

The People You Know. The Products You Trust.













Quality

Performance Public Safety

ic Safety Value

0.00

# 1 TOUGH SWEEPER

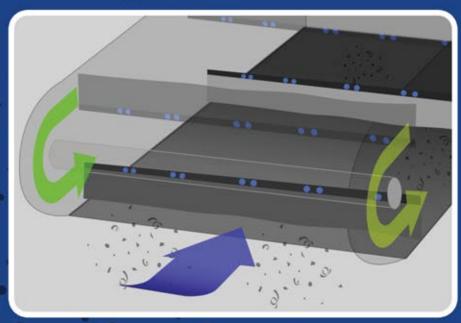
#### REVERSIBLE CONVEYER

During cleaning, a reversible conveyer provides a more efficient way to thoroughly clean the conveyer

# 13 RUBBER FLIGHTS ON SQUEEGEE TYPE CONVEYER

Removes debris from main broom quicker than competitive designs resulting in less trailing and increased heavy debris sweeping

# Squeegee Conveyer





## FAN JET NOZZLE CONVEYER WASHOUT

Allows for thorough end of day washout of the conveyer system extending the life expectancy of all conveyer components

# NOW YOU BETTER

#### CORDED RUBBER BELT CONVEYER WITH 13 FULL WIDTH CLEATS

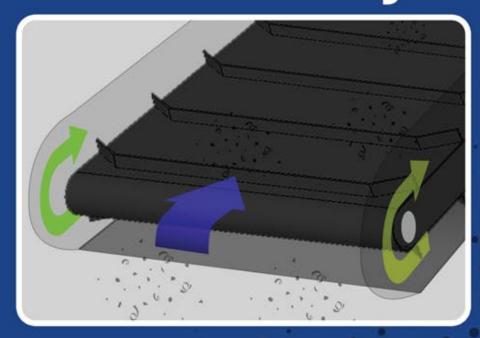
Carries larger debris without stalling the conveyer

# 2 VERSATILE OPTIONS

#### **EASY CHANGE CONVEYER SYSTEM**

Remove conveyer in just minutes. Change from belt to squeegee conveyer or for easy repairs to conveyer or housing

# Belt Conveyer



#### TWO-PIECE HARDENED STEEL CONVEYER FLOOR

Longer life expectancy equates to reduced cost of ownership



# HAVEA CHOCE

# M6 Avalanche<sup>™</sup>

The Schwarze M6 Avalanche™ is earning its reputation as the premier heavy duty mechanical broom sweeper in the American marketplace. The versatile Schwarze M6 Avalanche™ sweepers offer many of the design innovations that have become the Schwarze® hallmark. The Schwarze® Easy Change Conveyer System™ makes it a breeze to repair or replace a conveyer. Or go from a squeegee type to a belt type conveyer on the same machine. The free float, impact resistant, drag shoes take lateral impact from milling cuts, manhole covers and curbs and flexes back into place.

On the M6 Avalanche<sup>™</sup> Twin Engine, a dependable Deutz diesel engine provides power for all sweeping functions, while the M6 Avalanche<sup>™</sup> Single Engine sweeper functions are powered by the chassis engine via an Allison 3500 series Transmission.

#### COMPUTER CONTROLLED CUTTING & FORMING PROCESS

Guarantees a consistent cut part every time



#### MODULAR COMPONENTRY

Reduced repair time and cost of ownership

#### HYDRAULIC TEST PORTS

Reduces troubleshooting time with use of quick-disconnect gauge ports



#### PERMITE PERMIT

#### SIX SENSE CONTROLS

Six programmable configuration selections
Gives the operator the ability to press one button and sweep
Can be programed for various sweeping conditions
Programed functions are previewed prior to activation via display

#### WIRING HARNESS COLOR CODED AND FUNCTION IMPRINTED EVERY 6"

Provides easily identifiable wires and reduces maintenance downtime

# CENTRALLY LOCATED CONTROL COMPONENTS

Electrical controller, Hydraulic Directional Valves, Pneumatic Valves & Regulators, Water Pump, Valves & Filter, Auxiliary Engine (TE Models), Hydraulic Reservoir (TE Models)



