



Appreciation Award

Double Axle Rotavator

Gurpreet Maan
Muktsar, Punjab

Gurpreet (39) studied till 12th standard and was a state level Kabaddi player. Since childhood he was interested in mechanical objects and therefore set up his own workshop for manufacturing rotavator and repairing of agricultural machineries. His family owns 10 beegha of land where they practice farming.

While farming using a regular (single shaft) rotavator, Gurpreet observed that conventional single shaft rotavator needs to be operated in 2-3 passes for efficient pulverization of soil in field. This made him work on developing a double axle rotavator and in 2012 he was able to complete it.

Gurpreet's rotavator uses double rotating shafts for pulverizing the soil in a single

pass. It is tractor (min 40hp) PTO powered rotavator, wherein both axles rotate in the same direction, at the same speed resulting in better pulverization of soil in single pass. It is available in size from 7 ft to 12 ft and different shapes of blades like L, J and C type can be attached to the rotor to pulverize the soil. It has been tested by NRFMTTI (Northern Region Farm Machinery Training and Testing Institute) and found to perform as per following specifications. Working width: 203 -205 mm, Speed of operation (kmph): 3.63-3.91, Field capacity: 0.629-0.734 ha/h; Field efficiency: 82.9-94.1%, Depth of cut: 6.0-6.3 mm, Fuel consumption: 5.90-6.29 lph. Over 100 units of this rotavator have been sold with good feedback.

