

# Agri-tech & precision farming



Grain metering device for  
combine harvester

**Our client approached us for a device that could be added to their combine harvester range and provide yield data in real-time during harvest.**

## Approach

- Grain is difficult to measure in real-time due to the non-uniform density of solids
- We assessed different methods of measuring mass flow rate taking into account the dusty and unpredictable, mobile environment
- Mathematical and analytical modelling helped to validate the concept
- A vibrating plate system delivers the force required at a flow rate of one kilo per second

## Benefit

- The client is now able to provide their customers with real-time yield data
- Their customers will be able to tailor chemical and crop care programmes on an area by area basis
- Customers receive a geo display depicting yield levels for precision dosing and irrigation customers want and find easy to use.