#### BACKLIT SWITCHES WITH TEXT AND ICON LABELS

Rocker switch for each function that changes color when activated

#### TFT LCD COLOR DISPLAY

Hourmeters for Engine & Brooms, Hydraulic Oil Temperature, Engine Temperature, Oil Pressure, Water Level, Tachometer, Voltage, and on-screen indicators for each function



#### PM 10 CERTIFIED

Meets
AGMD 1186
requirements
to pick up and
contain harmful
particulates













#### **GLOBAL SUPPORT**

Schwarze staff will set-up and train on location world-wide

#### 52 DEGREE DUMP HOPPER DUMP ANGLE

Equates to a better dump action of the hopper allowing for a cleaner dump



#### WARRANTY SUPPORT

Schwarze people are on duty to support you and your equipment

#### 10 GAUGE STEEL HOPPER WITH 3/16" HOPPER FLOOR

Longer life expectancy equates to reduced cost of ownership



#### TRUSTED DEALERS

Trusted dealers will support your before and after-purchase needs

# 5.0 CUBIC YARD HOPPER CAPACITY

Increased hopper capacity equates to increased production and less dumps

#### 45 SECOND DUMP CYCLE

Faster dumping equates to increased production and efficiency.

#### 35 GALLON HYDRAULIC TANK CAPACITY

Reduces the heat buildup which creates a longer life expectancy for key hydraulic components

#### HOT SHIFT PTO

Provides unequalled power to the sweeper while eliminating the need to feather the chassis throttle for needed power in the most stringent of applications (Single Engine Only)

#### ENGINE SHUTDOWN SYSTEM

Reduces the risk of an engine failure due to high engine temperature or low oil pressure.

Also monitors hydraulic oil level and temperature for shutdown

#### PARKING BRAKE INTERLOCK MAXIMUM SAFETY

Does NOT allow hopper to be raised or tilted unless brake is set and chassis shifts to neutral automatically when brake is set

#### SEPARATE SWEEPER AIR TANK

Adds to air reserve, protected by priority safety valve





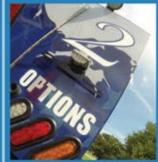
#### OIL COOLED DEUTZ ENGINE

Heavy duty Tier 4i industrial engine with 75 HP that does not require a radiator equating to less maintenance and less overall cost of operation











#### AMERICAN BUILT AMERICAN MADE



#### PARTS AVAILABILITY

Schwarze original equipment parts are available when you need them

#### INDUSTRY INVOLVEMENT

Schwarze supports the industry trade shows and industry associations

#### LOAD LEVELER

Allows for an increase in usable capacity, less dumps during a shift and increased production



#### 48" DUMP DOOR

Eliminates the need for a hopper side shift and another moving part. Less maintenance while still giving operator ability to dump into center of dump bed or container



#### 3:1 DESIGN FACTOR IN THE DESIGN OF THE HOPPER LIFT SYSTEM

Longer life expectancy equates to reduced cost of ownership

## HOPPER INTERIOR ILLUMINATION

Front viewing window with two skylights for daytime and sealed LED flood light for nighttime viewing of hopper & conveyer



### Provides more surface

SLIDE BLOCKS ON

SCISSOR LIFT

contact and better lift stability. Self-lubricating reducing overall maintenance



HINGE POINTS DO NOT COLLECT DEBRIS

HOPPER

Clean design prevents material buildup

# HIGH CAPACITY 5 MICRON WATER FILTER

Extends life and service intervals of water valves and nozzles



#### BRASS & GALVANIZED STEEL SPRAY BARS

7 Brass nozzle, front spray bar

4 Dual nozzle, gutter broom spray bars

5 Nozzle, main broom spray bar

Each nozzle has separate tip filter and main broom spray bar has quick release for easy access







#### SINGLE ELECTRIC DIAPHRAGM WATER PUMP WITH 50 PSI AND 5.88 GPM CAPABILITY

Extra powerful pump eliminates need for multiple pumps while providing excellent atomization of the water for excellent fugitive dust control





# M6 Avalanche™

The M6 Avalanche<sup>™</sup> may be mounted onto either of two standard production conventional chassis. These are the Freightliner M2 or International 4300. The M6 Avalanche<sup>™</sup> Twin Engine is also available in a cab-over version mounted on an Autocar Xpert cab-over chassis.

