

# Driving Your Mill to Maximum Profitability

IAOM Phuket, Thailand

August 2010

# Introduction

- Headquartered in Manhattan, Kansas, USA; Sales offices in Santiago, Chile; Lagos, Nigeria
- Formed in 2008 - Partnership between Kendall McFall, Vaughn Studer and Research Products Co. Salina, KS
- Mission to create value for millers through applied innovation
- Serving the milling/baking industries
- Expertise in strategic enzyme application

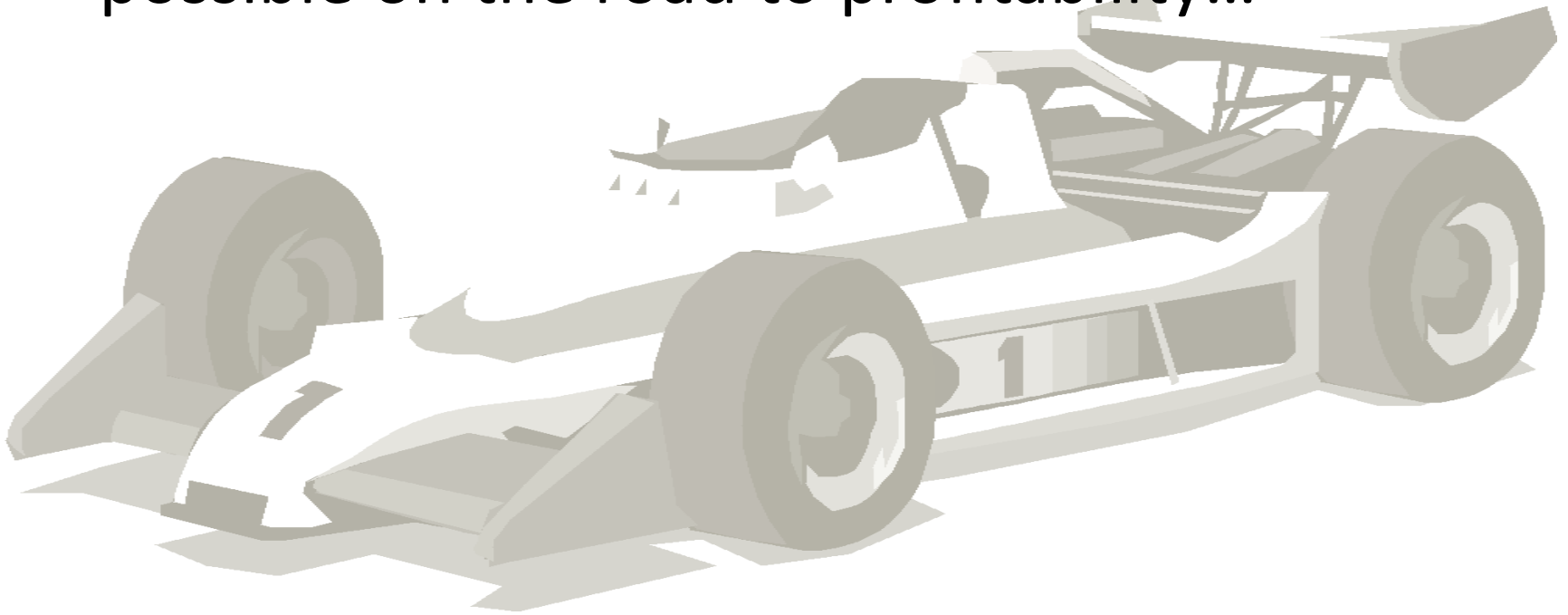


# Kendall McFall

- Co-Founder and Partner of Engrain LLC
- Education - Kansas State University in Milling Science & Management
- Experience - 17 years in the North American wheat milling industry
- Recently - 7 years faculty - KSU Grain Science and Industry/IGP

# Today's Topic

- Driving your mill – making the best decisions possible on the road to profitability...



