

FINE-TUNING OVER GENERATIONS

Bestmalz offers a diverse range of quality malts

Bestmalz is a 14 years old company, acting as sales & marketing holding for two family-owned malthouses. The roots date back into the 19th century. The two family-owned malthouses are located in the heart of Germany: One of which founded in the year 1899 near the German city Kaiserslautern in Rhineland-Palatinate; the other one located near Alzey in a region called Rhine-Hesse about 50 kilometers from Frankfurt.

All in all, the company embodies around 200 years of malting experience. Max Göhler, grandfather of today's CEO Dr. Axel Goehler-Broistedt, started the family tradition in malting, but the Göhler family has been active in the beer making for generations.

The company is convicted that the quality of raw materials is one of the most important factors for the malt and ultimately – the beer. Therefore, the malthouses have been placed in the best regions in Europe for cultivating malting barley.

Over the years, the malt specialist became known in Germany, Austria and Switzerland as manufacturer of high quality base malts such as Pilsener, Vienna and Munich malt. Germany's beer brands such as Bitburger, Warsteiner, Rothaus,



Karlsberg, and many others have been using the company's malts for generations.

In 2008, a line of malt specialties was introduced to the market. Together with these innovations the owning family approved investments in a high capacity bagging line and modern logistics facilities for national and international malt deliveries.

Since then and in less than a decade, a portfolio of around 30 unique malt products was developed which is now being delivered in practically any part of the world. Bestmalz became a brand name globally known by brewmasters.

Today, high quality malts are appreciated in all segments of the global beer industry: by diversified brewery conglomerates, by the leading German beer brands, by microbreweries, brew pubs and by home brewers.

Specialty malts – customers' new requirements

Customers nowadays expect innovative and specifically adapted malt types when manufacturing their beers for regionally different tastes. With competition increasing in a stagnating European beer market, these customers find loyal partners to support them in developing their unique products.

Dr. Axel Goehler-Broistedt

He represents the 3rd family generation in Bestmalz®. After university degrees from Germany, USA and Switzerland, he earned his PHD from St. Gallen University in Switzerland with an empirical study on the „Success of Large Family Breweries in Germany.“ Ten years as strategy consultant with The Boston Consulting Group followed. In 1999, Dr Goehler-Broistedt founded his own consulting firm with assignments in Europe, US and Asia. After heading the family business voting pool for several years, he was elected CEO and took over the leadership in the traditional German family enterprise. Dr. Goehler-Broistedt serves as member of several company supervisory boards and is Honorary Consul of the Hashemite Kingdom of Jordan in Germany.



A malt variety

On the one hand, the base malts are distinguished by quality and their processing characteristics. The company's base malt selection consists of products such as Heidelberg, Pilsen, Vienna, Pale Ale, and Munich Malt types 1 and 2 as well as Melanoidin malt. Even with the last three darker base malts, the processing characteristics are at the focal point of malt production.

Certain compounds (melanoidins) in dark malt impart color, enhance flavor and the intensity of the malt aroma in the finished beer, while they also possess antioxidant properties increasing beers' shelf-life.

On the other hand, the malt specialists offer specialty malts, which are categorized into three different clusters: first, caramel malts, which impart flavor to the beer; second, specialty malts produced from grains other than barley; and third so-called functional specialty malts.

1. Caramel malts:

The caramel malt is produced using the best summer malting barley varieties. This guarantees that these malts perform best in brewhouse processes. The specially developed production process ensures that the malt's natural enzymes are handled very gently while achieving the highest possible degree of caramelization.

As a consequence, a wide variety of unfermentable sugars are present in the malt that forms compounds leading to intense malt aromas and flavors. Since these compounds remain intact throughout the entire brewing process, they impart a pleasant roundness as well as malty notes to the finished beer.

Caramels are convenient and easy-to-use for brewmasters: As an example it is not necessary to alter the mash program in order to retain a higher quantity of unfermentable sugar in the finished beer.

This is frequently achieved by shortening the beta-amylase rest which can, however, negatively affect the brewing process. With caramel malts, the same, tried-and-true mash program can be employed simply by using the

corresponding amount of caramel malt in the grist, thereby obtaining the desired results.

2. Specialty malts produced using other kinds of grain:

In this second category, first and foremost wheat malt, dark wheat malt and spelt malt are grouped together. Bestmalz also supplies malt made from oats as well as rye malt.