All available chassis models have a well-deserved reputation as being durable, comfortable machines to

own and operate.



Returns any debris, that may have been carried over the broom, back into the sweep path



# ALL HYDRAULIC MOTORS ARE DIRECT DRIVE

Gutter Brooms, Main Broom and Conveyer direct coupled to high-torque hydraulic motors

### INNOVATIVE DESIGN

Several Patents Pending

#### POLYETHYLENE MAIN BROOM COVER

Flexible cover that does not dent when an immovable object is encountered and eliminates rust and corrosion



# 3" AIR CYLINDERS ON MAIN BROOM

Allows for better main broom adaptation to the road surface and reduces leaving material in street pans equating to a cleaner sweep



#### MAIN BROOM LIFT

Uses same pneumatic cylinders, used for suspension, to lower, lift and lock broom in place for travel.

Cylinders mechanically lock the broom in the up position

#### LED LIGHTING

Increased visibility on the streets

#### PNEUMATIC TRAILING ARM GUTTER BROOMS

Greater flexibility and give around obstacles. Full incab control of broom down pressure



#### FREE FLOATING TRAILING ARM DRAG SHOE

Allows positive contact with the ground and broom to minimize debris trailing. Flex member prevents damage during lateral movements. 2 year warranty on carbide shoe



#### PNEUMATIC (GEO) GUTTER BROOM EXTENSION OVERBIDE

Infinite lateral in-cab adjustment from fully retracted to fully extended

#### IN CAB 27 DEGREE HYDRAULIC TILT

Allows on the fly gutter broom adjustments without the operator leaving the cab

#### 49" DIAMETER GUTTER BROOMS

Better debris transfer towards main broom equating to less trailing and overall better sweeping ability



Also available from Schwarze Industries, Inc.









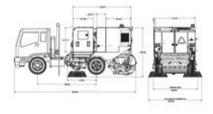


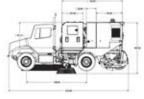














Design and specifications subject to change without notice.

#### CONVEYER / SQUEEGEE

Conveyer Conveyer Chain Bearings Conveyer Floor Speed

Flexibility Adjustment Drive Hopper Connection Suspension

Conveyer Jam Warning Cleaning

Bearings Speed

Drive Suspension

Conveyer Jam Warning Cleaning

#### WATER SYSTEM

Capacity of Tank

Construction Filler

Fill

Mounting Pump

Spray Bars

Spray Nozzles Filter

FUEL SYSTEM

Fuel Tank

#### HYDRAULIC SYSTEM

Pump Reservoir Oil Cooler Valves

Protection Controls Filtration

ELECTRICAL SYSTEM

Voltage

Alternator

Squeegee with replaceable flights

Precision, heavy duty, constant-radius roller chain Self-aligning, triple-sealed and shielded

Bolt-on; replaceable

Forward and Reverse, In-Cab Variable Speed Standard, Independent from Engine RPM Flexes for large object passage

Threaded rack

Direct Drive Hydraulic; forward and reverse Positive seal to eliminate debris spillage Air cylinders with in-cab adjustment for lower conveyer lift

Console-mounted, light and alarm

Bolt-on; replaceable

Threaded rack

conveyer lift

Built-in flushing system with high volume fan jet

Heavy Duty multi-ply belt with full width cleats

Forward and Reverse, In-Cab Variable Speed

Standard, Independent from Engine RPM

Positive seal to eliminate debris spillage

Direct Drive Hydraulic; forward and reverse

Air cylinders with in-cab adjustment for lower

Built-in flushing system with high volume fan jet

Self-aligning, triple-sealed and shielded

nozzles

#### CONVEYER / BELT

Conveyer Conveyer Floor

Adjustment Hopper Connection

SE conventional - 350 gal. (1325L)

Console-mounted, light and alarm

nozzles and lower roller flush

SE cab over - 350 to 700 gal. (1325 to 2650L) TE conventional - 200 gal. (1230L)

