

## What does the market want?

- Quality

What does this mean?

Quality is defined by the consumer (customer)



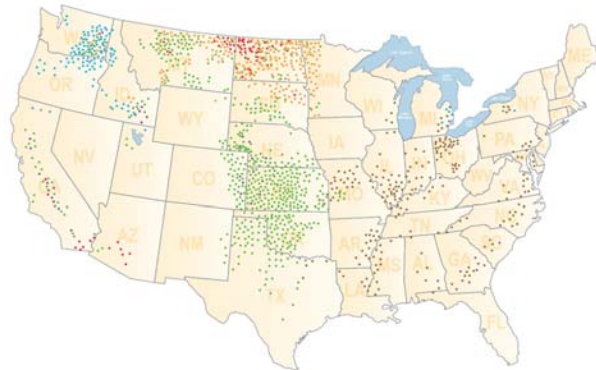
## Traditional Wheat Products

- Pan breads
- Hearth breads
- Rolls
- Asian noodles
- Cakes
- Cookies
- Crackers/biscuits
- Flat breads
- Pasta



## USW Mission & Activities

“Develop, maintain, and expand international markets to enhance the profitability of U.S. wheat producers and their customers.”



● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM

## Headquarters, Arlington, VA

- 19 full-time staff
- Supervision of overseas offices
- Organizational and logistical support
- Finance
- Trade Policy
- Relations with USDA, other USG agencies
- Issue support –
  - Market information
  - Quality/SPS issues
  - Credit initiatives
- Public affairs
- MarComm
- Member state relations
- Visitor contact

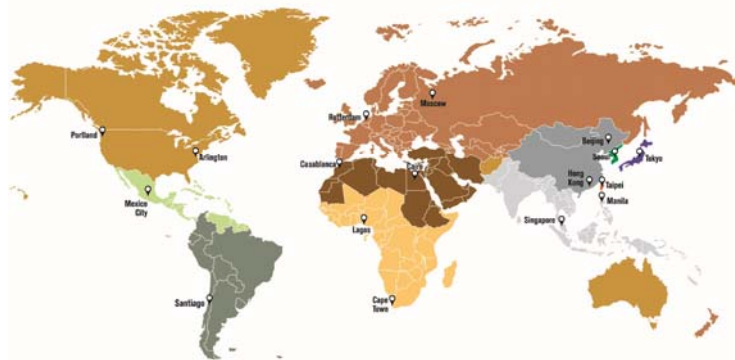
 **U.S. WHEAT ASSOCIATES**  
The world's most reliable choice.

## Overseas Offices

- 15 Offices
- Organized into 8 regions plus a “region” for worldwide activities
- 9 U.S. citizens  
49 local nationals
- Activities in over 100 countries



## Working for Wheat Growers 24/7



## Technical Assistance – Targeting Processors



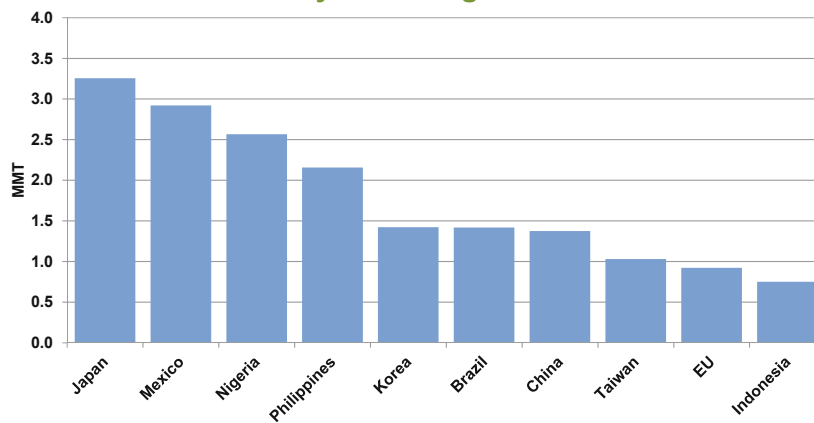
Trade Servicing,  
plus:

