



transforming the way the world works



Agriculture Productivity Solutions

GeoSmart Asia 2015

Scot Craig: Regional Sales Manager SE Asia & Japan

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Trimble Overview

A world leader in transforming how work is done across multiple industries and professions

Our technological capabilities span positioning and sensing, global connectivity, 3D design, modeling & measurement, machine and process automation, and powerful data analytics

Our customers gain significant economic breakthroughs and at the same time improving quality, safety, regulatory compliance and reducing environmental impact

Founded in 1978, US public listed with facilities in 36 countries, partners and customers in 150 – from some of the world's largest corporations to some of the smallest family farms

2014 Revenue US\$2.4Billion; 8,000+ employees

Transforming

THE WAY THE WORLD WORKS – ACROSS MULTIPLE INDUSTRIES & PROFESSIONS

Core Industry Focus



Agriculture



Heavy Civil Construction



Building Construction



Geospatial



Transportation & Logistics

Emerging Businesses



Rail



Environmental & Waste



Water Utilities



Electric Utilities



Mining



Forestry



Field Service



Oil, Gas & Chemical



OEM & Consumer



Government

Trimble Agriculture

Innovative technology that transforms the crop production cycle, driving efficiency, sustainability and profitability while protecting the environment

Objectives and Benefits

ECONOMIC



Increase Yield



Increase productivity and ROI



Improve asset and human capital utilisation rate

ENVIRONMENTAL



Reduce fossil fuel consumption



Reduce chemical and water consumption



Reduce input cost and minimise waste

Production Circle – Agriculture



Land Preparation

GUIDANCE:

Maximize the precision of your rows or inter row cultivation, and reduce skips and overlaps reducing time/labour and fuel .



PLANT SENSOR:

Automatically sense the presence of living plants, and targeted herbicide application and savings of up to 90% in herbicide costs.



TERRACES:

Design, install and maintain terraces to slow down the movement of surface water preventing soil erosion.



Planting

CAMERAS:

View what is building up in the planter discs or what is going on in the seed box with up to 4 cameras.



GUIDANCE:

Extend your operating hours so you can work when you need to, maximize the precision of your rows, and even decrease fuel and input costs.



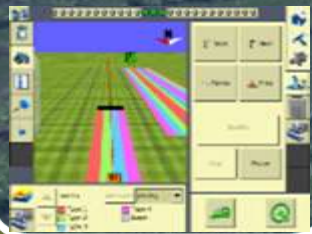
CONTROL YOUR IMPLEMENT:

Keep implements on a repeatable path, even on extremely sloped fields and variable soils.



VARIETY TRACKING:

Track different varieties to allow performance analysis after harvest.



PREVENT OVERLAP:

Prevent seed overlap, in your headlands and point rows, by automatically controlling up to 48 individual rows.



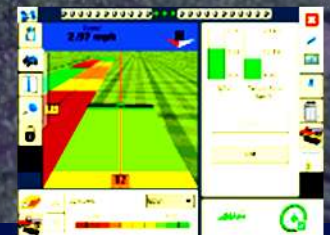
ADVANCED MONITORING:

Monitor real-time population, spacing, skips and multiples to identify adjustments for better planter control. Statistics can be provided as planter average or as detailed row by row information.



RATE CONTROL:

No lag at beginning of pass or when rate changes with the instantaneous rate response from Rawson™ variable rate drives.



Nutrient and Pest Management

CAPTURE DATA:
 Capture soil samples or scouting data to allow corrective actions to be prescribed to different zones in the field.



GUIDANCE:
 Extend your operating hours so you can work when you need to, maximize the precision of your passes minimizing skips and overlaps.



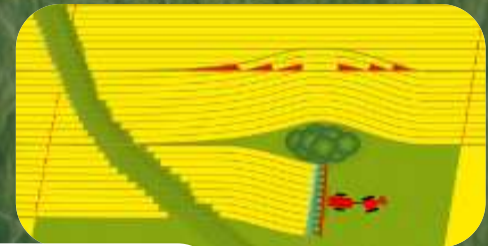
CAMERAS:
 Use up to 4 cameras to view places obscured by parts of the machine.



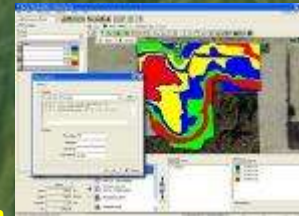
PLANT SENSOR:
 On-the-go plant sensor system that determines the health of a plant in real time and delivers the optimum amount of nitrogen.



PREVENT OVERLAP:
 Prevent chemical/pesticide overlap, in your headlands and waterways, by automatically controlling up to 48 individual sections/nozzles



PRESCRIPTION MAPPING:
 Create prescriptions and apply up to 6 different materials simultaneously in a single pass.



