

**QUALITATIVE REQUIREMENT FOR ALL PURPOSE RIDE ON PETROL
MOWER -71 CMS/28 INCHES WITH OPERATOR SEAT WITH SELF
STARTER**

M&MC Rs 2.25 lacs

TECHNICAL SPECIFICATIONS

Engine. Engine minimum 7 HP at 3600 RPM fitted with Self Starter, Battery, Volt meter and starting switch and charging system.

Chassis. In not less than 4 mm steel plate with strong tubular handle.

Drive. To overcome initial high torque , the drive should be passed through a set of 3 spur gears in EN steel hardened to HRC 40-45. Thereafter heavy duty roller chains to take over the drive.

Transmission.

- (a) **Centrifugal Clutch** consisting of minimum 2 x shoes, SKF Double ball bearing 1203 self adjusting cintered bushes, tapered bush and a flywheel for smooth engagement.
- (b) **Main Clutch** with Aluminum Pully, V Belt with facility to engage and disengage with lever on the handle bar.
- (c) Double Ball Bearings for Self Alignment of shaft between the engine and the output sprocket.

Front Roller. MS smooth / grooved roller.

Back Roller. Minimum two pieces in aluminium, light weight, splined /dotted/smooth finish, differential action for smooth turning. Should have at least 2 x RS bearings for smooth rolling.

Cutter Reel. 8 x knives with sharp cutting edge in EN Steel hardened to HRC 40 – 45. The bearing housing on each end should have a 2 RS bearing, grease ring with greasing nipple and dust cover. It should also have a gun metal bush for mounting on the end plate of the Bottom Block for ease of movement for adjusting gap between bottom blade and cutting cylinder blades.

Facility for Engaging / Disengaging Cutter Reel from Transmission. Provision should exist to engage / disengage cutter reel from the transmission for two purposes e.g.

- (a) To save the cutter reel from wear while moving the machine from one location to another with cutter in disengaged mode.
- (b) To enable the cutter reel to be Back Lapped with the help of Back Lapping machine in reverse rotation.

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.
- (b) **Bottom Blade.** To be manufactured in E N steel hardened to HRC 40-45. Cutting edge width not less than 5.0 mm. Cutting edge to be uniform with four profiles. Both ends of the blade should be profiled to save the green from damage while turning. Cutting edge profile should fully match the profile of the cutter reel.

Grass Box. To be manufactured in fiberglass and design should be such that the grass does not spill out.

Transport Wheels. Should be detachable with a size not more than 11X4X5 and not more than 2 ply. For free rolling, wheels should be mounted on the axle with 2 RS bearings. Wheel mounting should be of universal design so that it is possible to interchange wheels among mowers.

Performance Specifications

<u>Height of cut.</u>	8,11,14,17,20 mm or as desired
<u>Width of cut.</u>	71 cm /28 inches minimum
<u>Rate of cut.</u>	Not less than 30500 sq. ft. per hour.

Operator Seat A movable operator seat, which can be adjusting forward and backward and in height, which can be easily attached and detached is to be provided.