- Staff technical specialists
- Training facilities
- Collaborative studies



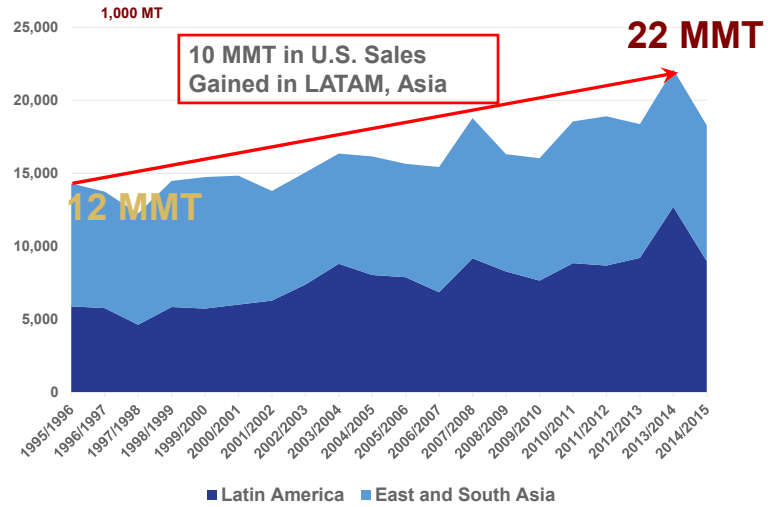
## Top 10 Customers for U.S. Wheat

5-year average





## Latin America and Asia



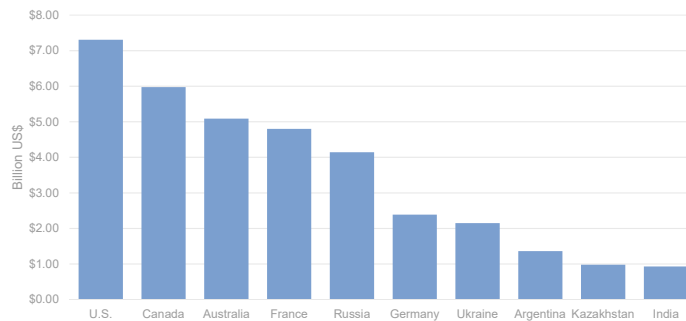
## New Markets Are Value Importers



## Staying Focused on Ingredient Quality

- Demonstrating performance, advocating for improved quality earns premiums

5-Year Average Export Value  
(2012-2016)



## FGIS Wheat Grading Standards

Grading factors	Grades U.S. Nos.				
	1	2	3	4	5
<b>Minimum pound limits of:</b>					
Test weight per bushel					
Hard Red Spring wheat or White Club wheat	58.0	57.0	55.0	53.0	50.0
All other classes and subclasses	60.0	58.0	56.0	54.0	51.0
<b>Maximum percent limits of:</b>					
<b>Defects:</b>					
Damaged kernels					
Heat (part of total)	0.2	0.2	0.5	1.0	3.0
Total	2.0	4.0	7.0	10.0	15.0
Foreign material	0.4	0.7	1.3	3.0	5.0
Shrunken and broken kernels	3.0	5.0	8.0	12.0	20.0
Total <sup>1</sup>	3.0	5.0	8.0	12.0	20.0
<b>Wheat of other classes: <sup>2</sup></b>					
Contrasting classes	1.0	2.0	3.0	10.0	10.0
Total <sup>3</sup>	3.0	5.0	10.0	10.0	10.0
Stones	0.1	0.1	0.1	0.1	0.1
<b>Maximum count limits of:</b>					
<b>Other material in one kilogram:</b>					
Animal filth	1	1	1	1	1
Castor beans	1	1	1	1	1
Crotalaria seeds	2	2	2	2	2
Glass	0	0	0	0	0
Stones	3	3	3	3	3
Unknown foreign substances	3	3	3	3	3
Total <sup>4</sup>	4	4	4	4	4
Insect-damaged kernels in 100 grams	31	31	31	31	31



## What the miller wants

- To be profitable
- To meet the customer demands

## What the baker wants

- To be profitable
- To meet the customer preferences



## How can the producer capitalize

- **On farm storage**
  - Harvest delivery = Price Taker
  - Delayed deliver = Price Discovery
- **Delivery Points**
  - Local elevator
  - Terminal Elevator
  - Direct to the Mill

