




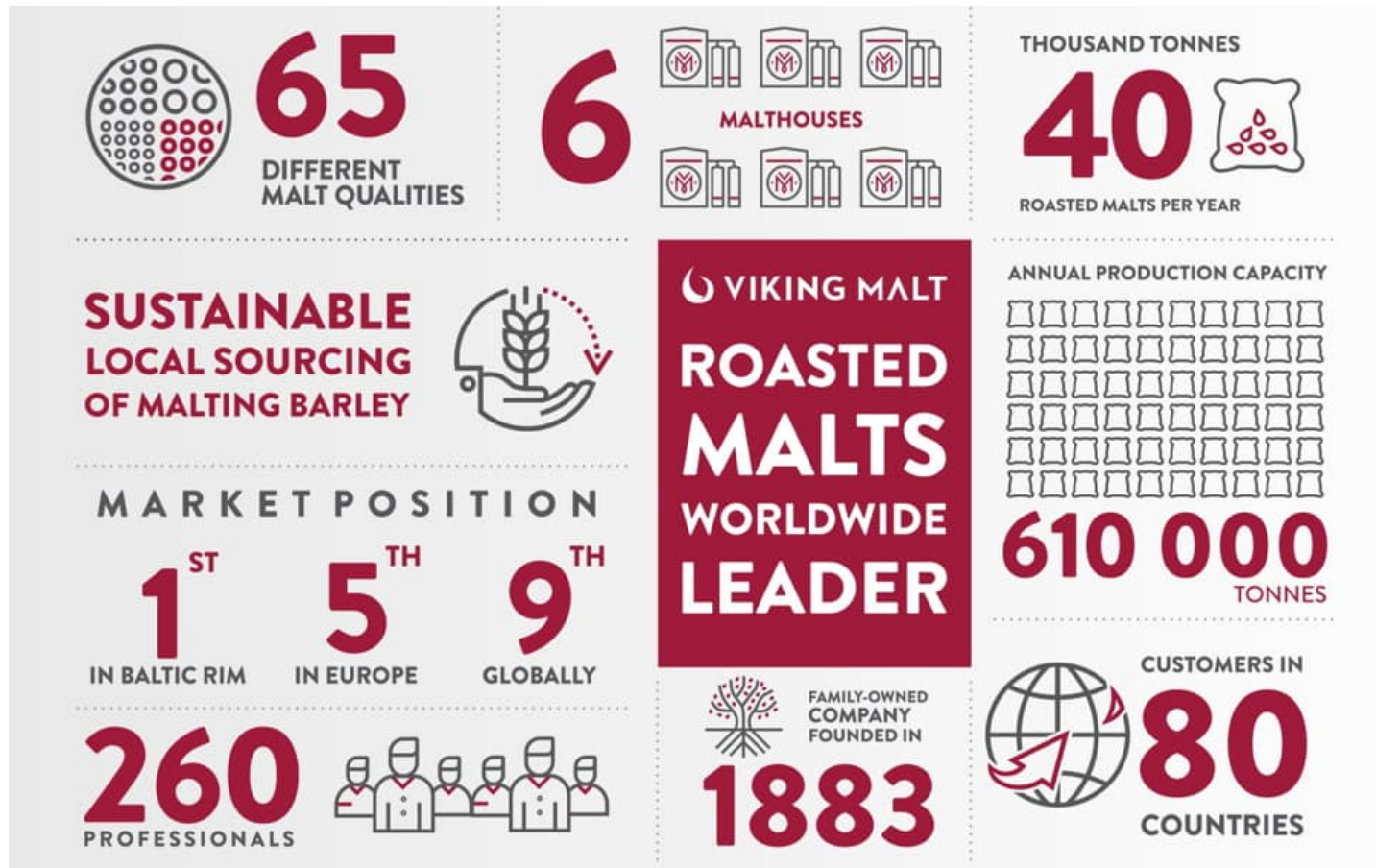
DISCOVERING THE WORLD OF **MALT.**

WHO WE ARE

 **VIKING MALT** is a worldwide acknowledged malting company that provides value adding malted products to brewers, distillers and food manufacturers for their success.

DISCOVERING THE WORLD OF MALT.

VIKING MALT FACTS & FIGURES



DISTINCTIVE NORTHERN MALTS

The raw material of our malt grows in the northernmost farming areas of the world, where the circumstances for cultivation are absolutely unique.

