



# A7 Zephyr™

Regenerative Air Runway Sweeper



\*Sweepers shown with optional equipment

## FAA APPROVED METHODS FOR FOD REMOVAL IN ONE UNIT:



VACUUM AND BRUSH  
REMOVAL OF DEBRIS



HIGH VELOCITY BLAST AIR TO  
PUSH MATERIAL OFF SURFACE



POWERFUL MAGNET TO  
COLLECT FERROUS MATERIAL



GLYCOL RECOVERY FOR  
PICKING UP DE-ICING FLUID

Your Schwarze Dealer.

Sweeping is one of the Best Management Practices to reduce FOD from runways and tarmac areas, and nothing does this as quick and efficient as the Schwarze A7 Zephyr™ high speed runway sweeper. Designed to meet the rigorous demand standards of the Department of Defense high speed sweeping requirements for quickly and effectively removing FOD.





MADE IN THE USA

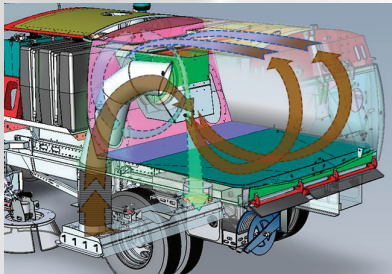


# A7 Zephyr™

## 8.4 Cubic Yard Regenerative Air Runway Sweeper

FOD or foreign object debris can wreak havoc on aircraft and has been shown to cost the industry more than \$10 Billion in damage, delays and disgruntled customers. Sweeping has been shown to be one of the best management practices to reduce FOD from runways and tarmac areas and nothing does this better than the Schwarze Model A7 Zephyr™ high speed runway sweeper. The A7 Zephyr™ was designed to meet the rigorous demand standards of the Department of Defense high speed sweeping requirements for quickly and effectively removing FOD.

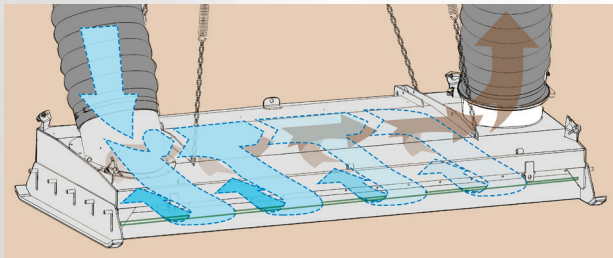
Schwarze regenerative air technology makes use of both positive pressure and vacuum airflow, this maintains the compressed air in a sealed loop and is not returned to the atmosphere like traditional vacuum sweepers.



### Regenerative Air Technology

Regenerative air sweepers generally only need 100KW to do the same amount of work as pure vacuum sweepers with 200KW.

The blast and recovery cycle continues indefinitely with no air leakage.



Pressurized air is forced across an "air knife" approximately 2.5 meters wide across the sweeping head. This scrapes the runway surface with a sheet of pressurized air, lifting dirt and Foreign Object Debris off the runway surface.

The performance of the Schwarze A7 Zephyr™ meets FAA guidelines for removing FOD such as ball bearings, rivets, and other metals at vehicles speeds of 25 KPH (TOS = 15 MPH).



The A7 Zephyr™ delivers outstanding results by:

- Removing FOD hazards (foreign object debris)
- Collecting large quantities of water from runways
- Collecting ferrous materials
- Collecting de-icer (Glycol)
- Removing dirt, grass & leaves with side blast air



# A7 Zephyr™ Regenerative Air Runway Sweeper



Shown with optional 615 gallon water system



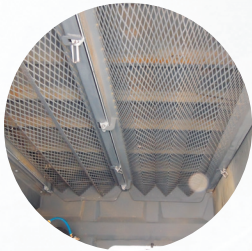
## Up to 144" Sweep Width

### 40" Dump Height

Large Fluid Capacity Glycol Collection System with 250 GPM Pump Off System



Powerful 360 Degree Rotating High Velocity Side Blast Air Blower



Large Saw-Tooth Increased Hopper Screen Design



Powerful Height Adjustable, Cab Controlled Self-Dumping Front Magnet

High Pressure Water Spraygun



CAN-Bus Control Panel with Backlit Switches, Text and Icons



44" Recessed Gutter Brooms with Shielded Broom Motor



Heavy Duty Catch Basin Vacuum Hose with Hand Controls

### Backup Camera

### Bolt-On Tubes

Schwarze regenerative air airport sweepers are used at the world's leading international airports, military air bases, and small regional airports because they offer the perfect combination of exceptional value, superior performance, and flexibility.



Michael Gunn  
Airfield Operations Supervisor

"Mobile Regional Airport, AL has been using the A7 Zephyr for 5 years and when Airbus sends out their FOD checkers, they tell us the runways look really good. We use it to clean the rams, runways, terminals, aircraft gates, lead-in lines and J-lines. We just stick with Schwarze because they are great machines and very reliable."

