



**DST-6<sup>®</sup>**  
Dustless Sweeping Technology

**GENERAL SPECIFICATIONS**



**MODEL DST-6<sup>®</sup> DUSTLESS REGENERATIVE<sup>®</sup> AIR STREET SWEEPER  
DIESEL AUXILIARY ENGINE / DIESEL 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  
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 with WIF sensor  
Fuel filters ..... 10 µm primary, 2 µm secondary  
Open crankcase ventilation (OCV) filter

**BLOWER, RUBBER COATED**

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, RUBBER LINED, HIGH CAPACITY**

Type ..... Cyclonic, multipass, centrifugal separation  
Size ..... 20 x 61 in cylindrical area (51 x 155 cm)  
Located adjacent to blower within hopper  
Particulate removal achieved through 61 in (155 cm) skimmer slot into skimmer hood  
Separator 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 (213 x 112 cm)  
Dump method ..... Hydraulic with raker bar  
Dump direction ..... Rear  
Dump height ..... 36 in (91.5 cm)  
Insection doors ..... (1) Each side of hopper  
..... 9.75 x 29 in (25 x 73.5 cm)  
Abrasion protection package  
Hopper deluge system

**BROOM ASSIST PICK-UP HEAD (BAH<sup>®</sup>)**

Type ..... Dual chamber with broom assist  
Width ..... 87 in (221 cm)  
Pick-up head area ..... 3567 in<sup>2</sup> (2.3 m<sup>2</sup>)  
Broom ..... 12 x 79 in (30.5 x 200.5 cm) enclosed in rear of pick-up head  
Suspension ..... 4 springs 2 drag links  
Suction hose diameter ..... 14 in (35.5 cm)  
Pressure hose diameter ..... 14 in (35.5 cm)  
Skids ..... DUO SKID<sup>®</sup>, long-life carbide  
Pick-up head deluge

Reverse pick-up head system

**GUTTER BROOM, TWIN, Patented**

Drive ..... Variable speed non-reversible hydraulic motor  
Adjustment ..... Adjustable for down pressure, pattern and wear  
Down pressure ..... Automatic  
Flexibility ..... Integral anti-damage "swing away" relief valve  
Brooms ..... 43 in dia. (109 cm) steel wire, vertical diggers  
Hydraulic tilt ..... Gutter brooms adjust for curb depth  
Floodlights ..... (2) LED  
Parabolic mirrors ..... (2) 10.5 in (26.67 cm) dia.

**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 ..... Air to oil integral with auxiliary engine heat exchanger  
Return filter ..... 3 micron in-line  
Vent filter ..... 10 micron spin-on  
Hydraulic oil ..... Extended life 10W ISO 46  
Hydraulic temperature shutdown system w/temperature gauge in cab

**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<sup>®</sup> control adjustment  
Capacity (volumetric) ..... 14 ft<sup>3</sup> (0.40 m<sup>3</sup>)  
Filters ..... (4) MERV 16 Rated w/pre-cleaner  
Particulate removal efficiency ≥ 95% of 0.3 µm  
Long-life filters, unaffected 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 m<sup>3</sup>/minute) @1200 RPM  
Shop air connection for air pulse system  
Dust box deluge washout system

**CONTROL SYSTEM**

**BlueLogic<sup>®</sup> 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 DST models, 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 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. (20 cm)  
Auxiliary hand hose hydraulic boom assist  
Gutter broom drop-down  
Hi/Low washdown system  
Hopper drain system  
Magnet: Light, standard, or heavy duty  
Pick-up head curtain lifter  
Shop air purge, dust control system  
Stainless steel (non-magnetic) options:  
Hopper & dust box:  
Hoper weldment  
Dump door  
Inspection doors  
Raker plate  
High capacity dust separator  
Hopper screen  
Dust box  
Blower housing  
Hopper drain  
Dust box  
Paint color (other than TYMCO standard white)

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

**CHASSIS AVAILABLE**

Peterbilt 220  
International MV607  
Freightliner M2-106