We aim for 100% local sourcing.



OUR LOCATION

We are located in an area with a surplus of high quality malting barley.

Our sites cover an area large enough to manage crop-related risks.

We offer our customers flexibility in terms of logistics.

MALTHOUSES
VIKING MALT



OUR MALTHOUSES



Halmstad, Sweden

Constructed: 1997, 2002–2004

Capacity: 200 000 tons/year

Malts: Pilsner, Distilling, Organic



Vordingborg, Denmark

Constructed: 1996

Capacity: 120 000 tons/year

Malts: Pilsner, Munich, Organic



Lahti, Finland

Constructed: 1965, 1978 and 1991

Capacity: 80 000 tons/year

Malts: Pilsner, Distilling, Organic, Specials



Sierpc, Poland

Constructed: 1978

Capacity: 90 000 tons/year

Malts: Pilsner, Pale Ale, Munich, Pearled Barley



Panevezys, Lithuania

Constructed: 2004

Capacity: 80 000 tons/year

Malts: Pilsner, Wheat, Dehusked Barley



Strzegom, Poland

Constructed: 1896

Capacity: 40 000 tons/year

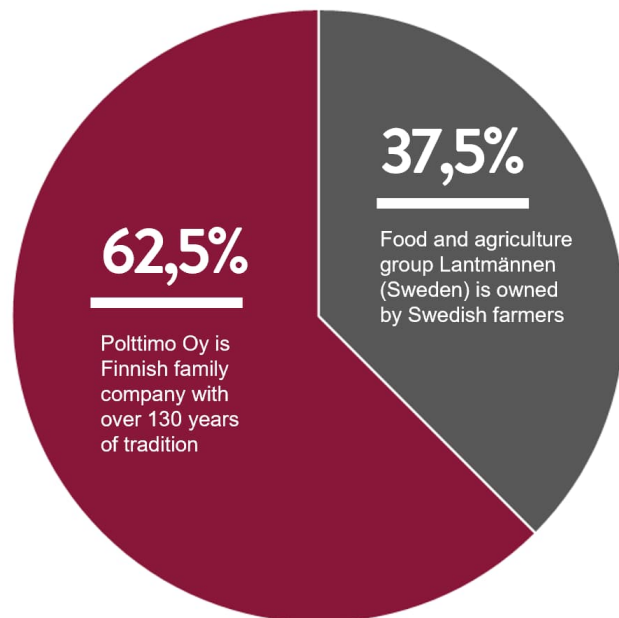
Malts: Organic, Full Specials

SPECIALS

FULL SPECIALS

OWNERSHIP

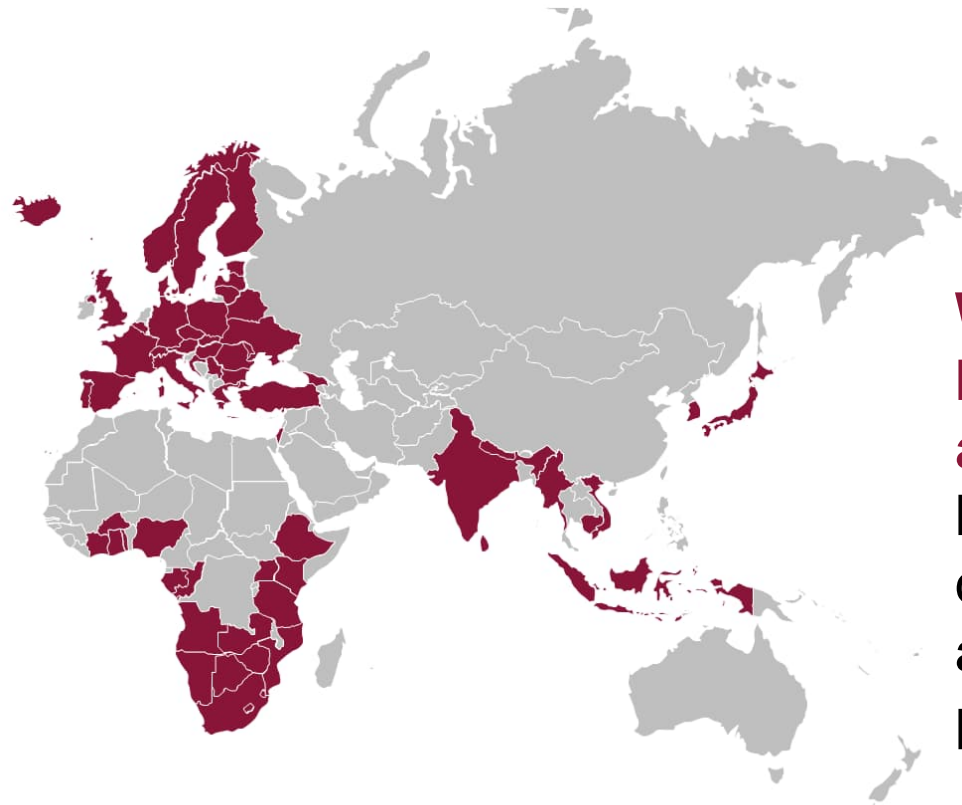
Viking Malt's ownership combines long malting tradition with Northern farming expertise.



