



DST-6[®]

Dustless Sweeping Technology



GENERAL SPECIFICATIONS

MODEL DST-6[®] REGENERATIVE AIR SWEEPER[®]



SWEEPER AUXILIARY ENGINE

Engine John Deere 4045 turbo, 4 cyl. (Final Tier 4)
 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
 Purpose Creates blast and suction
 Bearings (2) sealed lifetime lube, anti-friction
 Bolt-on housing 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)
 Abrasion protection package
 Hopper deluge system

BROOM ASSIST PICK-UP HEAD (BAH[®])

Type Dual chamber with broom assist
 Function Delivers air blast and suction
 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

FINAL TIER 4 AUXILIARY ENGINE

GUTTER BROOM, TWIN, Patented

Standard equipment, includes floodlights and parabolic mirrors
 Drive Variable 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
 Brooms 43 in dia. (1.1 m) steel wire, vertical diggers
 Hydraulic tilt Twin gutter brooms adjust for curb depth

HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head
 Drive Gear driven from auxiliary engine
 Capacity 8 GPM (30.3 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 low water warning light in cab coupled with liquid level sensor
 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 if applicable, 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 multiplex modules

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
 Auto Sweep Interrupt (ASI)
 Auxiliary hand hose 8 in dia. (203 mm)
 Auxiliary hand hose hydraulic boom assist
 Camera/monitor system
 Gutter broom drop-down
 Hi/Low pressure washdown system
 Hopper drain system
 Magnet (various options available)
 Pick-up head curtain lifter
 Pick-up head deluge (BAH[®])
 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 4300
 Freightliner M2-106