Additional Available Airport Sweepers:



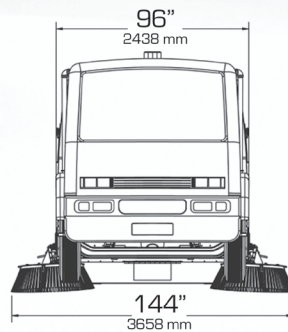
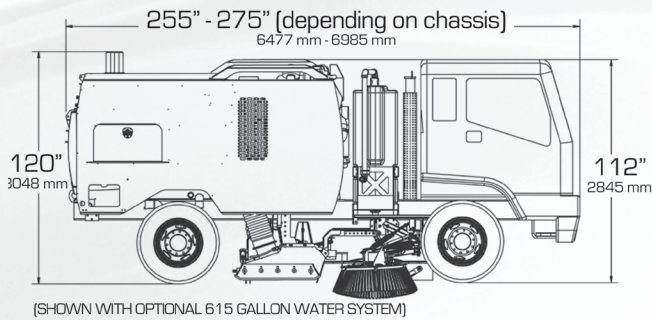
For More Information Visit

[WWW.SCHWARZE.COM/AIRPORT-SWEEPING/](http://WWW.SCHWARZE.COM/AIRPORT-SWEEPING/)

\*Ask us about our optional:







\*TYPICAL MEASUREMENTS SHOWN, EXACT DIMENSIONS DEPENDING ON OPTIONS AND TRUCK MANUFACTURER

### SWEeping PATH

Pickup head only	90 in [2286 mm]
Pickup head and one gutter broom	117 in [2972 mm]
Pickup head and two gutter brooms	144 in [3658 mm]

### CHASSIS

Mounts on various chassis to meet requirements

### SWEeper BODY

Construction	Welded 10-gauge stainless steel plate
Safety props	Lift spacers

### AUXILIARY ENGINE

Model/type	4045T in-line 4 cylinder
Aspiration	Tier 4 Final turbo-charged diesel
Manufacturer	John Deere
Displacement	275 cu. in. (4.5 L)
Brake horsepower	134 hp [100 kw]
Torque	@ 2400 rpm 398 ft. lb (540 Nm) @1500 rpm
Air cleaner	Centrifugal pre cleaner; dry type with safety element and restriction indicator
Oil filter	Full-flow/spin-on
Stroke	5 in [127 mm]
Bore	4.20 in [106 mm]
Compression ratio	19 to 1
Safety shutdown	Three-point automatic
Throttle control	Electronic

### HYDRAULIC SYSTEM

Type	Dual output 2 section
Pump capacity	8 gpm @ 1800 rpm (30 lpm) per section for 16 gpm total
Drive	Direct gear
Maximum pressure	2750 psi [190 bar]
Reservoir	25 gal [94 L]
Filter	10 micron; spin on
Protection	Pressure relief valve
Controls	Electro-hydraulic

### AUXILIARY HYDRAULIC SYSTEM

Type	Gear type; driven by electric motor
Function	Lower hopper; open/close hopper door; raise brooms and pickup head

### DUST CONTROL SYSTEM

Type	High pressure/low volume
Capacity	250 gallon (946 L)
Tank construction	Polyethylene filter; 50 mesh; cleanable
Fill diameter	2.5 in [63.5 mm]
Fill hose	25 ft [7620 mm]
Controls	Electric; in-cab
Nozzles	2 on each broom; 5 around suction head; 2 inside suction nozzle; 2 on front axle; 2 inside hopper
Water level gauge	In-cab

### FAN SYSTEM

Type	Closed-face radial
Drive	Direct via 5 groove; banded power belt
Construction	Hardox steel
Balance	1.5 grams on 2 sides
Diameter	32.75 in [832 mm]
Housing lining	Bolt-in corded rubber
Mounting	2 regreasable sealed bearings
Vacuum enhancer	For heavy/light material; in-cab indicator

### PICKUP HEAD

Type	Mechani-Pneumatic, dual chambered full-width blast orifice with windrow angle
Operating direction	Forward and reverse
Suspension	Adjustable spring balanced
Length	90 in [2286 mm]
Pressure hose diameter	14 in [355.6 mm]
Suction hose diameter	14 in [355.6 mm]
Hose construction	3/8" [9.5 mm] wire-reinforced molded rubber
Head area	3240 sq in (20903 sq cm)
Controls	Hydraulic raise and lower
Skids	Double wide tungsten carbide
Construction	Abrasion-resistant steel inlet and outlet transitions.

### SIDE BROOMS

Type	Vertical steel digger
Location	Right; left; forward of pickup head
Diameter	44 in [1118 mm]
Drive	Hydraulic
Suspension	Torque-sensing spring
Wear adjustment	Automatic
Pressure	Manual
Speed	Variable; non-reversing
Segments	5 each side; disposable
Tilt angle adjustment	In-cab controls

### INSTRUMENTATION

Auxiliary engine	Flat panel full color display; tachometer; hourmeter; voltmeter; temperature gauge; oil pressure gauge; warning icons
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### DEBRIS HOPPER

Volumetric capacity	8.4 cu yd [6.4 cu m]
Usable Capacity	7.0 cu yd [5.4 cu m]
Dump angle	51 degrees
Floor angle	3 degrees
Lifting	Twin hydraulic cylinders
Hopper dump door	Hydraulic open, close, lock
Inspection doors	1 on each side, pressure vessel lock
Hopper dump height	40 in [1016 mm]
Debris screens	Sawtooth drop down

### ELECTRICAL SYSTEM

Voltage	12 V
Sweeper engine alternator	90 amp

### PAINT

One coat of sealer/primer and two coats of Dupont imron elite polyurethane in standard white color

### OPTIONAL SWEEPER EQUIPMENT

- Special Paint
- Front Mounted Magnet Bar
- Amber Beacon
- Strobe Light Kit
- Arrowboard Kit
- Additional Flood Lights
- Hopper Hand Hose
- Remote Drop Down Screens
- Hopper Dump Assist Shaker
- 12-volt Auxiliary Hydraulic System
- Dual Steeling and Controls
- Extra Water
- High Pressure Front Spraybar
- High Pressure Wash Dow
- Side Air Blast Head
- Hopper Deluge
- Head Drain
- Dual Outside Hopper Controls
- Lifetime Hopper Warranty
- Short Wheelbase Chassis

Note: Design and specifications subject to change without notice.

Affiliates:



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