

Grain Origination by U.S. and International Customers: International Quality Needs and Specifications for Wheat

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About half of the wheat produced each year in the United States is exported. All six classes of wheat are exported to various markets. The major destinations for U.S. wheat are Asia (44%) and Latin America and the Caribbean (40%), with the balance going to Europe and Africa (16%). Two of the organizations involved in promoting U.S. wheat exports are the Wheat Marketing Center (WMC) in Portland, OR, and U.S. Wheat Associates (USW) in Arlington, VA, which maintains staff in major markets worldwide and serves customers in more than 100 countries. The two organizations work closely together to educate customers about the high quality of U.S. wheat and how they can utilize that quality to its full potential in their end products. This article discusses how U.S. and international customers purchase U.S. wheat.

Tracking Wheat Variety Development

In general, millers are focused on their daily operations and meeting their customers' needs, but they also track the larger issues in the industry such as new wheat varieties and quality trends. To this end, U.S. millers and end users participate in annual regional meetings organized to assess the end-use quality of new wheat varieties being considered for release. Regular attendance at these meetings (and participation as an evaluating lab) provides an early look at new varieties. The meetings also provide a forum for voicing concerns about certain trends in overall quality. These annual meetings include farmers, breeders and other researchers, millers, end users, wheat commission staff, and quality labs like the WMC, including the following meetings:

- Pacific Northwest Wheat Quality Council
- Wheat Quality Council in Kansas City
- Soft Red Quality Meeting
- California Collaborator Meeting



In recent years, these meetings have included international customers as speakers and/or members of the evaluation panels. Their participation has added a vital component to the discussion. Because roughly half of all the wheat produced in the United States is exported, breeders and growers benefit from directly interfacing with both domestic and international customers, gaining a better understanding of which quality characteristics are important.

In response to concerns expressed by customers about certain quality trends, the industry has taken some key steps:

- Wheat commissions across the country continue to make major grower fund investments in research into improving the quality, disease resistance, and yield of new varieties
- North Dakota and Minnesota have created a new preferred hard red spring (HRS) wheat variety list
- Pacific Northwest states (Washington, Idaho, and Oregon) have raised the bar on what is termed "acceptable" on their preferred variety list
- Kansas has hosted an international buyers team to discuss quality issues

USW maintains an ongoing program to invite top wheat buyers to wheat quality council meetings to provide direct input into the evaluation of new wheat varieties, as well as to participate in the review of USW wheat breeding targets. The opportunity for these international wheat buyers to interact with growers and wheat breeders creates confidence in the ability of the United States to reliably supply high-quality wheat to international customers.

USW also arranges tours for U.S. breeders, both public and private, to key international markets to increase their understanding of the type of wheat products consumed and quality demanded in different markets. It also arranges for buyers to visit key production areas and discuss quality issues. These activities create an opportunity to exchange information and further cement the relationship between U.S. wheat producers and international buyers.

Evaluating the New Crop

In conversations at various quality meetings, several U.S. millers have emphasized the importance of gathering accurate information about each new wheat crop being produced across the country. Environmental factors, varieties planted, diseases and pests, and agronomic practices vary from year to year; an early

indication of the new year's crop profile allows millers to better manage the transition from old crops to new. This information is gathered in two main phases: preharvest and real-time harvest.

The U.S. wheat industry also has created several opportunities for buyers to gain key market and quality information that will aid them in making key decisions that will impact profitability. It is necessary to not only monitor the futures markets, but also to stay abreast of the current harvest progress.

Preharvest Winter and Spring Wheat Tours

In early May and late July, the Wheat Quality Council sends millers, bakers, grain traders, U.S. Department of Agriculture (USDA) staff, and other members of the wheat industry into wheat fields around the country to inspect the crop. Ben Handcock, who just completed his 25th and final year at the helm, has developed an effective network of routes around winter and spring wheat production areas that yields a wealth of crop data. The most recent tour, which took place July 25–28, 2016, had more than 70 participants in 18 groups who stopped at 455 fields, including 407 HRS, 42 durum, and 6 hard red winter (HRW) wheat fields. At the end of each day, each group reported their statistics regarding yield, condition, and estimated time to harvest for the fields they visited. After all the data were compiled, the HRS crop was estimated to be in good condition with an average yield.

Most of the participants were from the U.S. wheat industry, although a few international millers joined the tour. This may be part of a growing trend in which international customers can take advantage of the informational opportunities these tours and crop quality meetings provide.

New Crop Samples

Once harvest begins, several entities, including the Kansas Wheat Commission and USW, publish daily and/or weekly harvest reports. Regional labs collect and test samples for inclusion in crop quality reports. U.S. millers test samples for strength, stability, and absorption qualities in their own labs with the goal of developing a crop profile. This enables them to both target production areas with good quality and identify areas to avoid.

Sometimes this is termed “zip code origination.” All this information also contributes to preparing their customers for the annual transition from the old to the new crop.

Millers outside the United States also need to maintain a consistent flour supply for their customers and have developed sources of accurate information that allow them to manage the transition from the old to the new crop. Other than the few who are joining U.S. tours, millers outside the United States rely primarily on two sources of information about new crop characteristics: grain trading companies and USW.

Wheat purchasing managers in major mills look to grain trading companies for current crop information, including quality, availability, and price. Major grain trading companies maintain offices in the United States and other wheat-producing areas to gather market information.