Like with all our malts, these malts are produced purely with the best raw materials and by using an intensive yet gentle and time consuming malting process.

As a consequence, these malts possess excellent processing features in the brewhouse, which allows their intensive flavors and aroma profiles to be fully revealed in the finished beer. Light and dark wheat malts can add an enticingly effervescent and fresh character to the beer which of course end consumers will appreciate just as much.

3. Functional specialty malts

Functional specialty malts are malts with specific functionalities developed to support and facilitate the brewing process. These kinds of malt will help the brewmaster to obtain the specific characteristics in the beer and to bring about improvements in the processes essential for creating quality products.

By the use of chit malt, long-chain proteins can be deliberately introduced into the wort in order to improve foam formation and retention without needing to change entire mash programs.

Acidulated malt lowers the pH value in the brewhouse to an optimal level. This results in an improved yield and a shorter mash duration, while creating a more pleasant and rounded flavor in the finished beer.

Smoked malt imparts a light to intense characteristic smoked flavor depending on the quantity added to the grist. It does not, however, negatively affect the brewing process. The flavor impression resembles that of smoked ham.

Roasted malt is created by using highly modified malt. Furthermore, the company is using a unique and innovative roasting technology

which results in considerably lower pyrazine levels. Pyrazines are developed during roasting when kernels are exposed to hot metal parts such as the drum of the traditional roasters. They cause a bitterness which is unpleasant in the finished beer.

As our analyses show, less than 50 percent of pyrazines are contained in our roasted malts when compared with malts from traditional roasting techniques. Roasted malts lack the compounds responsible for such unpleasant, scratchy bitterness. With a batch size of only 100 kgs per roasting batch, roasted malts are also truly “crafty.”

Aside from a smooth taste, roasted malts can add many different shades of brown and black tones to the beer without undesirable side effects for the brewing process. The foam of beers with these types of malt remains light in color. The nuances in beer can exhibit mild bread-like and nutty notes to stronger chocolate and coffee-like flavors, according to the color intensity of the finished beer.

All in all, it is our ambition to produce specialty malts which facilitate the complex and time consuming process of making excellent beers. Currently, craft-beer brewers are often emphasizing the use of hops for the production of their specific beers. While the selection of the hops is certainly one way to come out with a highly specific, unique taste, certain specialty malts have exactly the same differentiating effect.

Two examples: Special X®, a dark caramel malt slightly roasted, has originally been developed for the baking industry. After several in-house trials, our malt masters found out that very dark, highly aromatic beers can also be made with this malt. Surprisingly, the beers did not taste overly sugary at all. With up to 20 percent in the grain bill this malt imparts a chestnut-like red color.

The full bodied flavor resembles port and sherry tones inviting to taste more. Today, Special X® has become a good choice for brewers venturing for exciting and tasty beers – especially in some of the craft beer hubs in the United States of America.

Equally interesting is Red X®, which has become a synonym for “red beer” in some parts of the world. Traditionally, different malt mixes were used when manufacturing red beer. The outcome was “trial and error” and often not satisfying. This led our malt masters to the development of a malt type which is “plug and play” when striving for a reddish wort and a red beer.

When the ready-to-use malt mix was presented at a large trade fair in Nuremberg, the feedback regarding color and taste was so overwhelming, that it was decided to turn this mix into a new malt type. Red X® can be used up to 100 percent in the grain bill. With malt enzymes being transformed into natural sugar during the beer brewing process, this malt supports the processing characteristics of beer brewing in a very interesting way.

Conclusion

With a diverse range of high quality malts, the company offers to customers well proven naturally

processed ingredients for state-of-the-art beers. The highly functional products allow brewing superior beers of all colors, flavors and tastes. The Bestmalz family business processes have been fine-tuned over generations. At the same time modern technologies are used when they support the ambitions for “gentle and slow malting.”

Beers can be modified as needed with the help of malts, without altering the technical processes in the brewery to a great extent. In this way, professional and hobby brewers have a wide range of easy-to-use and cost efficient alternatives for optimizing flavors at their discretion.

Working with different malts, therefore, offers brewmasters a wide variety of valuable tools for distinguishing their products from competitive offerings on the basis of flavor, color and looks. Such beers will find it easy to become first choices of end consumers. They will increase breweries’ market shares and can fully justify the realization of premium end consumer prices. □