SCAT ENGINEERING

#### SCAT 4832, 4833 & 4932 Self-Propelled Compost and Bioremediation Turners



- Optimal Aeration
- Superior Mixing
- Greater Capacity
- Complete Inversion
- Higher Quality Compost
- Thorough Bioremediation
- Accelerated Bio Reduction

## Oxygen

-The key ingredient by which composting and soil bioremediation takes place. It is the catalyst for the aerobic process – the biological

workhorse that turns unusable trash into usable compost and assists in transforming polluted soil into safe ground.

The patented Elevating
Face of SCAT's line of
Turners is the single most
effective way to introduce
and trap oxygen into the
material. SCAT's simple
technology gently lifts,
tumbles and drops material
into windrows or stacks.

This thorough action processes all the material including ground level matter often missed by other turners. The result is the complete agitation and inversion of material allowing the biological process to do its best work.

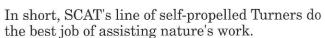


Inefficient drum-type methods of turning employed by others use a series of high speed flails or knives that thrash through a windrow pulverizing the material quickly. Unfortunately that compacting action is a serious flaw in the process of bio reduction. As material is broken down into fine pieces on first and subsequent passes, it compacts quickly reducing the required pockets of air needed for aerobic activity. As a result, the machine has to do most of the work. To keep the material from becoming anaerobic, more passes are required by high horsepower, high fuel consuming drum-type equipment which also means higher maintenance costs and longer time to thoroughly process the material. Unfortunately, quickly chopped grass, leaves and other

waste doesn't constitute good compost. It is the biological breaking down of these ingredients combined with SCAT's Elevating Face method of aeration that results in the quickest and most usable end-product.

The SCAT line of Turners work on a simple driveline that is made up of slow moving parts. They offer higher production and handle larger windrows with lower

overall maintenance costs. Taller windrows together with maximum aeration and mixing result in better inner thermal currents, shorter bio reduction time, better odor control, higher quality compost, and efficient use of available space.







With its 10 ft. by 10 ft. Elevating Face, the SCAT 4832 crawler Turner totally inverts windrows up to 8 ft. high and 20 ft. wide in two passes, adding maximum aeration as it turns the material. Powered by a 140 h.p. diesel engine and with an operator-friendly cab & controls, the SCAT 4832 is efficient, productive, and dependable.



SCAT 4833
SELF-PROPELLED WINDROW TURNER

Windrows up to 10 ft. high and 20 ft. wide can be turned in two passes by the SCAT 4833 crawler Turner with its 10 ft. by 12 ft. Elevating Face. The higher windrow height results in the ability to handle more material on the same site space, resulting in a more cost-effective operation.



SCAT. 4932
SELF-PROPELLED STACK TURNER

With its 10 ft. x 10 ft. Elevating Face and a Stacking Conveyor, the SCAT 4932 crawler Turner inverts solid stacks 8 ft. high. The use of stacks instead of windrows can more than double the volume of material on a given site. Eliminating the spaces between windrows, the solid stack method is the most economical in handling large volumes of material.





Standard equipment on the 4832 and 4833, this conveyor provides better mixing, inversion and aeration resulting in fewer turns to finished compost. This advantage translates into reduced equipment wear and tear and lower fuel costs. Its function is simple: material on the outside of the pile is shifted to the center of the new windrow allowing all of the material in the windrow to fully compost.



The elevating face is driven by a hydraulic motor mounted directly to the elevating face headshaft. This direct link provides smooth, even power to the face. As heavy loads are encountered on the face, a load controller responds to engine drag by automatically reducing ground speed to avoid stoppage and abnormal wear while maintaining optimum face power and speed.



Easy maintenance means regular maintenance. These remote grease fittings allow regular maintenance to occur without having to crawl all over the machine. From a single, ground level position the operator can lubricate all four headshaft bearings.



Chain life corresponds directly to chain tension. SCAT's 10 hydraulic cylinders maintain even pressure on the 5 elevating face chains for extended life. Pressure is maintained via a single remote grease zerk fitting complete with pressure gauge to indicate proper chain tension (Shown at the bottom of the photograph at left).

