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Modified Rotavator for Cutting Sugarcane Trunk

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Abstract: - Nowadays there are many types of rotavators available in the market but the cost of these rotavators is very high and it is not possible to purchase all farmers. So made the new rotavator for cutting of sugarcane trunk. But the different types of rotavators available in the market have some drawbacks covered in the new rotavator. The main thing of this new rotavator is to cut the sugarcane trunk at the ground level which does not happen in the other rotavator and the other rotavator. Quality control is used to evaluate processes and products and is a powerful tool for reducing variability. The objective of this study was to evaluate the quality of green sugarcane cutting for mechanized harvest, using statistical quality control tools. Cutting height and damage to ratoon stalks caused by different blade and disc combinations of the base cutter mechanism were used as indicators of quality.

Keyword: - Power Take off shaft, Bevel Gear, Rotating M S Blade, etc.

REFERENCES

- [1] Automobile Engineering Book
- [2] Design of Machine Element (Khurmi)
- [3] Study Of Torsional Response on the Rotor shaft of a Rotavator Under Transient Load Conditions' by Vignesh, Dr. Muruganandhan. R, Dasairi. N, Nagarjun. M, IJIRSET volume4, special Issue, 4 April 2015.
- [4] Computer-Aided Design and Analysis of Rotavator Blade' by Prasad D. Tupkari, Dr.P.K. Sharma, Prof. Amit Singh, IJATES Volume 2, Issue No.05, May 2014.
- [5] Design Modification and Structural Analysis of Rotavator Blade by Using Hyper Works 12.0' by C. Manivelprabhu, Dr. N. Sangeetha, T. Ramganesh, 2015 India Altair Conference.
- [6] Design Modification and Analysis of Rotavator Blade' by Jeevarathinam. A Velmurugan. C, IOSR Journal of Mechanical and Civil Engineering (IOSRJMCE) e-ISSN: 2278-1684, p-ISSN: 2320-334X PP 43-50 2.