OUR CUSTOMERS



The home market of Viking Malt is Scandinavia and the Baltic Sea region.



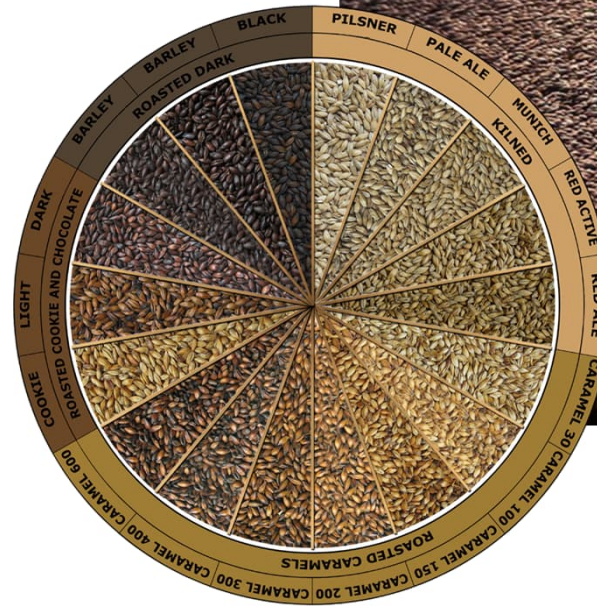
We serve both large and small breweries, distilleries and food producers.

OUR MALTS

We offer high quality Pilsner Malt as base malt for brewing.

We are also the leading maltster of Special Malts:

- Malts from barley, wheat, oat and rye
- Dark Kilned Malts
- Caramel Malts
- Roasted Malts
- Organic Malts
- Distilling Malts
- Smoked Malts



OUR PEOPLE

High quality malt is made with curiosity, dedication and strong expertise:

- 👤 Our agronomy and sourcing experts work with our farmers to manage quality and sustainability already in the field
- 👤 Our brewmasters who are working both in production and sales, design the malt and help us understand how it works in our customers' processes
- 👤 Our R&D experts keep us at the forefront of development by investigating new raw materials, processes and products



INNOVATION & VIKING MALT



Our R&D team possesses a strong expertise in malting, brewing and food sciences.

Our well-equipped test environment accommodates:

- Micro-maltings and a 50 kg custom-designed pilot malting for testing new varieties and crops, and for product development
- Micro-roasting and a 25 kg pilot roaster for special malts development
- A complete 100 litre brewery for testing our ideas
- Pilot vacuum evaporator for malt extract development
- A test kitchen for studying baking applications