# Preoccupation With Performance



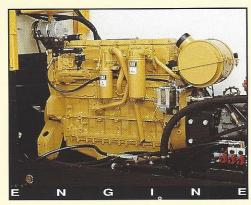
Track final reduction drives provide maximum torque (20,650 ft. lbs. with a ratio of 116:1) at the track where it is needed. The sealed design results in trouble free operation even in hostile environments such as bioremediation of petroleum and other contaminated soils. The track drives are hydraulic, variable speed and operate independently allowing for counter rotation resulting in space-saving turns.



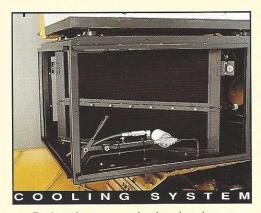
The Performance of any machine has much to do with its operator. A comfortable operator who feels in control works more effectively.

Comfort and control come together in the fully equipped cab. Comfort comes in the form of an air pressurized, insulated, rubber isolated cab complete with heater, air conditioner, AM/FM cassette player, contoured seat with armrests and a panoramic view.

Ease of operation comes from fingertip controls, fully illuminated instrumentation, exterior operating lights and windshield wiper/washer.



Dependable, low cost operation is the result of a Caterpillar 3116T diesel power source. This 6 cylinder work horse provides 140 HP @ 2400 RPM. The Cat features the latest energy efficient design providing low fuel consumption and long life.



Peak performance and reduced engine wear are the result of a well-cooled system. SCAT's diagonally positioned cooling system allows for larger radiators and bi-directional air intake for maximum engine and hydraulic system cooling.

Also seen in this detail is a hand pump which allows any additional hydraulic fluid required to be pumped and filtered directly into the system from a portable reservoir.

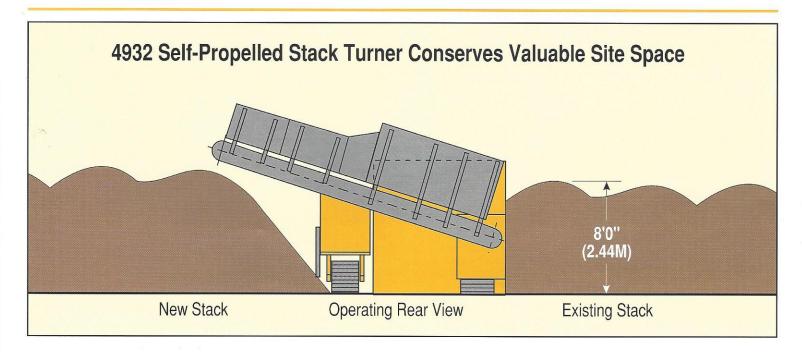


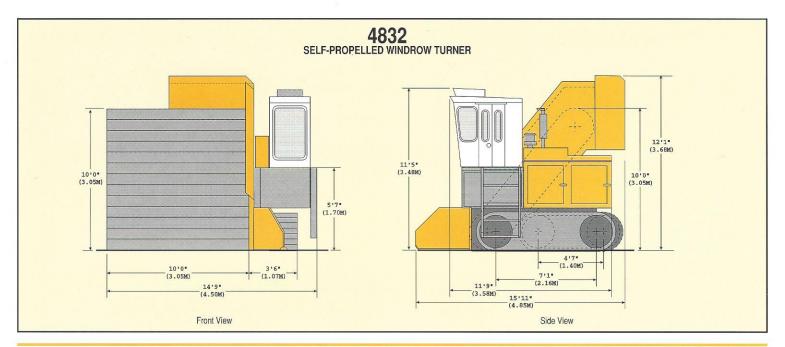


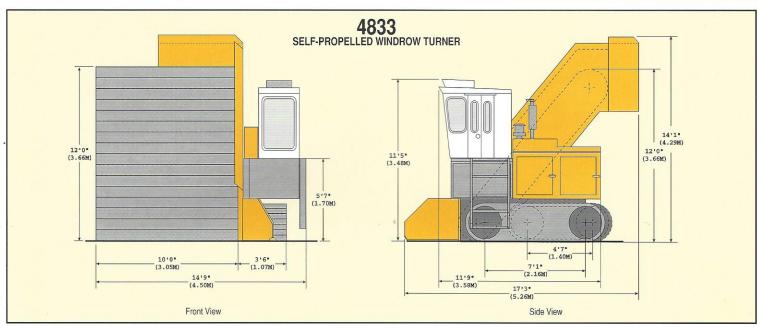
#### SCAT's 4932 Stack Turner... The Latest in Turning Technology.

