**Groove type hydraulic Compost turner machine**

**The main purpose and characteristics of the equipment**

The basic principle of the groove hydraulic compost turner machine: the hydraulic system uses the hydraulic pump to convert the mechanical energy of the motor into the pressure energy of the liquid, and the liquid pressure energy is transferred to the hydraulic motor and the hydraulic cylinder through the steel wire braided hose, through the transfer of the control valves and pipelines, so that the hydraulic actuating elements (hydraulic cylinders and motors) to convert the liquid pressure energy into mechanical energy, so as to drive the winches to rotate, and realize rotary motion and straight line reciprocating motion.

The groove hydraulic compost turner machine adopts a complete set of hydraulic system, through axial piston pump, hydraulic motor, shunt valve, directional control valve, integrated hydraulic valve, reversing valve, etc., which transmits even and smooth motion under the condition of outputting the same power, and is easy to start and brake quickly, and the operation and control is convenient and labour-saving, and it is easy to realize automatic control and overload protection.

**The machine specification:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Windrow width  (m) | Windrow depth  (m) | Hydraulic station electric power（kw） | hydraulic motor | Travelling motor power | Lift truck motor power | Travel speed range  (m/min） | Productivity |
| RY-ZFP-40AY | 3.74 | ≤1.1 | 22 | GM2X2 | 3 | 2.2 | 0-6 | 246.84 |
| RY-ZFP-40AY-2 | 3.74 | ≤1.5 | 37 | GM2X2 | 3 | 2.2 | 0-6 | 291.72 |
| RY-ZFP-40BY | 3.74 | ≤1.5 | 55 | GM3X2 | 3 | 2.2 | 0-6 | 336.60 |
| RY-ZFP-50AY | 3.74 | ≤1.5 | 75 | GM3X2 | 3 | 2.2 | 0-6 | 426.60 |