TE cab over - 350 to 500 gal. (1325 to 2555L)

Polyethylene 4" (102 mm) air gap fill; tubular protected fill

receptacle

Hose 25' with 2.5" NST hydrant coupling

(7620mm x 63.5mm) Bolt-on, removable

Electric diaphragm pump, 5.88 GPM (22.3 LPM) at 50 PSI (3.5 Bars) In-cab, independent control: 7 nozzles located across front bumper, 4 nozzles at each gutter broom and 5 nozzles across the main broom

All brass 80 degree fan pattern with

100 mesh tip strainer

200 mesh screen primary with 5 micron

high capacity secondary filter

Diesel, 50 gallons (189.25 L) CNG, 50 DGE (Diesel Gal, Equivalent) at 3600 PSI

Variable Displacement load sense piston pump 35 gallons (133L), mounted above pump

120,000 BTU twin electric fans Electro-mechanical:

12-volt DC with lighted DIN connectors

Pressure relief In-cab; all electric

100-mesh suction, 10-micron return,

5-micron breather

12-volt 160 AMP

#### Affiliates:











#### SWEEPER ENGINE (TWIN ENGINE ONLY)

Auxiliary for twin engine Deutz Tier 4i, In-line 4-cylinder Turbo Charged diesel 221 cu. in. (3.62 L) Displacement

5.0" (125 mm) Bore 3.8" (96 mm) Stroke Compression Ratio 18:1

75HP [56 kw] @ 2600 rpm 184 ft. lb. [250 Nm] @ 1600 rpm Horsepower Torque

**GUTTER BROOMS** 

Location Behind Cab 49" (1,245 mm) Diameter

5 segment wire filled plastic recyclable head Type

In-Cab Variable Speed Standard, Speed Independent from Engine RPM

Suspension Free-floating with air suspension and air extension

Drive Full hydraulic Adjustments

Manual tilt, In-cab remote hydraulic tilt (optional) 26" (660mm) wire Bristles Center Deflector Raises and lowers automatically with main broom

MAIN BROOM

Diameter 36" [914mm] Length 58" (1,473mm)

Bristles Replaceable solid core, poly wafer, poly wafer/steel combo or strip broom Lift Control In-cab pneumatic lift with positive lock

Drive Direct drive hydraulic motor

Mounting Full floating

Forward and Reverse, In-Cab Variable Speed Speed Standard, Independent from Engine RPM

Self-aligning Bearings

Trailing arm design with 2" (51 mm) wide Tungsten carbide shoe w/ Elastomeric flex link Dirt Shoes Suspension Air Suspension with in-cab adjustment and display

**DEBRIS HOPPER** 

Volumetric Capacity

5.0 cu. yds. (3.82 m3) 3/16" Floor, 10 gauge sides/roof, Construction Temper Pass/Pickled in Oil Carbon Steel

Optional Stainless Steel Lift Capacity 14,000 lbs.(6350 kg) Dumping Scissor-lift with hopper tilt

Dump Height (Variable) 16" (406 mm) to 138" (3,505 mm) Side door with ladder access, front view window Inspection with double skylight and LED illumination

GENERAL

SE and TE - 139" (3,532 mm) Wheelbase Cab Over - 132" (3,353 mm) SE and TE - 273" (6,934 mm) Length Cab Over - 269" (6,833 mm)

Travel Width 96" (2,438mm)

Sweeping Width 134" (3,404mm) (brooms extended)

Overall Height 113" (2,870mm)

33,000 lbs. [14,969 kgs] **GVWR** 

One coat of sealer/primer and two coats of DuPont Imron Elite polyurethane white color

Just a few of the options offered on the M6 Avalanche™

Arrow Board, Rear View Camera, Hopper full indicator, Extra LED flood lights, Extensive safety lighting, Pressure washer with hose reel, Reversible Gutter Brooms

#### WARRANTY

The Schwarze M6 Avalanche 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 or auxiliary engine manufacturer, if so equipped shall apply.

Note: Specifications are subject to change without notice.



Schwarze Industries, Inc. 1055 Jordan Road Huntsville, AL 35811 800.879.7933

An Alamo-Group Company