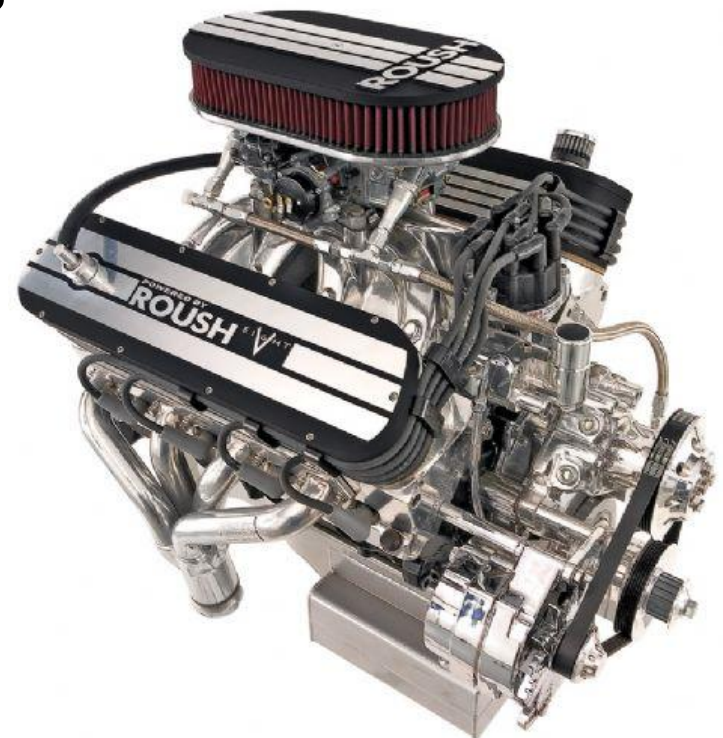
# Wheat: Dashboard Fuel

- Moisture
- Non-Wheat Material
- Protein
- Inventory +/-
- Supply Logistics
- Cost / MT
- Current Value Compared to Market Conditions



# Mill: Dashboard Engine

- Blend Opportunities
- Conditioning
- Mill loading versus Milling Yield
- Packaging
  - Inefficiency
  - Moisture Loss
  - Over Pack

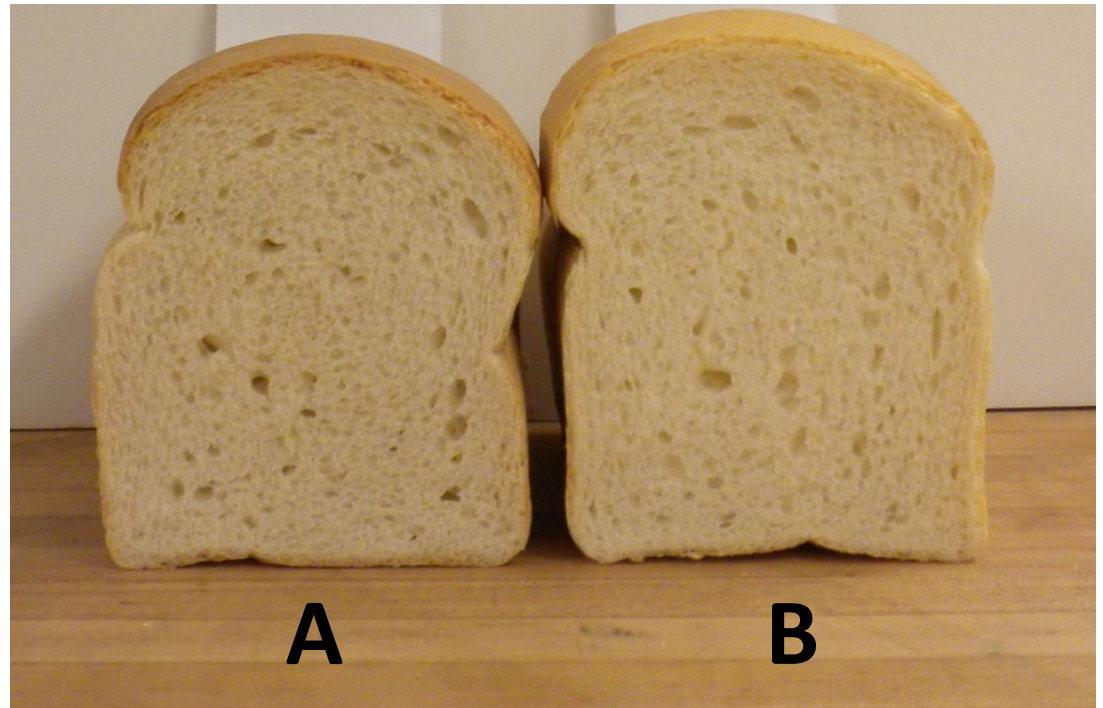


# Flour: Dashboard Performance

- Consistency – Through Protein
- Consistency – Through Rheology
- Consistency – Through Defined Baking Performance

# Flour: Dashboard Performance Continued

- Absorption same
- Protein “A” Higher than “B”
- Cost - “A” \$22 / MT more expensive than “B”



# Flour: Dashboard Performance Continued

- Flour “Value”

Flour with Normal Water				Flour with 2% Added Water			
Absorption Capacity				Absorption Capacity			
	Kg	Cost/Kg	Total		Kg	Cost/Kg	Total
Flour A	100	\$ 0.600	\$ 60.00	Flour B	100	\$ 0.609	\$ 60.92
Water	60		no cost	Water	62		no cost
Instant Yeast	2	\$ 6.00	\$ 12.00	Instant Yeast	2	\$ 6.00	\$ 12.00
Shortening	2	\$ 1.50	\$ 3.00	Shortening	2	\$ 1.50	\$ 3.00
Sugar	2	\$ 0.60	\$ 1.20	Sugar	2	\$ 0.60	\$ 1.20
Salt	1	\$ 0.25	\$ 0.25	Salt	1	\$ 0.25	\$ 0.25
	167		\$ 76.45		169		\$ 77.37
Value / kg of dough			\$ 0.458				\$ 0.458
Value per 100 kg of dough			\$ 45.78	Value per 100 kg of dough			\$ 45.78
				Increased value of Flour B/MT			\$ 9.20

# Summary

How is your mill operating?

What new gauges can you employ?