FIT FOR THE FUTURE

VIKING MALT STRATEGY 2023-2027+

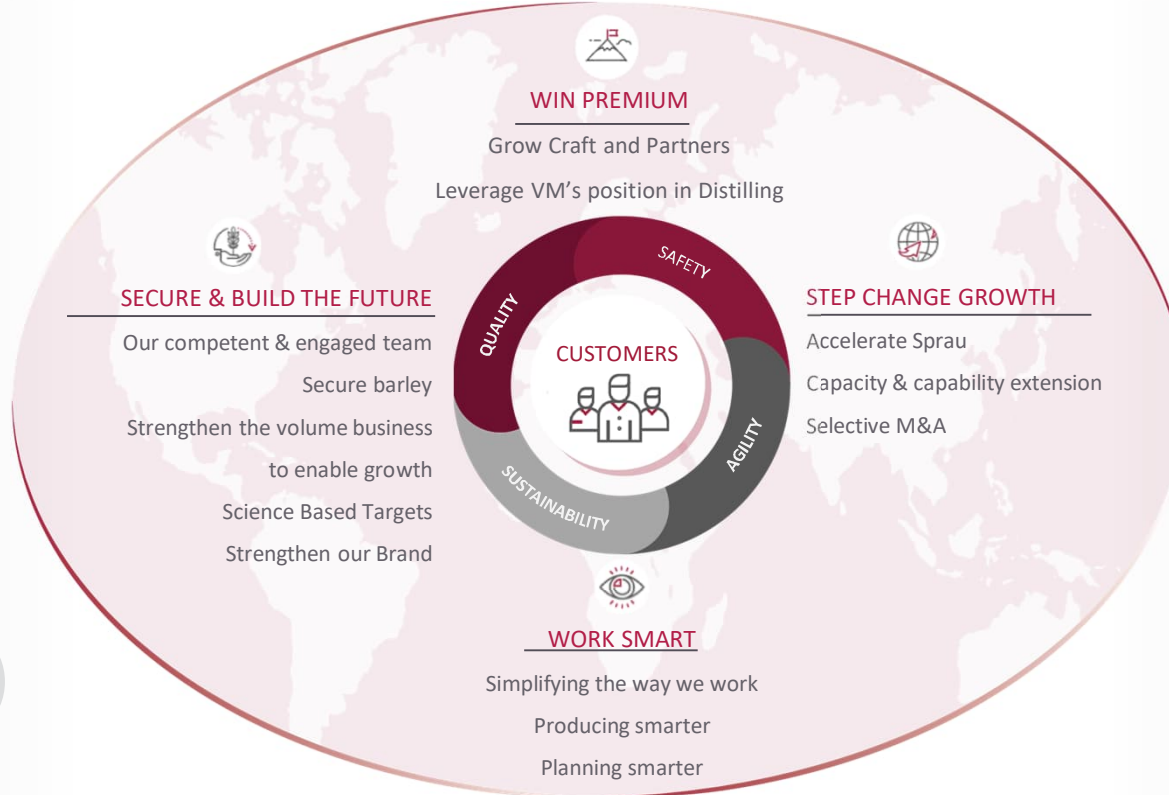
PURPOSE (IN PROGRESS)

Together with our farmers,
partners and customers
we explore all that malt can be
for a better tomorrow

