



SPECIFICATION

BeachTech Model 4500 Beach Screener

The BeachTech Model 4500XL beach cleaner is a tractor pulled sand screener which lifts beach sand and debris onto a one piece rigid, non rotating sifting screen, consistently retaining all items larger than the selected screen hole size and returning the screened-clean sand to the beach.

Screen: The one-piece rigid screen is made of oil tempered hardened woven wire and is easily interchangeable for other sizes. The standard screen which will be installed in the beach cleaner upon delivery has a $\frac{3}{4}$ " (19 mm) hole size. The following quick change screens are optional and may be specified in addition to the standard screen:

- $\frac{3}{8}$ " (9mm) square holes, woven wire
- $\frac{1}{2}$ " (13mm) square holes, woven wire
- $\frac{3}{4}$ " (19mm) square holes, woven wire
- 1" (25mm) square holes, woven wire

The one piece non-rotating, free floating screen is mounted on four aircraft grade rubber isolators. The leading edge may be hydraulically lowered into the sand to pre-determined depth settings, independent of the tractor's 3 point setting. The hydraulically powered screen's oscillation speed will be independent of the tractor's PTO revolutions-per-minute setting so as to provide constant high speed sand/debris separation at any ground speed.

Leading Edge: The beach cleaner has a leading edge (digger point) which is a separate bolt-on piece fabricated of high carbon steel, which loosens and lifts the beach sand.

Loading Flight Paddles: Sand and debris are conveyed over the screen by 27 loading flight paddles which are constructed of AR220 abrasion resistant steel and are hot dip galvanized. A system of easy-glide carbide pucks support the loading paddles and ride on hardened, high-carbon steel rails, to ensure many years of use and low maintenance costs.

Bearings: The beach cleaner has only three bearings. They are triple lip sealed and easily accessible for greasing.

Leveling Blade: A hydraulically adjustable leveling blade, or "sand castle buster", which can be used to level high spots and fill in low spots, is mounted to the front of the beach cleaner. The leveling blade provides no functional assistance to the Beach cleaning operation and can to be raised to a non-functional position for effective beach screening without its use. The blade's purpose is as a convenience to the operator to pre-groom and level the beach.

Specifications for Tractor Towed Beach Screener

Groomer: There will be a 9'2" (2,794 mm) wide polyurethane grooming attachment which will remove wheel tracks while leaving an aerated and groomed finish to the beach. It will be able to be activated (raised or lowered) automatically when the sand screening mechanism is turned on. It will also be able to be operated independently to allow grooming without screening.

Hopper: The collection hopper may be hydraulically raised by the operator for dumping at any height from ground level to a maximum dump height of 8'6" (2,591 mm), with a reach sufficient to empty into full sized dump trucks. Immediate ground dumping can be done also without having to raise the hopper. The hopper has a spray on polyurethane liner to eliminate rusting.

Operator Controls: The electric over hydraulic directional control valves which control all functions are activated by a control box which is mounted conveniently near the tractor operator and attaches to any electrical connector. No special hydraulic connections are required.

Conveyor Chain: Chrome plated, solid pin conveyor chain for four-five times longer life, less maintenance and quite operation

Drive System: A fixed displacement PTO pump provides the hydraulic power to set the screening depth, raise and lower the hopper, empty the hopper, lower and raise the groomer, and adjust the leveling blade. No hydraulic hose connections to the tractor are required. The screen oscillation motor and the loading flights drive motor are also powered by the PTO pump. A priority valve system insures constant oscillation to the screen regardless of the load on the conveyor. The conveyor drive motor can be stopped or reversed easily by the operator as needed.

Tractor Connection: A category 2, three point hitch frame is provided for the tractor with a pintle hitch mounted on the lower cross bar which will allow fast, easy and safe, one-person hook up to the pintle ring provided on the Beach cleaner.

Paint: All metal surfaces are grit-blasted, powder coated with corrosion resistant zinc rich epoxy primer, then top coated with super durable, chemical and abrasion resistant polyester top coat powder that is baked to a final thickness of 4-5 mils. Top coat is TGIC free. Conveyor flights, angles, and groomer components are hot dip galvanized. Standard color is Blue.

Tires: Front- Carlisle 26x12.00-12 NHS, turf tires
Rear- Titan 36x13.5-15 NHS, turf tires

Tractor Requirements: – Minimum 45 HP tractor (33kW), with Category 1 or 2, 3 point hitch lift and 540 PTO. Appropriate tires are recommended for traction on sand. Note that sand surfaces can vary and all tractors must have sufficient traction and flotation for the particular sand or application

Dimensions

- **Length:** 17' (5,182 mm)
- **Width:** 8'2" (2,489 mm)
- **Height:** 7'2" (2,184 mm)

- Weight: 5900 lbs (2,676 kg)
- Leveling blade width: 8'1" (2,464 mm)
- Cleaning width: 5' (1,524 mm)
- Screens: Standard screen is hardened woven wire with ¾" (19 mm) hole opening.
Other available sizes will be: 3/8" (9mm), ½" (13mm), and 1" (25mm) hole openings
- Grooming width: 9'2" (2,794 mm)
- Hopper capacity: 2 cubic yard (1.5 cubic meters)
- Dump height: 102" (2,591 mm) with minimum 3' (914 mm) reach
- Cleaning depth: Lifts 0 to 6 " (up to 152 mm) in varying applications
- Operating speed: Up to 7.5mph (up to 12 km/h)
- Hydraulic Drive: 12.9 GPM PTO. Pump (540 RPM)
- Hydraulic Reservoir Capacity: 18 gallons (68 liters)

Safety Features: The machine has safety features in accordance with current standards.

Manufacturer's Identification: A durable identification plate stating the manufacturer's name, location, model, and other information to identify the Mobile Screener for parts or repair is permanently attached to the frame.

Materials: All materials, parts and assemblies are new and are of current manufacture. Workmanship, fabrication and assembly are in accordance with standard manufacturing and engineering practices. All hardware is yellow-zinc chromate plated for corrosion resistance and is of sufficient length to assure a full thread nut. All bolts are fitted with self-locking nuts or lock washers. All welds and welding practices conform to the latest American Welding Society standards.

Warranty: There will be a twelve-month manufacturer's warranty against all manufacturing defects.