LASER BASED LAND LEVELER

ESTD - 1994

सत्यमेव जयते
Department of Science and Technology (DST)
DST

K.L.N. College of Engineering

K.L.N - Innovation and Research Park (KLN - IRP)

Project Funded by
Department of Science & Technology
New Delhi

Tested @
KLNCE Campus

Project Title: Laser Based Hydraulic Controlled Variable Length Land Leveler Cum Plough Device With Remote Monitoring System

Order No: DST/TDT/AGRO-12/2019 **Dated: 18/12/2019** **Project Duration: 2 years (2020-2022)**

INVENTORS

Principal Investigator

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Co-principal Investigator's

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Quick Facts

- Land leveling is the most significant pre-processing phase to start agriculture, civil constructions, high way road formation, construction of playground and other all types of land leveling applications, towards the faithful production and process of the system.
- The present invention used for large land leveling applications with the help of length adjustable scraper and the leveling operation performs automatically based on the laser signals using hydraulic actuators.
- The land leveling time is estimated on basis of a prediction procedure and the entire leveling process is remotely monitored using a controller.
- Easy to monitor and coordinate more than one land leveller operations in one remote monitoring device with the help of a dedicated web page.
- Time saving, accurate land levelling and cost effective are the main advantage of the proposed innovation.

Applications

- Agriculture farming
- Civil constructions (Commercial and domestic construction applications)
- High way road formation
- Preliminary land levelling purpose such as large play grounds, commercial buildings, Airports, ship yards, railway stations.
- All type of land levelling applications

Laser Research Laboratory (Nd:YAG Laser & Spectrograph)

Advantages over Existing Methods

- Adjustable length scraper rather than fixed scraper.
- Prediction analysis to estimate time and cost of land levelling process
- Remote monitoring system
- Dual Purpose unit – Leveller and Plough unit
- Larger Area coverage within short span of time
- Cost effective.

Industry Partners

M/S. Kannan Tools and Dies
Sri Subaha Ganesh Industrial Estate
Kuppepalayam
Coimbatore - 641 107, Tamilnadu.

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