VALUES



**We ensure profitable growth with sustainable operations,
an adaptive product portfolio and superior customer
service**



ASPIRATION & PRIORITIES

"Come back stronger"
short term priority

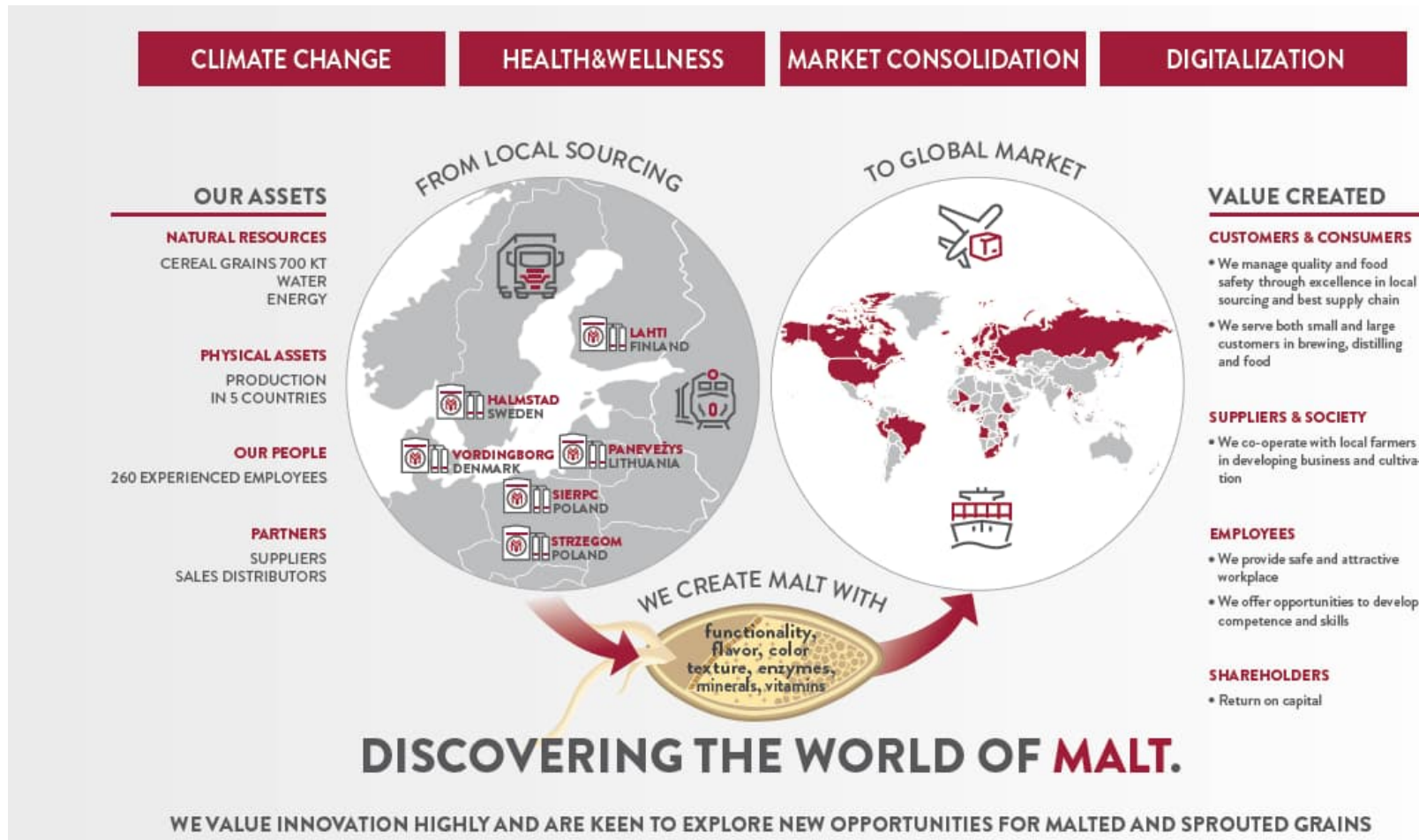
"Fit for future, freedom to
take another steps" long
term aspiration

GROUP MEASURES

People
Health & safety
Right quality
Sustainability
Financials

CORPORATE SOCIAL RESPONSIBILITY AT VIKING MALT

OUR BUSINESS MODEL AND THE VALUE WE CREATE



OUR SUSTAINABILITY AGENDA FOCUSES ON AREAS WHERE WE HAVE IMPACT

Customer favorite

Best Supply Chain

Sustainable procurement

Our Viking Malt

- Our values (We respect, We care, We strive for success and We are curious) form the backbone of a business culture of high ethical standards
- We conduct customer satisfaction surveys to measure our performance on a regular basis, and aim to improve our customer satisfaction
- We aim to reduce the amount of energy we use and minimize the use of fossil fuels
- In 2022, we reached our target to use max 2,9 m³/ton of malt and continue to explore opportunities further reduction
- We are beginning to audit our farmers according to SAI (Sustainable Agriculture Initiative)
- It is of key importance to us to protect people, property, information, knowledge and environment from accidents, incidents and crimes
- We are implementing 5S to ensure a safe, efficient and pleasant working environment



WE OPERATE ACCORDING TO CERTIFIED MANAGEMENT SYSTEMS AND REPORT TO SEVERAL CSR PLATFORMS

We operate according to integrated management systems **Quality (ISO 9001)**, **Food Safety (ISO 22000)**, **Environment (ISO 14001)** and **Energy (ISO 50001; Denmark only)** and are certified in these.



We are also developing our operations towards **Occupational Health and Safety Management system (ISO 45000)**, the more advanced **Food Safety FSSC 22000** and **ISO 26000 Guidance on Social Responsibility**.



We are taking part in **CDP**, **SEDEX** and **EcoVadis** social responsibility platforms and evaluations. We are now on a **Gold Level in EcoVadis**.



We have had third party **SEDEX SMETA 4 Pillar** audits on social responsibility in Finland and Poland.





