

The Elgin innovation team traversed the country, speaking to hundreds of customers at all levels within the street sweeping industry, both municipal and contractor, in pursuit of true voice-of-the-customer insights. Years of real-world prototype testing and feedback refined the sweeper design to provide customers with exactly what they want and need while proving reliability and durability along the way. The input of service technicians, operators, and street sweeping supervisors shaped every detail of the new **RegenX1**<sup>®</sup> mid-dump regenerative air street sweeper. **Easy to use, easy to clean, and easy to maintain** while delivering the quality and proven technology that is the hallmark of Elgin Sweeper products.

The new RegenX1 was built by Elgin, but designed by you.

# SINGLE-ENGINE, 4-WHEEL REGENERATIVE AIR SWEEPER

# **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

# RELIABLE, SERVICEABLE, SIMPLE. Why RegenX()

# X Roll-off Dump Height with 50° Dump Angle and 8 yd<sup>3</sup> Hopper

• Avoid double-handling, driving back to the facility to dump, and environmental ground-dumping restrictions

# X Incredibly Easy to Clean

- Simple hopper rounded corners and external self-dumping dust separator
- Easy-access washout doors for dust separator and pickup head
- Cable-controlled drop-down screens standard

# X Easy to Service

- Easy to access components with locations determined by experienced service technicians
- Bolt-on wear parts wherever possible (dust separator, hopper inlet, etc.)

# X Reliable

- Better cleanout and easier serviceability
- Highly efficient dust separator and large screen surface area reduce carryover and sand blasting
- Overall simple design less moving parts, more uptime



# **SWEEP SYSTEM - SINGLE ENGINE**

### VARIABLE SPEED DEVICE (VSD)

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

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

"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 270 amperes

### **INSTRUMENTATION / CONTROLS**

Rocker Switches central console Display That Indicates Fan Meter Sweep Hours - Diagnostics Indicator Lamps Full load, screen down, hopper up, door open, hydraulic oil temp

Display: Day/Night visibility modes

VSD mounted Oil Level Sight Gauge

Volumetric Capacity 8 yd3 (6 m3)

centrifugal with cleanout doors

Hopper Dump Door Hydraulic open/

- Control lever on right side of unit

drop down control on right side of unit, steel

Effective Dump Angle 50°

Dust Separator Self-dumping,

Lifting Hydraulic, two double

close and lock/unlock

- In cab dumping controls

Dump Height Minimum of 56 in

In Cab Hopper Dump

pump speeds

**SPRAY WATER SYSTEM** 

Fill Hose 16 ft 8 in (5,080 mm)

Pump Capacity 8 GPM (30 LPM)

Pump Pressure 40 PSI (2.7 bar)

- 6 (3 each) side brooms

Filter 100 mesh, cleanable

Controls Hi-Lo off switch in cab

Fittings Prestomatic Push-To-Lok

Spray Nozzles (Total of 9)

- 3 in suction tube

Hopper Screens Hinged, pneumatic

Water Tank Construction Polyethylene

capability with HI or LO selectable

- Quick release brass for ease of

cleaning or service

Water Tank Capacity 265 gal (1003 L)

Pump Type Diaphragm with run-dry

**Hopper Dumping Control** 

acting cylinders

**DEBRIS HOPPER** 

# 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 2-groove banded power belt with spring-loaded idler belt tensioner Blower Construction Hardox brand steel Blower Housing 7 gauge (4.6 mm) Steel

#### **PICKUP HEAD**

Length 90 in (2,286 mm) Head Area Approx. 2,700 in2 (17,420 cm2) Hose Diameters - Pressure: 14 in (355 mm) - Suction: 13 in (330 mm)

**Control** Hydraulic raising and lowering Vacuum Enhancer External, cablecontrolled with in-cab lever

Hose Connection Quick disconnect type near pickup head at lower area of suction hose and upper area of suction hose

Hose Construction Flexible rubber steel reinforced **Pick-up Head Camera** Flow Blocker

### **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

#### **HYDRAULIC SYSTEM**

Purpose Powers hydraulic motors on side brooms, blower fan, and activates hopper dump cycle, raises/lowers pickup head

Hydraulic Blower Pump variable - piston type with 3.66 cu-in (60 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

## PAINT

and gray

Powder Coated,

Your Elgin Dealer is:

and consult factory

Engine **Consult Factory** 

WARRANTY

VSD 3 year parts and labor



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- **AVAILABLE ENHANCEMENTS**
- Dual side broom scrub
- Broom hour meter
- · Left and right hand toolbox
- Aux. lighting packages
- In-cab side broom tilt
- Variable broom speed
- · Auxiliary hydraulic system
- · Wandering hose 8 in
- (203 mm) diameter
- LifeLiner® Hopper System
- · Stainless steel hopper
- · Hopper inspection door
- Hopper deluge washout system

 Hopper drain · Centerbroom in pick-up head

- High/low pressure washdown
- Left hand side camera
- Auxiliary water tank capacities
- PM-10 water system · Extended warranty
- Idle down no water

\*Chassis dependent © 2022 Elgin Sweeper Company Federal Signal Corporation is listed on the NYSE by the symbol FSS

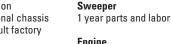
Specifications subject to change without notice.

Available on

# **CHASSIS**

# type with thermoplastic tubing





standard Elgin white