

IM 8800



Background

- Need for a portable, battery driven moisture & protein analyser
- Heavy investments in R&D, spectrometer design and tooling
- Field trial in Australia and South Africa Nov – Feb (2013-14)
- Successful launch in May 2014
 - More than **250 units** sold this first year
 - More than **15 regions/countries**
 - Farmers, Grain Traders, Inspectors, ...



”It’s a game changer !”

”...performs surprisingly well !”

”...too successful !!”

Market

Small grain traders

- Bring the IM 8800 to the field
- Inspector can decide & sign contract on-site
- Better planning for receiving grain

Industrial farms

- > 2000 ton Wheat, Barley, Canola
- Storage on-farm
- Manage delivery contracts, Wheat & Barley grades & premiums
- Fertilizer decisions based on Protein mapping



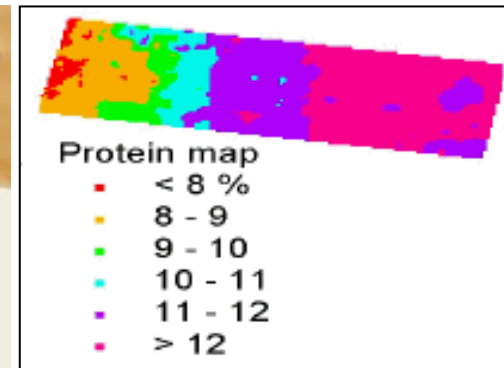
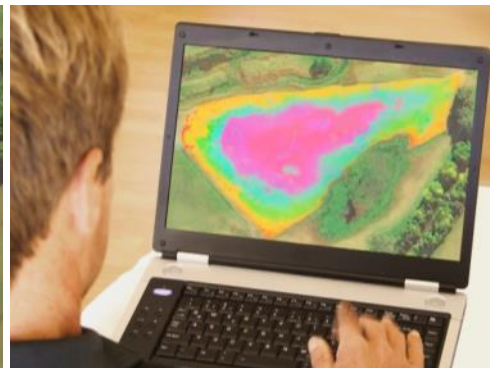
Protein mapping/Precision farming

Variability in Protein Content of Wheat Within a Year

Source of Variation

Range in Protein Content

Rows within one apparently uniform field	6 %
Farms delivering to one elevator point	5 %
Farms within a province (of Canada)	8 %



On Farm storage

- Enables farmers to segregate and store the grain on farm
- Contracted farmers "call in" measured quality to Grain trader
- Grain Traders call upon the farmers, knowing the quality and can prepare for the known qualities
- Drop shipment directly to customers of the Grain Traders reduces the need for storage at the Grain Trading station



IM 8800 Specification

Weight: **7 kg**

Start-up time: **15 sec**

Measurement time: **From 90 sec**

Technology: **Silicon Diode Array**

Calibration alignment/transfer: **IM 9500** (Approved in US, France, Germany, etc)

Wavelength range: **850-1050 nm**

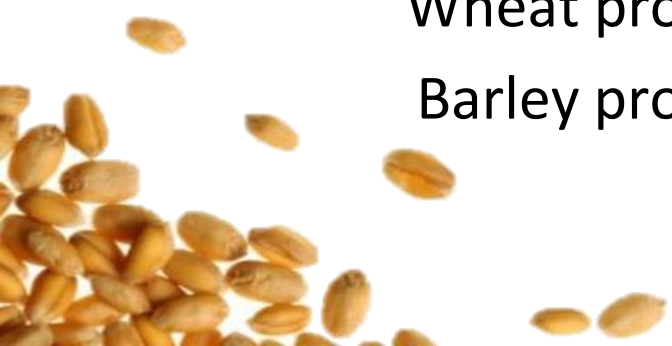
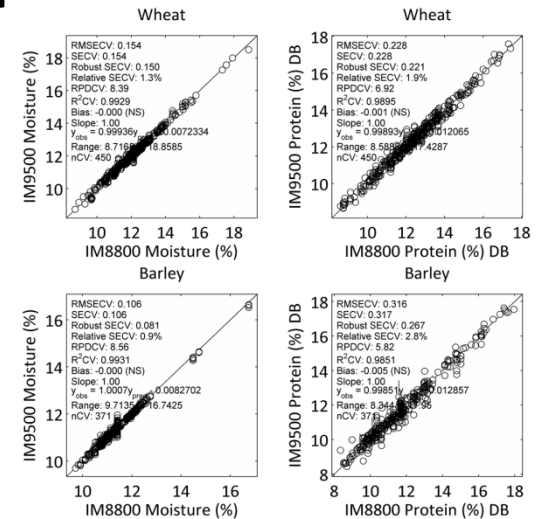
Battery operation: **2 hrs**

GPS, protein mapping: **Yes**

Carry case/bag: **Yes**

Wheat protein SEP: **< 0,2**

Barley protein SEP: **< 0,3**



Calibrations/Products

Available now

- Wheat, Durum Wheat (Moisture, Protein, Wet Gluten)
- Barley, Malt Barley (Moisture, Protein)
- Sorghum (Moisture, Protein)
- Canola/Rape seed (Moisture, Protein, Oil)
- Corn (Moisture, Protein, Oil)
- Soy beans (Moisture, Protein, Oil)
- Lentils (Moisture)
- Lupins (Moisture)
- Chick peas (Moisture)



In progress

- Rice
- Beans
- Oats
- and more...

Any questions?
Welcome to our booth G13-14

Perten
INSTRUMENTS

Analysis with Value