## Case Study 11: Feb 2018

# Case Study 011 In Field Blending using the Model 3000H On Combine Analyser

## Introduction:

Segregating and blending grain based on the protein content is not a new concept in Australian farming. Large growers have been using bench top NIR Analysers for the last 15 years to measure protein and moisture in wheat and barley on farm. With the introduction of the Model 3000H On Combine Grain Analyser grain is measured every 8-12 seconds as it is harvested, farmers can now blend and segregate grains in the paddock.

This case study shows how the Holland family, Young, NSW, implemented an In Field blending strategy in 2017 using the Model 3000H On Combine Analyser.

### Description:

Broden Holland installed a Model 3000H On Combine Anlayser onto their CASE IH 7240 Combine leading up to the 2016 harvest. Broden reported that they realized an immediate payback by segregating and blending a small percentage of crop. This success of the 2016 experience led Broden to use the Model 3000H to blend across all fields.

#### **Results:**

In 2017, while harvesting a 274ha wheat field, the combine operator found that half a field had above 13% protein and the other half had below 13% protein. The Model 3000H records every header box to give the

operator a bin average. Using a 145 tonne mother bin in the field, the chaser bin driver segregated the wheat into the mother bin.

The chaser bin driver then blended the grain the from the mother bin into their B Double truck. As a result, the Hollands were able to upgrade all but 2 loads from H2 to H1 grade. Table 1 shows the financial analysis comparing what was achieved by blending vs what they would have be paid without blending., ie, an additional revenue of \$37/ha.





Blending						
KK2	274 Ha	Tonnes/Ha	Tonnes	# B Doubles	\$/Tonne	Revenue
HI <13%	255	4.12	1051	25	310	\$325810
H2 >13%	19	4.4	84	2	280	\$23502
						\$349312
No Blending						
KK2	274 Ha	Tonnes/Ha	Tonnes	# B Doubles	\$/Tonne	Revenue
HI <13%	174	4	696	17	310	\$215760
H2 >13%	100	4.4	440	10	280	\$123200
						\$338960
					Increased Revenue	\$10,352