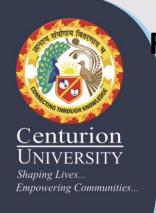


STRAW COMBINE

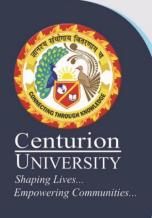


Features

- •This Machine makes straw quality of Small size as per choice of the farmer.
- Grain tank provided for grain storage from waste.
- Stone trap system provided for safety of machine.
- •The machine consumes less power as the threshing drum is fitted with steel blades.
- Machine is provided with two blowers.



PANESAR STRAW COMBINE



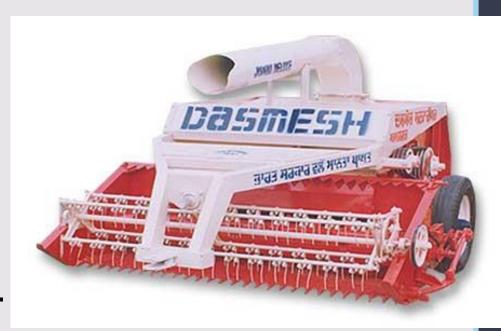
STRAW COMBINE

Single speed gear box with 540 R.p.m. P.T.O.

Machine is fully belt operated.

Cutting height is a adjustable.

Threshing drum contain 225 blades.

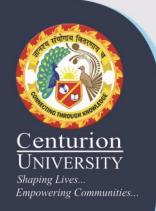




TRACTOR OPERATED STRAW COMBINE







TRACTOR OPERATED STRAW COMBINE

Recover wheat straw after combine operation

Straw collected by straw combine is cut into pieces and collected in the trolley as bhusa.

Also some grains are collected along with straw.

The capacity of machine on an average is 0.4 ha/h (2.5km/h) and straw recovery is about 55-60%.

Two persons are required for its operation.

The cost of operation is Rs. 1200/ha.

The machine can cover about 75-100 ha/year.

There is an additional grain recovery of 50-100 kg/ha.

The cost of grain recovered is almost equal to the amount paid for hiring the machine.

There are more than 50 manufacturers manufacturing straw reaper/ combine.

Advantages of straw combine over control

- Use of tractors per year has been increased
- saving of time, money and labour.
- Bhusa can be obtained as bi product
- Less fatigue than manual threshing of wheat.
- Machine repay its cost with in one year
- The tractor needs frequent service of air cleaner because of dust and bhusa during operation of straw combine.
- Small farmers welcome the work to be get done by custom hiring.
- The machine is liked by the farmers very much.

Conclusion

- Straw recovery is 70.7 per cent with good quality.
- The straw split was 92.36% and length of bhusa was 2.3 cm.
- There was an additional grain recovery of 141 kg/ha (45.8%). The cost of grain recovered is almost equal to the amount paid for hiring the machine.
- Straw combine is very economical and now a days it is used extensively by the farmers as the cost of bhusa rises and use of combine increases.
- The demand for straw combine also increase.
- It helps to save environmental hazards.

Economics of Straw combine on custom hiring

Cost of machine (Rs.) : 90,000 to 1, 20,000

Operating speed(km/h) : 2.5

Average Field capacity(ha/h): : 0.4

Average Fuel consumption, (I/h) :3.5- 4.0

Labour required/ha : 2 persons

Cost of operation (Rs./ha) :800

Average grain recovery(kg/ha) ; 100-120

Average bhusa recovery (q/ha) : 25.0

Average area covered (ha) :85

Rate of custom hiring(Rs./ha) :1250-1325

Total turn out(Rs./year) : 1,06,250- 1,12,625

Expenditure(Rs./ha) : 800

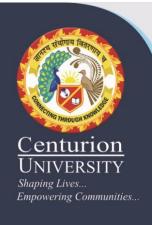
(Rs. Year) : 40,000

Net saving (Rs./year) : 66,250-72,625

Pay back period: : two year

Straw Combine

Straw Baler



Straw reaper/ combine

Working of Straw Reaper:

Straw Reaper is a machine; cut, thresh & clean the straw in one operation.

The wheat stalks left after combine harvest are cut by an oscillating blades while revolving reel pushes them back toward & auger.

The stalks are conveyed into the machine by the auger & guide drum, which reaches the threshing cylinder which cut the stalks into small pieces against concave.

It give superior separating performance. The short fragment (straw) fall through the bars of the concave.

Double Blower operating just behind rushes the straw to trolley attached & separate the dust particles.





Straw Baler