



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 in³ (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
 Purpose Creates blast and suction
 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 yd³ (5.6 m³)
 Capacity (useable) 6 yd³ (4.6 m³)
 Construction Welded steel plate with integral stiffeners
 Floor angle 22°
 Dump door opening 84 x 44 in (2134 x 1118 mm)
 Dumping method Hydraulic with raker bar
 Dumping height 36 in (914 mm)

PICK-UP HEAD, HSP, Patented

Type Dual chamber
 Function Delivers air blast and suction
 Width (inside dimension) 87 in (2210 mm)
 Pick-up head area 2784 in² (1.79 m²)
 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

Standard equipment includes floodlights and parabolic mirrors
 Drive Constant speed non-reversible hydraulic motor
 Adjustment Adjustable for down pressure, pattern and wear
 Down pressure Automatically adjusts to requirement
 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 multiplex module

SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)
 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
 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
 Camera/monitor 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
 Liquid recovery system
 Low emissions package (required for South Coast AQMD Rule 1186)
 Magnet, light, standard, or heavy duty
 Pick-up head curtain lifter
 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