

Turfcare 5 X UNIT GANGMOWERS

QUALITATIVE REQUIREMENT FOR 5 UNIT GANGMOWER

M&M Cost Rs 4.40 lacs

TECHNICAL SPECIFICATIONS

Power. Tractor pulled 35 HP minimum.

Construction. All steel construction with frame fabricated in steel sheet not less than 5 mm thick. The connecting wings of steel bar should not be less than 19 mm in diameter.

Transmission. Through a set of 3 x spur gears in EN Steel hardened on both sides to HRC 50-55. The gear teeth after hobbing should be polished to a smooth finish for easy engagement. The idle gear shaft should have a uniform hard chrome deposit of thickness between 10 – 20 microns. To enhance the life and performance of the machine the axes of the Cutting Cylinder, Main Drive Gear and the Idling Gear should be parallel.

Clutch. The Engage / Disengage fork should fit snugly into the groove of Pawl Box. Pawls should be hardened to HRC 30-35. The Pawl Box design should ensure smooth engagement / disengagement.

Cutter Reel. The efficiency and clean cut of the Gang Mower depends entirely on the material used and various operation of Heat Treatment, Grinding, Welding with special by L&T electrode as specified by the specialist rep of L&T Company. The detail construction is further as under :-

The cutting cylinder carries 7 X Cutter Strips (Blades) of EN -9 alloy Steel each strips is twisted to an angle so that it gives uniform cut to the grass. The width of each cutting strips is 762 mm and thickness is 6 mm Not normally found on any cutting cylinder in the market. The strips are hardened on HRC scale 35 to 38 and rechecked for quality on hardness testing machines in the factory.

Bottom Block Assembly.

(a) **Bottom Block.** Manufactured in Mild steel. Bottom surface on which blade is fitted should be ground to mirror finish to ensure uniform cutting. The brackets on both ends should be perpendicular to the block and parallel to each other. The holes on the brackets should be on the same horizontal axis. A light weight and strong deflecting plate should be provided to deflect the cut grass to the Nylon Collecting Net.

(b) **Bottom Blade.** Should be of E N steel hardened to HRC 40-45. Cutting edge width 7.0 mm. Cutting edge should be uniform with two profiles so that its sharpness is always maintained. Cutting edge profile should fully match the profile of the cutter reel.

Back Roller. A Back Roller in the shape of a hollow cylinder should be provided to

ensure that the cutting reel always hugs the ground while cutting the grass. The roller should be mounted on the shaft with 2RS bearings to ensure long life and easy rolling. The bearings should be protected against ingress of moisture and dust by oil seals. As an additional precaution a greasing arrangement should be provided for removal of any dust / mud that may still find ingress through the lubricating bush provided on outer sides.

Shock Absorber. To ensure that cutter units despite unevenness in the ground hug the ground and that no portion is left unmowed, a shock absorber is provided (Gabriel make) of each of the mowing unit.

Backlapping Arrangement. The only known machine internationally having facility for backlapping the cutting cylinder and Bottom Blade to maintain the cutting edge of Bottom Blade and Cutting reel.

Transport Wheels. Should be detachable with a size not less than 3.50 – 10

General.

- (a) All moving parts should be grease lubricated using a hand operated pressure gun.
- (b) All fasteners should be rust proof and in standard sizes.
- (c) All bearings should be of Standard Quality in 2 RS type.
- (d) Welding should be done using electrodes of Standard Make e.g.L&T or ISI approved and using DC current.

Performance Specifications

	<u>Tractor Speed</u>	<u>1 x Unit</u>	<u>3 x Unit</u>	<u>5 x Unit</u>
<u>Width of cut</u>		760 cm	2.10 meter	3.50 meter
<u>Rate of cut</u> (Acres / hr)	8 km / hr	1	3	5
	10 km / hr	1.4 (not less)	4.2	7
	16 km / hr	2	6	10
<u>Draw bar pull</u>				
Initial		100 kg	300 kg	500 kg
In work		50 kg	150 kg	250 kg

Height of cut. Adjustable from 13 mm to 100 mm by locking on rear rolling carriage

Guarantee. One year from the date of purchase for any manufacturing defect. Consumable and perishable items are not covered under guarantee.

Spares Back Up. Assured spares back up for 5 years.

Total Weight of 5 X Unit Gang Mower should not be less than 420 Kg