

MANAGING YOUR INGREDIENT SUPPLY CHAIN

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Country Malt Group



Malt Industry Trends

- ▣ Malt is a commodity made from Barley.
- ▣ Barley is a boutique crop.
- ▣ Barley is the only Commodity Grain that must be kept **alive**.
- ▣ Malting barley is the best (low protein) barley.
- ▣ Weather damaged barley is sold as Animal Feed and competes with GMO corn.
- ▣ Every Barley Farmer is also a wheat, corn or canola seed farmer. Corn now grown in Canada.
- ▣ Barley's Growing Region continues to shrink.

Malt Vendor Trends

- ▣ World Malt Price is determined by Europe.
- ▣ Micromaltsters – Specialty Malts could be viable. Base malt would be too expensive.
- ▣ Two one-stop-shop Vendors:
 - Country Malt Group (Domestic & Imported)
 - BSG Craftbrewing (All Imported incl. Canada)
- ▣ Ownership and Partnerships between malting companies and distribution companies.
- ▣ Likely more competition in the future. Short term could lower prices. Long term could kill production plants and that could lower production and reduce competition.

Malting Challenges

- ▣ Every farmer's field is its own microclimate.
- ▣ The same barley variety grown at altitude vs. dry field vs. irrigated must be malted separately.
- ▣ Maltster wants uniform germination.
- ▣ Brewers have easiest job: Take a uniform raw material and be creative with it.
- ▣ Malsters have difficult job: take widely divergent crops and turn out a consistent uniform product.

Hop Industry Trends

- ▣ Hop farmers are families.
- ▣ Families hitting harvest infrastructure limits.
 - Picker
 - Stripper
 - Dryer/kilns
 - Baler
 - Pelletizer
- ▣ To add acres, must double infrastructure.
- ▣ Contracts needed to get bank loans.
- ▣ New Zealand seems happy as is.

Ingredient Sourcing

- ▣ Malt & Grains
- ▣ Hops
- ▣ Water
- ▣ Yeast
- ▣ Spices
- ▣ Unusual ingredients (coffee, pumpkin)
- ▣ Brewing Salts
- ▣ Other ingredients (kettle additions & finings)

Types of Malt & Grains

▣ Bagged Malt

- US Malt – 50 lb bags (*pre-milled option*)
- Imported Malt – 55 lb bags (*pre-milled option*)
- Totes – 2,000 lb (ton)/2,200 lb (metric tonne)

▣ Bagged Flaked/Rolled Grains

- US Grains – 25 or 50 lb bags
- Imported Grains – 55 lb bags

▣ Bulk Malt

- Pneumatic truck (10,000-48,000 lb deliveries)
- Silo needed (12,000 – 60,000+ lb silo)
- Container bulk to Alaska for tilt chassis delivery

Plan for Growth - Scalable?

- ▣ Domestic vs. Imported Malts
 - Future: Bagged vs. Totes vs. Bulk
- ▣ Local Malt/Vendors (US or Canada)
 - Speed of Deliveries
 - Delayed by border crossing
 - Variety of offerings (two roasters in N.America)
- ▣ Imported Malt (Europe, C.America, S.America)
 - Lead time includes: Logistics (14-23 weeks lead time)
 - ▣ Order is scheduled for production...
 - ▣ Production scheduled for bagging...
 - ▣ Bags loaded on shipping containers...
 - ▣ Containers loaded on ship with other containers, etc...

Plan Ahead - Forecasting

- ▣ Get to know your suppliers.
- ▣ Fast growth impossible without a good supply pipeline and good supplier relationships.
- ▣ Learn to forecast your growth:
 - Know your customers & forecast demand
 - Forecast overall sales
 - Forecast breakdown in beers/products
 - Forecast raw material and packaging needs
 - Order in plenty of time
 - Adjust raw materials if you can't forecast easily

Know Yourself

- ▣ Are you well organized and plan your production weeks/months ahead?
- ▣ Are you a procrastinator and make decisions at the last minute?
- ▣ Are you always at the mercy of your marketing department or your distributor, and need to make changes to your beer production plans?
- ▣ Do you have limited onsite storage for grain, and need to order ingredients just-in-time?

Malt Contracting

- ▣ Bulk Contracting - Need to Know:
 - City & State of Brewery (Portland vs. San Diego)
 - Annual projected bulk malt needs (250,000 lbs)
 - Size of Silo (60,000 lbs) (Malt = 32 lbs/cu. ft.)
 - Size of Deliveries (1/2 truck = 24,000 lbs)
 - Malt wanted (Pilsner, 2-Row, Pale)
 - ▣ Secondary Silo could be Munich for example
 - Projected month of transition
- ▣ Tote Contracting - Domestic vs. Imported.
- ▣ Bag Contracting - Currently only for Organic.

Hop Contracting

- ▣ Required to ensure supply.
- ▣ Minimum contract requirements:
 - From 88 lbs mix-and-match per year/contract
 - To full pallet of all one hop, shipped together.
- ▣ Contracts ensure sustainable pricing.
 - Helps avoid spikes up or down (2007-2008).
- ▣ Contracts encourage farmers to plant, maintain, grow, harvest & process.
- ▣ Contracts allow farmers to get the bank loans to expand infrastructure and therefore acreage.

More on Hops

- ▣ Is your recipe Scalable?
- ▣ If you insist on using a rare, trendy or new hop, are you contracted enough to ensure your supply to cover your projected growth?
- ▣ What is your back up plan if:
 - If you can't get enough of that hop?
 - If you are over-contracted and need to sell your excess?
 - If you change your recipe and need a different hop?
- ▣ Hops are not as easy to substitute as malt is.

Water

- ▣ Your water can make your beer unique.
- ▣ Get information from your water district.
- ▣ Water adjustment could include additions
- ▣ Or water adjustment may require R/O.
- ▣ Some leases include water (a bonus!).

Yeast

- ▣ Decisions:
 - Liquid yeast or
 - Dry yeast (better than it used to be)
 - Multiple suppliers for both
- ▣ Keep your yeast handling simple (limit your yeast varieties)
 - Can get very expensive
 - Is it scalable?
- ▣ In 2007: Planned six week shipments save 10%.

Spices & Unusual Ingredients

- ▣ Your one-stop shop malt suppliers
- ▣ Restaurant suppliers
- ▣ Warehouse stores like Costco
- ▣ Specialty spice shops
- ▣ Farmers
- ▣ Coffee Roasters

- ▣ Ask yourself: Is this Scalable?

Brewing Salts & Other

- ▣ List could include:
 - Gypsum, CaCO_3 , CaCl_2 , Epsom Salt
 - Diatomaceous Earth or Filter Sheets
 - Irish Moss or other Kettle Coagulants
 - Gelatin, Isinglass or other Tank Finings
 - More
- ▣ Direct from manufacturer = full pallets
- ▣ Your one-stop-shop malt vendor

Questions?



Women: join Pink Boots Society
Everyone: buy a Unite Pale Ale!



INTERNATIONAL WOMEN'S

COLLABORATION BREW DAY

SATURDAY, MARCH 8TH