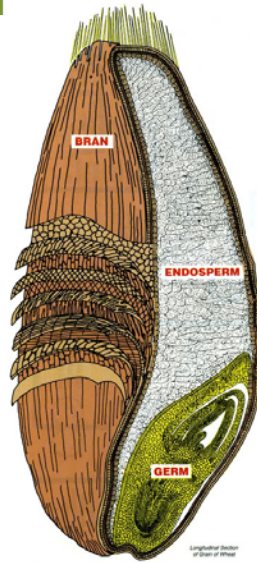




## Wheat Kernel

### Wheat Kernel Composition

83% Endosperm  
14.5% Bran  
2.5% Germ



### Flour Extraction

75-78% Flour  
22-25% Millfeed

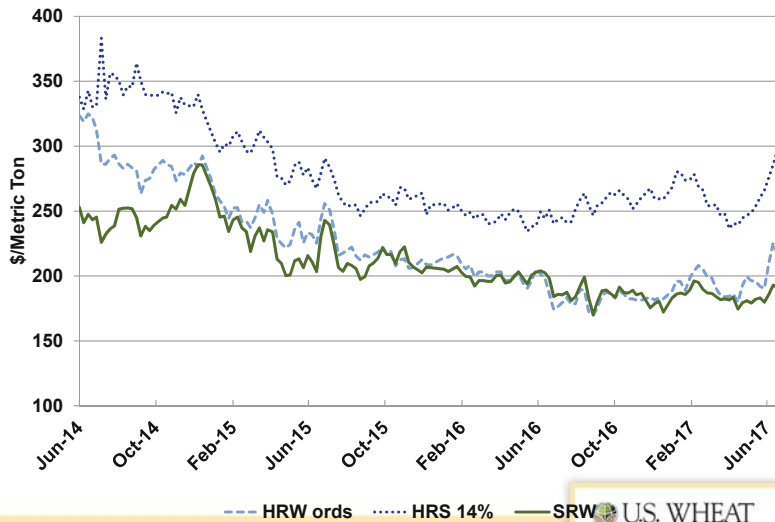
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## What is “quality”

- This year in Kansas quality =
  - Protein quantity
  - Protein quality
  - Test Weight
  - TKW

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## U.S. FOB Gulf Prices



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## Value of Extraction (Impact of TW and TKW)

HRW				
	Dry Dirty	Dry Clean	First Break	Total Plant
<b>Extraction</b>	<b>78.56%</b>	<b>80.00%</b>	<b>75.00%</b>	<b>77.77%</b>
Variables	Metric Ton	\$ / MT	Total \$	
Dry Dirty Wheat	500	\$ 234.00	\$ 117,000.00	
Screenings	1.80%	\$ 65.00	\$ 585.00	
Dry Clean Wheat	491			
Dry Wheat Moisture	10.40%			
Tempered Wheat Moisture	16.00%			
Percent Moisture Added	6.25%			
First Break Wheat	524			
Paten Flour Produced	385	\$ 350.00	\$ 134,730.40	
Clear Flour Produced	8	\$ 195.00	\$ 1,531.92	
Total Flour Produced	393			
Bran/Shorts/Germ	120	\$ 65.00	\$ 7,829.81	
Percent Product Loss	2.00%			
Total Flour Packed	389			
Percent Packing Loss	1.00%			
Total Material Cost			\$ 117,000.00	
Fixed Production Costs		\$ 50.00	\$ 25,000.00	
Total Revenue			\$ 144,677.13	
Profit			\$ 2,677.13	
% Profit Based on Total Cost			1.89%	

HRW				
	Dry Dirty	Dry Clean	First Break	Total Plant
<b>Extraction</b>	<b>79.61%</b>	<b>81.07%</b>	<b>76.00%</b>	<b>78.81%</b>
Variables	Metric Ton	\$ / MT	Total \$	
Dry Dirty Wheat	500	\$ 234.00	\$ 117,000.00	
Screenings	1.80%	\$ 65.00	\$ 585.00	
Dry Clean Wheat	491			
Dry Wheat Moisture	10.40%			
Tempered Wheat Moisture	16.00%			
Percent Moisture Added	6.25%			
First Break Wheat	524			
Paten Flour Produced	390	\$ 350.00	\$ 136,526.81	
Clear Flour Produced	8	\$ 195.00	\$ 1,552.35	
Total Flour Produced	398			
Bran/Shorts/Germ	115	\$ 65.00	\$ 7,489.39	
Percent Product Loss	2.00%			
Total Flour Packed	394			
Percent Packing Loss	1.00%			
Total Material Cost			\$ 117,000.00	
Fixed Production Costs		\$ 50.00	\$ 25,000.00	
Total Revenue			\$ 146,153.54	
Profit			\$ 4,153.54	
% Profit Based on Total Cost			2.93%	

This mill operating 6 days a week, 50 weeks per year will consume 5.5 million bushels of wheat per year  
**1% change in extraction ~ \$450,000**

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## What is “quality”

- Longer term industry trends
  - Identity preserved
  - Responsibly grown



## Questions?