The other major source of information is USW, which organizes annual crop survey tours during harvest and crop quality seminars throughout Asia and other key markets in the fall. Because USW has a network of 15 international offices that serve more than 100 markets, it is able to select key wheat buyers to participate in trade team or crop survey tours, during which participants learn about wheat production, storage, grain grading, and quality, as well as the U.S. supply chain and how wheat is moved to market. This gives international wheat buyers confidence that U.S. growers can reliably deliver a high-quality wheat product that will meet the needs of their consumers.

USW also reaches out to customers by organizing crop quality seminars outside the United States that deliver detailed technical information on the quality of the new wheat crop. These seminars create a forum where buyers can see the quality results and ask technical experts how end-product quality could be impacted by subtle variations in quality due to weather. These seminars also include the U.S. and world supply and demand outlook, so buyers can get an idea of current market conditions. Grain traders also are invited to participate in these seminars and provide their perspective on where the market is headed and when the best time to buy is. Crop quality seminars are held each November in Asia, Latin America, and Europe.

Similarities in Grain Origination

In general terms, millers are looking to source the best wheat at the lowest price to supply diverse customers with a consistent product that meets their specifications. Acquiring wheat that will give them a competitive advantage in key markets is an annual challenge. Basic specifications regarding protein, moisture, ash, and falling number generally are comparable across the industry, although there are markets that will pay premiums for quality and others that remain more flexible as a way to lower the price. There are some significant differences in grain origination, however, between international and U.S. customers.

Origination Differences

The size and method of grain delivery are probably the major differences between international and U.S. customers. U.S. mills often have the flexibility to accept wheat transported by either truck or train. Each truck can be tested and the wheat sent to the appropriate silo or rejected. Trains are tested during loading, and the information is sent in advance to the receiving mills. Mills can schedule deliveries to meet their needs and, to some extent, specify quality and areas of origin to achieve the desired blends. In the view of many international buyers, U.S. mills enjoy a “luxury of choice” when it comes to sourcing wheat.

With the exception of rail delivery to Mexico and some container shipments to Asia, most mills outside the United States receive their wheat in large ships. U.S. wheat export shipments of 50,000 metric tons are the most competitive, and grocery boats containing multiple wheat classes and protein levels are quite common. In some countries, smaller mills will band together to buy ship loads of grain. Some countries, notably Japan, buy grain through a government entity. Taiwan and Korea buy collectively through their respective miller associations, which enables them to buy in quantity and share costs. The challenge with this system is that all the mills receive the same wheat, making it more difficult to differentiate their end products. Mills in Indonesia and the Philippines contract for their own wheat shipments.

Although U.S. buyers have more flexibility in sourcing wheat from U.S. production areas, international buyers have multiple options in terms of country of origin, particularly when freight rates are low. With the current large supply of wheat in world markets and the strength of the U.S. dollar, the U.S. wheat industry is competing by offering superior quality to customers who are willing to pay premiums to obtain the wheat they want.

Contracting for Wheat Value

Understanding the wording used in wheat contract specifications is the key to optimizing value for the flour miller. USW educates buyers about the U.S. grain inspection system and related contract language. In the early 1970s, irregularities in the grain inspection process forced the U.S. Congress to mandate that all grain (wheat) exported from the United States be inspected by the Federal Grain Inspection Service (FGIS). FGIS is the referee in the highly competitive international grain business and ensures that international buyers’ contract specifications are met. Exporters cannot load wheat that does not meet a buyer’s contract specifications. Therefore, quality specifications and contract language are very important in determining the overall uniformity and quality performance of a wheat shipment.

In addition to the U.S. wheat grade standards, buyers can request rheological tests be performed to gain additional information about a wheat shipment. These tests are performed by pri-

vate laboratories such as the WMC. In most cases the samples are collected by FGIS during the grain grading process and vessel loading. The samples are then sent for analysis. Many buyers use these types of services because they can receive detailed quality information before the vessel arrives at port.

External Factors

As with many products, wheat purchases are affected by a range of external factors. Trade agreements, either global or regional, often include quotas, set tariff rates, or seek to set limits on nontariff barriers countries may employ to protect their home markets. USW works with millers, end customers, and government agencies to create the most favorable export markets possible.

Personal relationships and customer loyalty are very important as well. In a competitive market in which U.S. wheat is seldom the least expensive option, long-standing relationships, technical assistance, and a transparent flow of market information help support U.S. exports. This was exemplified by recent celebrations marking the 60 and 50 year anniversaries of the USW presence in the key Japanese and Taiwanese markets, respectively.

Market Changes

The U.S. market for wheat foods is undergoing many changes in response to shifts in customer preferences and increasing interest in knowing the origins of food products. Many of the same trends are occurring in major export markets, particularly in Asia. Millers are responding by offering products featuring whole grain flour, organic and ancient grains, and fewer additives. In a highly competitive global wheat market, U.S. wheat growers are responding by placing greater emphasis on quality, which benefits both domestic and international customers.



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mission is to improve the well-being of present and future generations of U.S. wheat farmers and consumers worldwide by conducting wheat utilization research projects and delivering dynamic educational programs in partnership with other international technical and educational organizations. Janice is an AACCI member and can be reached at cooper@wmcimc.org.



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