



DST-6[®]
Dustless Sweeping Technology

GENERAL SPECIFICATIONS



**MODEL DST-6[®] DUSTLESS REGENERATIVE[®] AIR STREET SWEEPER
DIESEL AUXILIARY ENGINE / DIESEL 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
Diesel auxiliary engine fuel tank shared with cabover chassis, and independent from conventional cab chassis fuel tank.
Aux. engine 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 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)
Dump method Hydraulic with raker bar
Dump height 36 in (914 mm)
Abrasion protection package
Hopper deluge system

BROOM ASSIST PICK-UP HEAD (BAH[®])

Type Dual chamber with broom assist
Width 87 in (2210 mm)
Pick-up head area 3567 in² (2.3 m²)
Broom 12 x 79 in (305 x 2007 mm) enclosed in rear of pick-up head
Suspension 4 springs 2 drag links
Suction hose diameter 14 in (356 mm)
Pressure hose diameter 14 in (356 mm)
Skids DUO SKID[®], long-life carbide
Pick-up head deluge
Reverse pick-up head system

GUTTER BROOM, TWIN, Patented

Includes LED floodlights and parabolic mirrors
Drive Variable 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
Brooms 43 in dia. (1.1 m) steel wire, vertical diggers
Hydraulic tilt Gutter brooms adjust for curb depth

HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head
Drive Gear driven from auxiliary engine
Flow rate 8 GPM (30.3 LPM)
BAH pump Vane pump, operates Broom Assist Head broom motor
BAH pump flow rate 8 GPM (30 LPM)
Reservoir 25 gal (94.6 L) with 80 mesh suction strainer, sight/temperature gauge, cooler
Filter 3 micron in-line
Auxiliary hydraulic system
Temperature shutdown system

DUST CONTROL SYSTEM

Water spray nozzles for dust suppression
Pump Electric diaphragm
Reservoirs Polyethylene 220 gal (833 L), total
Filter 80 mesh in-line
Low water shut-off Safety shut-off with audible and visual indicator in cab
Spray nozzles:
Gutter brooms (each) 3
Hopper (inside) 1
High output water system
Hydrant fill hose w/storage area 20 ft (6 m)

DUSTLESS FILTRATION SYSTEM

An external mounted modular filtration system with automatic BlueLogic[®] control adjustment
Capacity (volumetric) 14 ft³ (0.40 m³)
Filters (4) MERV 16 Rated
Particulate removal efficiency ≥ 95% of 0.3 μm
Long life filters, not affected by wet sweeping conditions.
Filters cleaned by intermittent air pulse
Air compressor Belt driven, liquid cooled, engine lubricated
Compression rate 13.2 CFM (0.37 m³/minute) @ 1200 RPM
Shop air connection
Dust box deluge washout system

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. Specific to the DST-6, BlueLogic also monitors and automatically controls the adjustments for the DST system, requiring no operator adjustments.

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, water pump, BAH broom, and DST filters; 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, DST mode, purge system, variable speed gutter brooms, dust control water system nozzles, safety lights

Exterior Components

Dump switch, BlueLogic Control Modules (BCMs)

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
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
Gutter broom drop-down
Hi/Low pressure washdown system
Hopper drain system
Magnet (various options available)
Pick-up head curtain lifter
Shop air purge, dust control system
Stainless steel options:
Hopper & dust box:
Hopper weldment
Dump door
Inspection doors
Raker plate
High capacity dust separator
Hopper screen
Dust box
Blower housing
High capacity dust separator
Hopper drain
Dust box
Paint color (other than TYMCO standard white)

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

CHASSIS AVAILABLE

Peterbilt 220
International MV607
Freightliner M2-106

