor-lift |
| Dump Height (Variable) | 16" to 138" (406mm to 3,505 mm) |

Hopper includes safety pins; 18" x 21" (457mm x 533mm) inspection door; 12" x 38" (305mm x 965mm) plexiglass inspection window, and 8" x 38" (203mm x 965mm) skylight.

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Email: support@schwarze.com

SAFETY/LIGHTING:

The Schwarze M6000 meets all federal motor vehicle safety standards and is equipped with a fire extinguisher, hopper safety prop blocks, high-mount back stoplight, hopper dump lights (optional), gutter broom and rear broom work lights.

The M6000 is equipped with a parking brake interlock that automatically applies during all hopper movements.

CONVEYOR/ELEVATOR:

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|----------------------------|---|
| Conveyer | Squeegee with replaceable flights |
| Conveyor Chain | Precision, heavy duty, constant-radius roller chain |
| Bearings | Self-aligning; triple-sealed and shielded |
| Bottom | Bolt-on; replaceable |
| Speed | Forward and reverse (optional variable speed forward) |
| Flexibility | Flexes for large object passage |
| Adjustment | 3-way positive |
| Drive | Hydraulic; forward and reverse |
| Conveyor/Hopper Connection | Positive seal to eliminate debris spillage |
| Suspension | Air cylinders |
| Lift Control | In-cab hydraulic |
| Conveyor Jam Warning | Console-mounted (optional) |
| Cleaning | Built-in flushing system |

WATER SYSTEM:

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|------------------|---|
| Capacity of Tank | Twin Engine: 200-250 gal. (757-946 L) (Capacity on twin engine cabover M6000 is 350 gallons) Single Engine: 325-350 gal. (1,230-1325 L) |
| Construction | Polyethylene |
| Filler | 4" air gap fill tube; protected fill receptacle |
| Fill Hose | 25' with 2.5" NST hydrant coupling (7,620 mm x 63.5 mm) |
| Mounting | Bolt-on, removable |
| Pump | Electric |
| Spray Bars | In-cab; independent control; 7 nozzles located across front bumper, 3 nozzles at each gutter broom, and 5 nozzles across the main broom elevator (optional) |
| Spray Nozzles | Front, gutter broom, pick-up broom |
| Filter | Fine mesh screen |

FUEL SYSTEM:

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| Fuel Tank | 50 gallons (189 L) (Capacity of cabover M6000 fuel tank is 56 gallons) |
| Location | Rear compartment |

HYDRAULIC SYSTEM:

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| Pump | Variable displacement |
| Reservoir | 35 gallons (133 L); mounted above pump |
| Oil Cooler | Electric; 60,000 BTU |
| Valves | Electro-mechanical; 12-volt DC |
| Protection | Pressure relief |
| Controls | In-cab; all electric |
| Filtration | 10-micron |

ELECTRICAL SYSTEM:

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|------------|-----------------------------|
| Voltage | 12 volt |
| Alternator | TE: 130 AMP; SE: 160 AMP |
| Protection | Resettable circuit breakers |

PAINT:

One coat of sealer/primer and two coats of DuPont Imron 5000® polyurethane in standard white color.

WARRANTY:

The Schwarze M6000 sweeper is guaranteed to be free from defects due to faulty materials and/or workmanship for a period of 12 months, or 1200 hours. Liability is limited to replacement of defective parts at factory or authorized dealer. The standard warranty of the chassis manufacturer shall apply.

SWEeper ENGINE (M6000TE ONLY):

Auxiliary Engine for Twin Engine M6000TE

| | |
|-------------------|----------------------------|
| Make | Deutz |
| Type | 4-cylinder in-line; diesel |
| Displacement | 2.73 L |
| Stroke | 4.1" |
| Bore | 3.6" |
| Compression Ratio | 17.5:1 |
| Horsepower | 75.5 HP @ 2800 rpm |
| Torque | 160.7 ft lb @ 1800 rpm |



"New Ideas From The Company That's Sweeping The Earth"™

Note: Specifications are subject to change without notice.

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