

TANA E450 SANITARY LANDFILL COMPACTOR
Technical specification E450-D101446B 7.8.2012

GENERAL INFORMATION AND MAIN DIMENSIONS

| | SI | US | |
|--------------------------------|---|-------------|-------|
| Weight | 45000 kg | 99208 lb | |
| Total length | 9230 mm | 30 ft | 3 in |
| Total width (with dozer blade) | 4950 mm | 16 ft | 3 in |
| Total height | 4320 mm | 14 ft | 2 in |
| Wheelbase | 4050 mm | 13 ft | 3 in |
| Ground clearance | 890 mm | 2 ft | 11 in |
| Length without dozer blade | 7430 mm | 24 ft | 4 in |
| Width without dozer blade | 4390 mm | 14 ft | 5 in |
| Dozer blade width | 5000 mm | 16 ft | 5 in |
| Dozer blade height | 1960 mm | 6 ft | 5 in |
| Inside turning radius | 3310 mm | 10 ft | 10 in |
| Driving speed ranges | 0...5 km/h | 0...3,1 mph | |
| | 0...7 km/h | 0...4,3 mph | |
| Max crushing force | 221 kN | 49683 lbf | |
| Max operating altitude | 1000 m | 3281 ft | |
| Ambient operating temperature | -30 °C...+50 °C | | |
| Exhaust emissions | Fulfills U.S. EPA Tier 3, CARB Tier 3 and EU Stage IIIA | | |
| Noise emissions | Fulfills EU directive 2000/14/EC | | |
| Warranty | Basic warranty 12 months/2000 operating hours | | |

COMPACTION DRUMS

Uniform full-width drums with forged crushing teeth made of wear resistant steel. Adjustable, forged wear-resistant steel scraper bars on both sides of the drums. Adjustable, wear resistant steel wire cutters in the ends of drums.

| | SI | US | |
|---|---------|-------|------|
| Crushing/compaction width, front drum | 3800 mm | 12 ft | 6 in |
| Crushing/compaction width, rear drum | 3800 mm | 12 ft | 6 in |
| Diameter including crushing feet | 1620 mm | 5 ft | 4 in |
| Height of crushing feet | 200 mm | | 8 in |
| Number of crushing feet, pcs (front+rear) | 110+110 | | |
| Number of scraper bars, pcs (front+rear) | 20+20 | | |
| Number of wire cutters, pcs (front+rear) | 2+4 | | |

DOZER BLADE

Dozer blade is operated with two hydraulic cylinders.

Two arms

| | SI | US | |
|-----------------------------|---------|-------|------|
| Width | 4950 mm | 16 ft | 3 in |
| Height | 1960 mm | 6 ft | 5 in |
| Movement above ground level | 1230 mm | 4 ft | |
| Movement below ground level | 150 mm | | 6 in |

Upper part of blade: trash screen

Arm joints with hardened pins and spherical bearings

Bolt mounted reversible cutting edges

FRAME

Frame is constructed of two modular drum frames connected together with longitudinal upper frame. The drum frame acts as a shell around the drum, which helps to prevent waste raising to the upper parts of machine from below.

The upper frame is equipped with center point articulation operated with two hydraulic cylinders.

Articulation links are equipped with hardened pins and spherical steel bearings

Angle of articulation left or right 40 degrees

SERVICE PLATFORMS AND PROTECTION

Service platforms and steps are equipped with banisters and anti-slide surfaces.

Engine and powerpack are protected with a lockable hood.

VANDALISM PROTECTION

Lockable cabin, engine compartment, fuel filler cap and toolbox

Electronic key for ignition

CABIN EQUIPMENT

Pressurized, sound and heat insulated cabin

Air suspended seat with head rest

Seat heating

Right hand emergency exit door

Foot support

Inside mirror

Sun cover front

Swivelling operator's seat

Control symbols according to ISO 3767

Lockable door

Cabin lights

Socket for mobile phone re-charge

External rear view mirrors

Shelf and lockers

Front and rear windshield intermittent wipers and washers

Heater and AC unit

Replaceable cabin air filters in accordance with EUROVENT

Radio and CD/MP3-player

EUROVENT -4/5 "Method of testing air filters used in general ventilation"

TOTAL CONTROL SYSTEM

Decentralised electronic total control system. Different modules are interconnected via a CAN bus.

TANA ProTrack®

Wireless TANA ProTrack® connection to TANA Control System through Internet.

CONTROL SYSTEM DISPLAY

LCD 5,7" colour display mounted on the right hand side of operator. All gauge and monitor functions shown on the display.

