SKR ENGINEERING COLLEGE

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Department of Mechanical Engineering

PROJECT TITLE	DESING AND DEVELOPMENT OF AUTOMATED MULTI PLOUGHER
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OBJECTIVE	1. To design the plougher this can be used for different soil. 2.To eliminate the air pollution of tractor.
ABSTRACT/IDEA	To design and fabricate an automatic multi-plougher vehicle that reduces the human effort and also supports to plough different fields in Agriculture. This plougher carries two DC motor in which, in turn its run by a battery. The vehicle can easily attach and remove ploughs for different crop fields by a slider. The upward and downward movement of the plough is produced by the screw jack which is driven by the wiper motor. The embedded system supports the vehicle to run through entire field automatically. When a person enters the dimensions of field in the HMI (Human Machine Interface), the embedded system computes the vehicle throughout the field. The plougher in the fields palletized through the HMI interface by sending signals to wipe in or wipe out the motor continuously running throughout the process would be finished. Hence, the entire field is ploughed automatically without the human interaction.

TECHNOLOGY USED	Embedded system
WORKING STEPS	Problem on Conventional Plougher – Identification of required physical components – calculation of motor power – power required for drawbar – design and fabrication process – development of prototype
REQUIREMENTS	Ultra sonic Sensor, Dual Relay Board, micro controller
BENIFITS	The Plougher varies from field to field and thus it is not cost efficient. In order to reduce this , we have come up with an idea of Automated Multi Ploughing vehicle which reduce the cost as well as effort of the human labour.