

## Requirements and Technical Specifications

### 1. Tractors (“CASE”) or Equivalent:

Tractor Specification as provided below for “CASE” or equivalent		
Item Type	Description	Quantity
a. Engine power	120 HP	Six (6) units
b. Shaft type	rpm’s shaft with 6 splines, 1 1/8” diameter;	
c. Valve type	3 double hydraulic valves;	
d. Geer system	Super creeper gear that can make possible to drive at a speed of 100 meters/hour;	
e. Air filter	oil bath (can be different type);	
f. Fuel tank capacity	more than 200 liters;	
g. Clutch type	dry double action type (can be wet type);	
h. Gear box shift	16 forward and 8 reverse;	
i. Rear axle	with mechanical differential lock;	
j. Front axle	with planetary hub;	
k. Pump function	more than 40 L/min;	
l. Nominal pressure	More than 15 Mpa;	
m. Steering system	Hydraulic;	
n. Service break	wet, disc type mechanically actuated;	
o. Parking break	mechanical, hand actuated;	
p. Front/rear wheels	13/18 (can be more or less);	
q. Front/rear trades	2200 mm (can be more or less);	
r. Length/width/ height –	5000 x 2000 x 3000 mm (since the operation is in a shade, smaller size is preferable);	
s. Wheel bath	2000 mm (can be shorter or longer than this);	
t. Weight without ballast weights	less than 5000 kg;	

u. Built	Safety frame with sun canopy	
v. Drive	2-wheel drive	
w. Tyre	Standard manufacturer size for front and rear	
x. Engine	4 cylinders	
y. Hitching system	Hitching system for compost turner operations	

## 2. Compost turner or Compost System “ST 350” or Equivalent;

Item Type	Description	Quantity
<b>Compost turner (Compost System-ST 350) or Equivalent</b>		<b>Six (6) units</b>
Item Type	Description	
Type	Tractor pulled semi manual type;	
Model	That can fit with the tractor that has specs listed under number 1 in this document;	
Dimensions	With a rotor length of 3.5 m and a heap cross- section of about 4 m <sup>2</sup> ;	
	That works well with a push axle even without creeper speed;	
	With transport height of less than 2 Meter because our shades have low heights;	
	That can be easily lifted from the heap at any time and transport;	
	That can stabilize lateral forces to ensure it is not transferred to the tractor;	
	Has maximum width of 4 Metter;	
	Transport weight should be less than 3 tone and including counter weight less than 9 tone;	
Tuning capacity	Has capacity of turning quantity 1,200 m3 /h;	
Working speed	Working speed should be between 100-500 m/h;	
Material	Stainless steel rotor tunnel;	
color	Has a gray color;	

**3. Compost fleece (Compost System Cover or Equivalent;**

Item Type	Description	Quantity
<b>Compost fleece (Compost System Cover or Equivalent</b>		<b>Sixty (60) Rolls</b>
Length	5-meter width 50-meter by length;	
Fibers	Polypropylene (non-woven);	
Color	Black;	
Thickness	1/16 inch or 1.8mm (+- 0.2 mm);	
Weight	.37 lb./sq. yd or 200 g/sq. m (+- 20 g);	
Air Permeability	200 to 400 cfm;	
Water Shedding	99% or better <sup>2</sup> ;	
Finish treatment	Thermal stabilization (i.e.. heat treated on one side);	

**4. Digital Thermometer: The Specification or Equivalent;**

Item Type	Description	Quantity
<b>Digital Thermometer: The Specification or Equivalent;</b>		<b>12 (twelve) Pcs</b>
Type	Digital	
Display and Feature	1 3/4" easy-to-read dial;	
	20" stem;	
	Plastic No fog lens;	
Material	All Stainless-Steel Construction;	
Others	Very of +/- 1% full scale;	