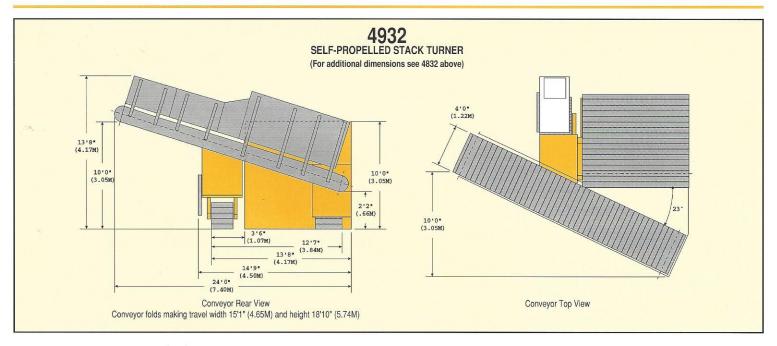
When space is at a premium the SCAT 4932 Stack Turner is the perfect solution. A large stacking conveyor takes the thoroughly aerated material from the top of the Elevating Face and moves it over into a new stack. As a result, the SCAT 4932 handles continuous stacks of material, thus eliminating the need for travel lanes between each windrow.

Now, without adding any additional space, an operation can handle twice the volume. Used in conjunction with an aerated floor, fewer turns of the stack may be required. The SCAT 4932 Stack Turner is economical and efficient for covered composting sites as well as bioremediation treatment sites where space is critical.











### **SPECIFICATIONS**

#### Self-Propelled Compost and Bioremediation Turners

Model	4832	4833	4932
Face Type	Elevating	Elevating	Elevating
Face Size	10' x 10' (3.05 x 3.05m)	10' x 12' (3.05 x 3.66m)	10'x 10' (3.05 x 3.05m)
Teeth Type	Cup Teeth Standard	<b>Cup Teeth Standard</b>	Cup Teeth Standard
Inversion Control Conveyor	Standard	Standard	NA
Stacking Conveyor	NA	NA	Standard
Working Dimensions:			
Operating Length	15'11" (4.87m)	17'3" (5.26m)	21'7" (6.65m)
Overall Height	12'1" (3.66m)	14'1" (4.27m)	13'8" (4.17m)
Overall Width	14'9" (4.50m)	14'9" (4.50m)	24'0" (7.40m)
Overall Weight	16.25 tons	17.00 tons	18.93 tons
	(14.77 tonnes)	(15.45 tonnes)	(17.20 tonnes)
Ground Pressure	10.32 psi	11.06 psi	11.88 psi
Transportation Height	11'5"	12'0"	11'5"
With Conveyor Removed	(3.50m)	(3.66m)	(3.50m)
Capacity* Up To	4000 yd³/hour	4000 yd³/hour	2500 yd³/hour**
	(3040m³/hour)	(3040m³/hour)	(1900m³/hour)
Windrow Height	8' (2.44m)	10' (3.05m)	NA
Windrow Width	20' in 2 passes (6.10m)	20' in 2 passes (6.10m)	NA
Stack Height	NA	NA	8' (2.44m)
Stack Width	NA	NA	Unlimited
Engine	Caterpiller 3116T, 6 Cylinder		
Horsepower Continuous	140 @ 2400 rpm (104 kw)		
Maximum Torque	425 ft. lbs. @ 1400 rpm		
Fuel Type	No. 2 Diesel		
Cooling System	Water		
Fuel Capacity	70 U.S. Gallons w/ Full View Gauge (265 litres)		
Hydraulic Tank Capacity	70 U.S. Gallons w/ Filtered Vent (265 litres)		
Track Drive	Hydrostatic, 0 to 1.5 mph Forward & Reverse (0 to 2.41 kph)		
Standard Track Shoes	24" Triple Bar Grouser (61cm)		
Optional	Rubber Track Pads (extra cost)		

 ${}^*$ Capacity is based on site, material, and operating techniques.

\*\*Based on stacking conveyor capacity.

For additional detailed specifications on SCAT's full line of Turners & Aerator/Blenders call 1-800-THE-SCAT.

Specifications and design are subject to change without notice and without liability therefore.



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