# Crosswind ()

# SINGLE-ENGINE 4 WHEEL REGENERATIVE AIR SWEEPER

Searching for a solution that eliminates maintaining and servicing an auxiliary engine on a regenerative air sweeper? Elgin Sweeper Company has the answer. The Crosswind1® eliminates all things associated with a diesel auxiliary engine, providing value to customers that extends beyond having one less engine. The Crosswind1 has undergone years of customer focused testing and validation; ensuring a design that exceeds expectations!

# **ELIMINATES:**

- Maintaining two engines
- Complex aftertreament system, and maintenance
- Untimely auxiliary engine regenerations
- Cost exposure resulting from "missed" auxiliary engine regenerations
- Cumbersome belt tensioning systems
- Auxiliary engine noise and vibration

# **CUSTOMER FEEDBACK:**

- Increases productivity
- Easy to use and learn; single push-button on-the-fly operation
- Quiet operation
- Reduces daily checks

# **EXHAUSTIVELY PROVEN OVER:**

Years of testing and validation, with thousands of miles and hours in operation, and customers market driven feedback to ensure a design that exceeds expectations.

Built for clean, Backed for life.

#### Variable Speed Device (VSD)

Replaces auxiliary engine; installed between the chassis engine and the Allison transmission

In "Road Mode" VSD produces 1:1 speed ratio between chassis and transmission

In "Work Mode" VSD allows chassis accelerator pedal to control input to transmission and engine speed remains constant - fan speed is adjustable

Singular in-cab push button control No parking brake requirement No complex EPA off-highway aftertreatment system

#### Single-engine System

Make Variable Speed Device Type Planetary Gearbox Design Horsepower 240 (179 kW) approved input rating Torque 560 ft-lb approved input rating Air Cleaner Dual safety element dry type Alarm For Low Hyd Oil / High Hyd Temp

#### Chassis Engine\*

Make Cummins ISB 6.7 or equivalent Type in-Line 6 cylinder, turbocharged diesel Displacement 409 cu. In. (6.7 L) Horsepower 200 (150 KW) @ 2400 RPM Torque 520 ft-lbs (708 Nm) @ 1600 RPM Fuel Tank Capacity 50 gal (189 L)

#### **Electrical System**

Chassis Battery Rating 12 volt Sweeper Battery Rating 1000CCA Chassis Engine Alternator 160 amperes

# **Instrumentation / Controls**

Rocker switches in central console gauges:
Blower tachometer, hour meter, fuel,
voltmeter, coolant temperature, spray water
level gauge, hopper up, hopper rear door
open, full load indicator

VSD mounted Oil Level Sight Gauge

# Sweep System - Components

### **General Specifications**

Sweeping path:

Pickup Head only 90 in (2,286 mm)

Pickup Head & one Side Broom 117 in (2,971 mm)

Pickup Head & two Side Brooms 144 in (3,658 mm)

Travel speed Up to highway speed

#### **Blower**

Drive direct Jaw-type coupling with hydraulic 2.87 cu-in (47 cc) displacement bent axis motor Blower Construction Hardox brand steel Blower Housing 10 gauge (3.4 mm) Steel, replaceable urethane-lined for extended wear

#### **Pickup Head**

Length 90 in (2,286 mm)
Head Area Approx. 2,700 in<sup>2</sup> (17,420 cm<sup>2</sup>)
Hose Diameters

Pressure 14 in (355 mm) Suction 12 <sup>3</sup>/<sub>4</sub> in (324 mm) Control Hydraulic raising and lowering

Vacuum Enhancer External, manually controlled
Hose Connection Quick disconnect type near
pickup head at lower area of suction hose

Hose Construction Flexible rubber steel reinforced

#### Side Broom

Diameter 42 in (1067 mm) Disc Construction Steel plate Speed Constant

Drive Hydraulic motor, protected by relief valve
Mounting Free floating trailing arm
Motion Pneumatically inward/outward,
raised/lowered

Adjustment Inward/outward, forward/backward Digging Pressure/wear control pneumatic in cab Sweep Position Fully extended or in front of pickup head with optional full retract feature Type Segment set disposable

#### **Debris Hopper**

Volumetric Capacity 8 yd³ (6 m³) Effective Dump Angle 50 degrees Dust Separator Self-cleaning, centrifugal Lifting Hydraulic, two-stage telescoping cylinder

**Hopper Dump Door** Hydraulic open/close and lock/unlock

Hopper Dumping Control In-cab switches combined with Dump Mode control Hopper Screens Hinged, quick release, steel

#### **Hydraulic System**

Purpose Powers hydraulic motors on side brooms, blower fan, and activates hopper dump cycle

Hydraulic Blower Pump variable - piston type - with 4.2 cu-in (68.8 cc) /rev rating

Hydraulic Sweeper Pump gear driven with capacity of 19.5 GPM (73.8 LPM) @ 3400 RPM; sweeper brooms, hopper dump, and pickup head raise/lower

Reservoir Capacity 23 gal (87 L)

Filter Sweeper Functions System 10 micron spin-on type filter, twin suction strainers 100 mesh. Cooler hydraulic system accessible without raising hopper.

Filter Blower System 6 micron canister type Filter reservoir vent 10 micron spin-on type breather

#### **Spray Water System**

Water Tank Construction Polyethylene
Water Tank Capacity 240 gal (908 L)
Fill Hose 16 ft 8 in (5,080 mm)
Pump Type Diaphragm with run-dry capability
with HI or LO selectable pump speeds

Pump Capacity 8 GPM (30 LPM) Pump Pressure 40 PSI (2.7 bar)

Spray Nozzles Total of 16

(21, with optional center broom) Quick release brass for ease of cleaning or service.

7 in pickup head (12 if with center broom)

3 in suction tube

6 (3 each) side brooms

**Controls** On-off switches in cab, manually adjustable valves

Filter 100 mesh, cleanable

Fittings Prestomatic Push-To-Lok type with thermoplastic tubing

#### Available Enhancements

- Glycol recovery system
- FSX Airport Application System
- MemorySweep®
- Broom hour meter
   Full broom retract
- In-cab vac enhancer control
- Enhanced water control
- Aux. lighting packages
- •In-cab side broom tilt
- Variable broom speedWandering hose
- 8 in (203 mm) diameter •Auto lubrication system
- LifeLiner® Hopper System
- Stainless steel hopper
- Hopper inspection door(s)

- Hopper deluge washout system
- Quiet Pak™ acoustical insulation on front cowling and access doors
- Hopper drain
- Center broom in pick-up head
- High/low pressure washdown
- Auxiliary water tank capacities
- Water system air purge
- •PM-10 water system
- Caster pick-up head wheels
- Full-width magnet
- Cast aluminum side air blast nozzle
- Aluminum refillable side broom segments
- Extended warranty

#### Paint

Powder Coated, Standard Elgin white and gray

# Chassis

Available on commercial cab-over and conventional Consult factory

# Warranty

Sweeper

1 year parts and labor

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3 year parts and labor

Your Elgin Dealer is:



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Specifications subject to change without notice
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