



## GENERAL SPECIFICATIONS



# MODEL HSP® REGENERATIVE® AIR AIRPORT RUNWAY SWEEPER DIESEL AUXILIARY ENGINE / DIESEL CABOVER CHASSIS

### SWEEPER AUXILIARY ENGINE

Engine ..... John Deere 4045 turbo FT4, 4 cyl.  
 Displacement ..... 275 in<sup>3</sup> (4.5 L)  
 Power ..... 99 HP @ 2200 RPM (74 kW)  
 Net torque ..... 315 lb-ft @ 1600 RPM (427 Nm)  
 Air cleaner ..... Heavy duty, w/pre-cleaner, scavenge vacuum hose, and in-cab air restriction indicator w/gauge.  
 Remote oil filter ..... Spin on, full flow  
 Auxiliary engine fuel tank shared with chassis  
 Diesel fuel tank capacity ..... 51 gal (193 L)  
 DEF tank ..... Dedicated  
 Capacity (volumetric) ..... 5.4 gal (20.6 L)  
 Capacity (useable) ..... 3.8 gal (14.4 L)  
 Auxiliary engine protection system  
 Fuel/water separator and separate fuel filter  
 Open crankcase ventilation (OCV) filter

### BLOWER, Rubber Lined

Aluminum alloy, high volume, open face turbine  
 Bearings ... (2) sealed lifetime lube, anti-friction  
 Bolt-on housing ..... Steel w/abrasion resistant, replaceable liner  
 Drive ..... Heavy duty power band

### DUST SEPARATOR, HIGH CAPACITY

Type ..... Cyclonic, multipass, centrifugal separation  
 Size ..... 20 x 61 in cylindrical area (508 x 1549 mm)  
 Located adjacent to blower within hopper  
 Particulate removal achieved through 61 in (1549 mm) skimmer slot into skimmer hood  
 Hinged inspection door opened from hopper exterior  
 Abrasion resistant housing w/replaceable wear resistant liner

### HOPPER

Capacity (volumetric) ..... 7.3 yd<sup>3</sup> (5.6 m<sup>3</sup>)  
 Capacity (useable) ..... 6 yd<sup>3</sup> (4.6 m<sup>3</sup>)  
 Construction ..... Welded steel plate with integral stiffeners  
 Floor angle ..... 22°  
 Dump door opening ..... 84 x 44 in (2134 x 1118 mm)  
 Dump method ..... Hydraulic with raker bar  
 Dump height ..... 36 in (914 mm)

### PICK-UP HEAD, HSP, Patented

Type ..... Dual chamber  
 Width (inside dimension) ..... 87 in (2210 mm)  
 Pick-up head area ..... 2784 in<sup>2</sup> (1.79 m<sup>2</sup>)  
 Suspension ..... 4 springs, 2 drag links  
 Skids ..... DUO SKID®, long-life carbide  
 Suction hose diameter ..... 10 in (254 mm)  
 Pressure hose diameter ..... 14 in (356 mm)  
 Linear actuator - pressure bleeder w/gauge  
 Integral for leaf/light material pickup

### GUTTER BROOM, TWIN, Patented

Includes LED floodlights and parabolic mirrors  
 Drive ..... Constant speed non-reversible hydraulic motor  
 Adjustment ..... Adjustable for down pressure, pattern and wear  
 Down pressure ..... Automatic  
 Flexibility ..... All directions integral anti-damage "swing away" relief valve  
 Broom ..... 43 in dia. (1092 mm) steel wire, vertical digger

### HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head  
 Drive ..... Gear driven from auxiliary engine  
 Flow rate ..... 8 GPM (30.3 LPM)  
 Reservoir ... 25 gal (94.6 L) w/80 mesh suction strainer, sight/temperature gauge, cooler  
 Filter ..... 3 micron in-line  
 Temperature shutdown system

### DUST CONTROL SYSTEM

Water spray nozzles for dust suppression  
 Pump ..... Electric diaphragm  
 Reservoirs ..... Polyethylene 330 gal (1249 L) total  
 Filter ..... 80 mesh in-line  
 Low water shut-off ..... Safety shut-off with audible and visual indicator in cab  
 Spray nozzles:  
 Around pick-up head ..... 4  
 Gutter brooms (each) ..... 2  
 Hopper (inside) ..... 1  
 Hydrant fill hose w/storage area ..... 20 ft (6 m)

### CONTROL SYSTEM

#### BlueLogic® Control System

Multiplexed electrical system includes hardware and TYMCO designed software that integrates the in-cab controls to the auxiliary engine and all sweeper functions; as well as provides intelligent safety features and on-board diagnostics (OBD) for the auxiliary engine and sweeper through the BlueLogic display.

#### BlueLogic Display

Pedestal mounted touchscreen display provides sweeper and auxiliary engine data to the operator and includes hour meters (trip and total) for the auxiliary engine, gutter brooms, pick-up head, blower, and water pump; sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm, dust control system winterization guide, and OBD.

#### Interior Components

BlueLogic display, auxiliary fuse panel, illuminated control switches: pick-up head, gutter brooms, auxiliary engine RPM, leaf pressure bleeder, dust control water system nozzles, safety lights.

### Exterior Components

Dump switch, BlueLogic Control Module (BCM)

### SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)  
 Rear view camera system  
 Back-up alarm  
 SAE Class 1/California Title 13 amber beacon light with limb guard - LED

### OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/spray gun  
 Abrasion protection package  
 Additional camera views - pick-up head, left gutter broom, right gutter broom  
 Auto Sweep Interrupt (ASI)  
 Auxiliary hand hose 8 in dia. (203 mm)  
 Auxiliary hand hose hydraulic boom assist  
 Auxiliary hand hose catch basin cleaning package  
 Auxiliary hydraulic system  
 Gutter broom tilt adjuster(s) (left, right, or twin)  
 Gutter broom variable speed  
 Gutter broom drop-down  
 Hi/Low pressure washdown system  
 High output water system  
 Hopper deluge system  
 Hopper drain system  
 Lateral Airflow Nozzle (LAN)  
 Liquid Recovery System (LRS)  
 Low emissions package (required for South Coast AQMD Rule 1186)  
 Magnet, light, standard, or heavy duty  
 Shop air purge, dust control system  
 Spark resistant skids  
 Stainless steel options:  
 Hopper:  
 Hopper weldment  
 Dump door  
 Inspection doors  
 Raker plate  
 High capacity dust separator  
 Hopper screen  
 Blower housing  
 High capacity dust separator  
 Hopper drain  
 Paint color (other than TYMCO standard white)

*Special options are available for your individual requirements. Contact your local dealer or TYMCO.*

### CABOVER CHASSIS AVAILABLE

Peterbilt 220  
 Autocar Xpert