**GENERAL SPECIFICATIONS**

**MODEL HSP® REGENERATIVE® AIRPORT RUNWAY SWEEPER**

**DIESEL AUXILIARY ENGINE / DIESEL CONVENTIONAL CAB CHASSIS**

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### 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, pre-cleaner, scavenged 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**: 71 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.
- **Fuel tank capacity**: 51 gal (193 L)
- **Auxiliary engine fuel tank shared with chassis**:
- **Remote oil filter**: Spin-on, full flow auxiliary engine fuel tank shared with chassis.
- **Air cleaner**: Heavy duty, pre-cleaner, scavenged vacuum hose, and in-cab air restriction indicator w/gauge.
- **Remote oil filter**: Spin-on, full flow auxiliary engine fuel tank shared with chassis.
- **Open crankcase ventilation (OCV) filter**:

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### BLOWER, RUBBER LINED

- **Aluminum alloy, high volume, open face turbine**
- **Purpose**: Creates blast and suction.
- **Size**: 20 x 61 in
- **Type**: Cyclonic, multipass, HSP, Patented
- **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)

### DUST SEPARATOR, HIGH CAPACITY

- **Type**: Cyclonic, multipass, centrifugal separation
- **Size**: 20 x 61 in
- **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**
- **Abrasives resistant housing w/replaceable wear resistant liner**

### HOPPER

- **Capacity (volumetric)**: 3.8 gal (14.4 L)
- **Capacity (useable)**: 3.4 gal (12.7 L)
- **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 (17.9 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)
- **Pressure bleeder**: Integral for leaf/light material pickup

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### 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/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 220 gal (833 L), total minimum
- **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
- **Gutter brooms (each)**: 4
- **Hopper (inside)**: 2
- **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.**

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**INTERIOR COMPONENTS**

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

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**EXTERIOR COMPONENTS**

- **Dump switch, BlueLogic multiplex module**

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**SAFETY/WARNING DEVICES**

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

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**OPTIONAL EQUIPMENT**

- **AOD water pump w/washdown hose/spray gun**
- **Abrasives protection package**
- **Autosweep Integration (ASI)**
- **Auxiliary hand hose 8 in. (203 mm)**
- **Auxiliary hand hose hydraulic boom assist**
- **Auxiliary hand hose catch basin cleaning package**
- **Auxiliary hydraulic system**
- **Camera/monitor system**
- **COMDEX (extra water and tool box) 330 gal (1249 L) total capacity**
- **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**
- **Linear actuator - pressure bleeder w/gauge**
- **Liquid recovery system**
- **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.*

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**CONVENTIONAL CAB CHASSIS AVAILABLE**

- **International 4300**
- **International MV607**
- **Freightliner M2-106**