



DST-4[®]
Dustless Sweeping Technology



GENERAL SPECIFICATIONS

MODEL DST-4[®] REGENERATIVE AIR SWEEPER[®]
FINAL TIER 4 AUXILIARY ENGINE/CABOVER CHASSIS



SWEEPER AUXILIARY ENGINE

Engine Kubota V2403-CR-TE4B, 4 cyl.
(Final Tier 4)
Displacement..... 148.5 in³ (2.4 L)
Power..... 56 hp (41.7 kW) @ 2100 RPM
Net torque..... 140 lb-ft (190 Nm) @ 2100 RPM
Air cleaner Heavy duty, w/pre-cleaner, and
in-cab air restriction indicator w/gauge.
Oil filter Spin on, full flow
Cooling Liquid
Diesel fuel supplied from chassis fuel tank
Fuel tank capacity..... 30 gal (113 L)
Auxiliary engine protection system
Fuel/water separator

BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine
Purpose Creates air blast and suction
Bearings Anti-friction
Housing Abrasion resistant,
replaceable liner
Drive Heavy duty power band

DUST SEPARATOR, RUBBER LINED

Type Cyclonic, multipass, centrifugal
separation
Cylindrical area..... 20 x 22.5 in
(508 x 1549 mm)
Location Adjacent to hopper
Particulate removal achieved through 22.5 in
(572 mm) skimmer slot into skimmer hood
Inspection/cleanout port w/extended plug
handle

HOPPER

Capacity (volumetric)..... 4.0 yd³ (3.06 m³)
Capacity (useable)..... 3.1 yd³ (2.37 m³)
Construction Welded steel plate
Dump door opening..... 77.25 x 70 in
(1962 x 1778 mm)
Dumping method Hydraulic with tilt up
Dumping height 72 in (1829 mm)
Dump clearance height..... 154 in (3912 mm)
Dump door hydraulically opened/closed
Hopper screen lifts with door for easy cleaning
Hopper deluge
Abrasion protection package
Hopper drip edge extension

PICK-UP HEAD

Type Dual chamber
Function Delivers air blast and suction
Width (inside dimension) 78 in (1981 mm)
Pick-up head area 2028 in² (1.31 m²)
Suspension..... 4 springs, 2 drag links
Skids..... DUO-SKID[®], long life carbide
Suction hose diameter..... 12 in (305 mm)
Pressure hose diameter 12 in (305 mm)
Reverse pick-up head system

HYDRAULIC SYSTEM

Operates gutter brooms, dump door and
pick-up head
Drive Gear driven from auxiliary engine
Capacity..... 5 GPM (18.925 LPM)

Reservoir 13.5 gal (51.1 L) with 80 mesh
suction strainer, sight/temperature gauge, oil
cooler
Filter..... 10 µm in-line
Hydraulic oil Extended life
Auxiliary hydraulic system

GUTTER BROOMS, TWIN, Patented

Standard equipment includes floodlight and
parabolic mirror
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..... Steel wire vertical
digger 36 in (914 mm)
Variable speed control
Hydraulic tilt Twin gutter brooms
adjust for curb depth

DUST CONTROL SYSTEM

Water spray nozzles for dust suppression
Pump Electric diaphragm
Reservoirs Polyethylene, 77 gal (291.5 L),
total
Filter..... 80 mesh in-line
Low water shut-off Safety shut-off
with low water warning light in cab
Spray nozzles At gutter brooms
and inside hopper
Fire hydrant and garden hose connections
Hydrant fill hose..... 20 ft (6 m)
High output water system

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.

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, illuminated control
switches: pick-up head, gutter brooms,
auxiliary engine RPM, DST mode, purge
system, 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
Hopper safety prop

OPTIONAL EQUIPMENT

Auto Sweep Interrupt (ASI)
Auxiliary fuse panel
Auxiliary hand hose 6 in dia. (152 mm)
Cabover dual steering
Camera/monitor system
Gutter broom drop-down
Hi/Low pressure washdown system
Light bar, cab mounted, LED
Low emissions package (required for South
Coast AQMD Rule 1186, not applicable with
high output water system)
Magnet, front bumper mounted, light duty
Pick-up head curtain lifter
Shop air purge, dust control system
Stainless steel options:
Hopper & dust box:
Hopper weldment
Dust box
Hopper door
Skimmer hood assembly
Hopper screen assembly
Inspection door
Suction inlet tube
Blower housing
Dust box
Dust separator
Hopper inspection door
Hopper screen
Auxiliary hand hose hardware
Paint color (other than TYMCO standard white)

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

CHASSIS AVAILABLE

Isuzu NQR