



**DST-4**<sup>®</sup>  
Dustless Sweeping Technology



**GENERAL SPECIFICATIONS**

**MODEL DST-4<sup>®</sup> REGENERATIVE AIR SWEEPER<sup>®</sup>**  
**FINAL TIER 4 AUXILIARY ENGINE/CABOVER CHASSIS**



**SWEEPER AUXILIARY ENGINE**

Engine ..... Kubota V2403-CR-TE4B, 4 cyl.  
(Final Tier 4)  
Displacement..... 148.5 in<sup>3</sup> (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 yd<sup>3</sup> (3.06 m<sup>3</sup>)  
Capacity (useable)..... 3.1 yd<sup>3</sup> (2.37 m<sup>3</sup>)  
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 in<sup>2</sup> (1.31 m<sup>2</sup>)  
Suspension..... 4 springs, 2 drag links  
Skids..... DUO-SKID<sup>®</sup>, 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<sup>®</sup> control adjustment  
Capacity (volumetric)..... 14 ft<sup>3</sup> (0.40 m<sup>3</sup>)  
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 m<sup>3</sup>/minute) @ 1200 RPM  
Shop air connection  
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.

**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