MAIN DISPLAY

- Diesel engine charge pressure
- Engine oil pressure
- Engine oil temperature
- Engine intake air temperature
- Engine coolant temperature
- Hydraulic oil temperature
- Gear box temperatures
- Fuel level
- Fuel consumption
- Charging voltage
- Engine RPM
- Engine load percentage
- Engine operating hours

CONTROL SYSTEM WARNINGS AND ALARMS

- Total amount of warnings and alarms over 500 pcs. For example:
- Engine over speed
- Engine air filter contamination
- Hydraulic oil temperature (both high and low)
- Low hydraulic oil level
- Fuel level
- Gearbox temperatures (both high and low)
- Hydraulic oil return line filter clogging
- Drive hydraulics charge pressure filter clogging
- Low transmission charge pressure
- Voltage (both high and low)
- All diesel engine alarms shown on display (e.g. oil pressure, coolant temperature etc.)

CONTROLS

- Transmission and parking brake on/off
- Headlights
- Additional lights
- Warning light
- Mirror heater
- Seat heater
- Windshield wipers and washers
- Horn
- Speed range control
- Emergency stop
- Start-stop switch: power on/off, start
- Multi-selector switch: windshield wiper speed, air conditioning/heater control

CONTROL LEVERS

Control of driving and dozer blade movements by two joysticks/levers. Joysticks integrated in armrests on both sides of the operator's seat.

The control levers return automatically into neutral position when released and the movements of the machine cease.

Left hand joystick: control of driving speed & direction,braking, speed range selection with a button

Right hand joystick: steering and dozer blade control, bucket control (option, models E260 - E380), horn

| ROPS/FOPS | |
|---------------------------------------|--|
| ROPS in accordance with ISO 3471:2008 | |
| FOPS in accordance with ISO 3449:2005 | |

| ENGINE | |
|--|-----------------------------|
| Cummins QSX15-C535 | |
| 6-cylinder, in-line, water-cooled, turbo-charged, after-cooled, four-stroke diesel engine. | |
| Electronic engine control system which communicates with compactor's TCS-control system through CAN-bus. | |
| Engine performance data in accordance with SAE J1995: | |
| Maximum power | 589 BHP(439kW)@1800 RPM |
| Maximum torque | 2539 Nm(1873lb-ft)@1400 RPM |
| Power rating | 535 BHP(399kW)@2100 RPM |

| ENGINE EQUIPMENT | |
|--|--|
| Attachment to the frame with vibration and noise damping rubber mounts. | |
| Dry-type air cleaner with replaceable primary and safety element. Inbuilt pre-cleaner and service indicator. | |
| Fuel filter and water separator | |
| Oil filter | |
| Radiator + separate charge air cooler | |

| POWER TRANSMISSION | |
|---|-------|
| Closed circuit hydrostatic transmission | |
| Separate systems for both drums | |
| Control of driving speed and direction with one lever | |
| Stepless control of speed | |
| Two driving speed ranges | |
| Pumps: | |
| One tandem pump | |
| Variable displacement axial piston pumps with electrical proportional control | |
| Motors: | |
| Variable displacement motors | 4 pcs |
| Cooling of hydraulic system: | |
| Air operated oil cooler | |
| Removable air filtration screen | |
| Hydraulic oil filtration: | |
| Return line filter | |
| Two charge pressure filters | |
| Hydraulic oil filling filter | |

| FINAL DRIVES | | |
|---|-------|--------|
| Transmit power of the hydraulic motors to the drums | | |
| Three-stage planetary gear | 4 pcs | |
| | SI | US |
| Cooling water volume per gear | 230 l | 61 gal |
| Integrated spring applied, hydraulically released multi-plate parking brake | | |
| Splash lubrication system | | |

BRAKES

Service brakes: Hydrostatic transmission acts as service brakes, separate circuits for both drums

Parking/Emergency brakes: spring applied, hydraulically released multi-plate parking brake integrated in planetary gear boxes

AUXILIARY HYDRAULICS

Open circuit system with electro-hydraulic load sensing (LS) control.

Variable displacement axial piston pump.

Directional control valve with electro hydraulic proportional control

HYDRAULIC OIL TANK

Hydraulic oil tank is located inside the engine hood.

Level sensor with alarm

Breather filter

FUEL TANK

Tank is located inside the upper frame under operator cabin.

Lockable filling cap

Service hatch

Suction strainer

Drain cock

Capacity 760 l (201 US gal)

Level sensor with alarm

ELECTRICAL EQUIPMENT

24 VDC system

Batteries 12 V 170 Ah, 2 pcs

Circuit breaker

Lights: front 4 pcs, rear 4 pcs

Horn

Voltage reducer for radio

Socket for hand light in engine compartment

Back up alarm

LITERATURE

MANUALS

TANA – operation manual

TANA – service & maintenance manual

TANA – spare parts manual

Weights and measurements are given within normal tolerances. Manufacturer reserves the right to alter the above as necessary.