

“MINI ROTAVATOR MACHINE WITH MULTIPURPOSE”

More M.D., Phuge A. K., Shinde D.S., Vaidhy S.S.

Department of Mechanical (Poly), SVERI's College Of Engineering, Pandharpur

Abstract:

The purpose of developing this machine is to achieve desirable soil structure of the farm. After ploughing of the farm the large bulky blocks of the soil formed to break this “rotavator” is used. This machine is designed for preparing the land by breaking the soil with rotating blades. The 175CC, 2 Stroke engine is used for providing power to rotating blades. This manufactured device is portable and easy to handle and results in saving in farmers time and effort.

Project Goals/Objectives

- It's easy and simple to use.
- Reduce the man power required for operation.
- The all operation of the machine will be operated by only one person.
- Reduce the hard work of the farmer and provide satisfaction to farmer.
- All the operation done by single machine.

Advantages

1. This machine is easy to hand
2. It has low cost of performance Maintenance cost is less.
3. Skill worker is not required.
4. Single person is required.
5. It is Machine. multipurpose

Disadvantages

1. More power is required.
2. Difficult to turn the machine.
3. Suitable only for less farm.

Results

Time Required	3 Hrs / 1.5 Acers
Fuel Required	3 Liters / 1.5 Acers
EffortsRequired	Less as compared to conventional

Conclusion

- This device has low cost as compared similar device commercially available in the market.
- Serves best for braking the soil.
- Having higher efficiency as compared to other similar devices.
- Required less skilled worker to operate this device

Applications

- Used for spraying medicine on the crops.
- Used for tillage the farm.
- Used for ploughing in the farm.
- Used for sickle purpose.
- Used for sowing purpose.

Acknowledgment

This work is just not an individual contribution till its completion. I take this opportunity to thank all for bringing it close to conclusion.

References

- www.aboutrotavator.com
 www.alibaba.com
www.wikipedia.com