Irrigation

AUTOMATED MACHINE GUIDANCE:
Install drip tape precisely so beds can be pulled accurately above water source without damaging tape.



MACHINE CONTROL SOLUTIONS:

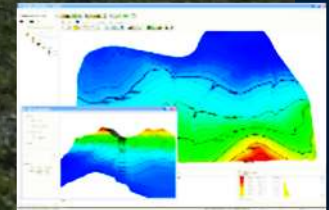
Wide selection of machine control solutions for leveling of fields to provide optimal distribution of rain or irrigation water.



LEVEES:
Design and install levees on the contour for perfectly irrigating fields.



WATERSHED ANALYSIS:
Analyze the field's watershed, tributary and flow data in 3D to enable informed water management decisions.



Harvest

YIELD MONITORING:

Monitor and record the crop yield as it being harvested to identify high yielding areas of the field or areas that need attention.



CAMERAS:

View what is behind the combine before backing up or see exactly where to line up the clean grain auger.



GUIDANCE:

Operator is able to focus on other operations such as combine performance and watching for rocks or other objects in the field.



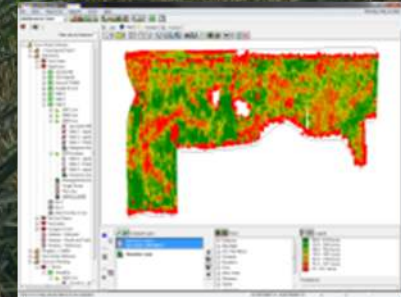
ROW FOLLOWING:

Increase corn yield through reduced ear loss by using row following to keep the corn head centered on the rows and reduce operator fatigue in difficult conditions such as down corn, curved rows and long passes.



CONNECTED FARM™:

Automatically send the yield data to a secured storage location to create fall fertilizer prescription maps.



Drainage Management

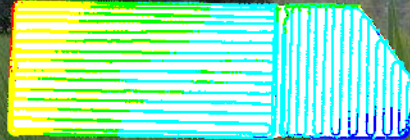
SUB-SURFACE DRAINAGE SOLUTION:

Complete solution for sub-surface drainage ensuring 3D drain placement for optimal water table control.



AUTOMATED MACHINE GUIDANCE:

Utilize automated machine guidance for consistent and adequate topographic data collection.



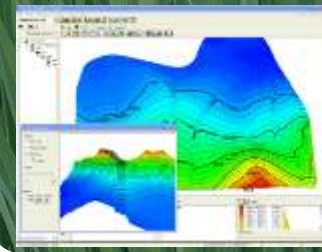
SURFACE DRAINAGE SOLUTION:

Complete solution for surface drainage ensuring 3D drain placement for optimal water table control.



WATERSHED ANALYSIS:

Analyze the field's watershed, tributary and flow data in 3D to enable informed water management decisions.



Trimble AG Product Introduction

Display Range



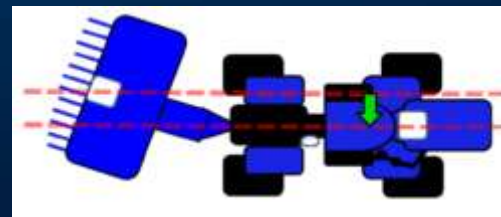
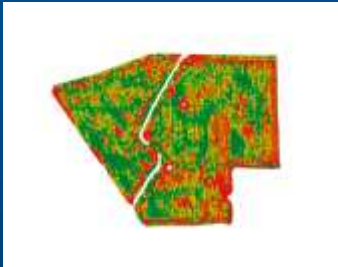
Trimble AG Product Introduction

GNSS Auto Steering systems



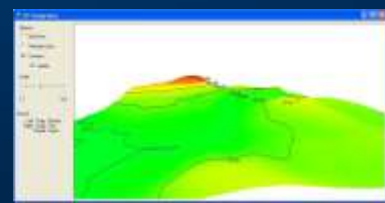
Trimble AG Product Introduction

Other Add On Products



Trimble AG Product Introduction

Software and Data Transfer



Productivity & Efficiency Improvements With GNSS Autosteer

	GNSS Autosteer	Manual Steering	Difference
Area (ha)	6.10	6.10	0.00%
Diesel Consumption (l)	149	165	-10%
Work Rate (ha/h)	1.13	1.00	+13%

Customer: Usina Batatais

Water Management success in Asia

- Over 5000 such systems in India operating successfully .
- Over 3000 of such systems operating in Pakistan successfully.
- Trimble is proud to have introduced this in both the countries a decade ago.

THANK YOU

WWW.TRIMBLE.COM

Contact details

Scot Craig: scot_craig@trimble.com