WWW.VIKINGMALT.COM

[Facebook.com/vikingmalt](https://www.facebook.com/vikingmalt)

[Instagram.com/viking_malt](https://www.instagram.com/viking_malt)

[Twitter.com/vikingmalt](https://www.twitter.com/vikingmalt)



 VIKING MALT
PRODUCT PORTFOLIO



You have before your eyes our Standard Product Portfolio. It is wide and diverse, in particular in the Specialty Malts category. We offer a range of barley malts, but also wheat, rye, and oat malts under the Viking Malt brand. In addition to our Standard Specifications presented here, we also provide our larger customers with customized malts, malted and blended according to individual recipes. We would be happy to meet up with you, and curious listening to your ideas on how we can further improve our malt portfolio. We also have our own, dedicated brewmasters that would be happy to discuss with you different recipes, and how to make the best use of our Specialty Malts in your process, together with your other raw materials.



We are strategically well located in areas where malting barley is available. With several FOB locations, we offer our customers flexibility in logistics. Based on our latest Customer Satisfaction Survey, our customers were most satisfied with the good availability of our malts and our strong sustainability program. Going forward, sustainability will no longer be optional. To continue refining the fruits of our fields into enjoyable beverages, we need to do it in a way that guarantees this opportunity for also for generations to come. Therefore, we have decided to sign up for Science Based Targets. Viking Malt Group is also committed to supporting the United Nations Global Compact's Ten Principles on human rights, labor, environment, and anti-corruption – because we care about the future of the business, society, and our planet.

We hope our malts will help you on your success journey in making the worlds' best beverages!

Malin Andersson, VP Sales

Annika Wilhelmson, VP Innovation, Craft & Food

OUR **MALTHOUSES**



FACTS & FIGURES



65
DIFFERENT
MALT QUALITIES

6



MALTHOUSES

THOUSAND TONNES

40



ROASTED MALTS PER YEAR

**SUSTAINABLE
LOCAL SOURCING
OF MALTING BARLEY**



MARKET POSITION

1ST

IN BALTIC RIM

5TH

IN EUROPE

9TH

GLOBALLY

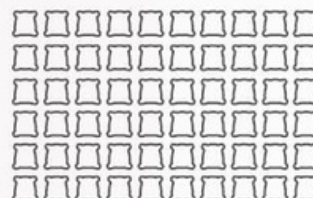
260
PROFESSIONALS



VIKING MALT

**ROASTED
MALTS
WORLDWIDE
LEADER**

ANNUAL PRODUCTION CAPACITY



610 000
TONNES



FAMILY-OWNED
COMPANY
FOUNDED IN

1883



CUSTOMERS IN

80
COUNTRIES

WHO WE ARE

Welcome to the world of Viking Malt, where generations of experience combined with curiosity for the new are reflected in our unique malts!

With over 130 year's experience and expertise in malt production, Viking Malt is a trusted malting brand worldwide. Today we are the largest commercial malting company in the Baltic region, 5th largest in Europe, and 9th in the world with 610 000 tons malting capacity per year. We own six malthouses located in 5 countries: Finland, Sweden, Denmark, and Lithuania, as well as two plants in Poland with a total of 270 employees. We sell our products globally to the brewing, distilling and food industries serving all sizes of customers from the smallest craft to the largest global brands.

High-quality malt is made with curiosity, dedication and strong expertise. Our agronomy and sourcing experts work with our barley suppliers to manage quality and develop sustainability already in the field. Our brewmasters, who are working both in production and sales, design the malt and help us understand how it works in our customers' processes. Our R&D and technology experts keep us at the forefront of development by investigating new raw materials, processes and products.

We believe that good business is based on mutual respect and trust.



QUALITY & SUSTAINABILITY

Quality and sustainability are embedded in everything we do. We strive to be a truly responsible company, as a manufacturer and as a supplier, but also as an employer and a business partner. With our sustainability program, we also support our customers' sustainability efforts, as we are part of the same value chain.



We aim for the highest possible quality of our products and customer services while at the same time keeping our environmental impact low.



We do this, e.g., by sourcing raw materials locally to the highest extent possible and by reducing our energy and water usage and waste.



We work proactively with breeders, farmers, and customers, identifying new malting barley varieties suitable for our purpose.

Our operations are based on international standards. We apply integrated management systems, including Quality (ISO 9001), Food Safety (ISO 22000), Environment (ISO 14001), and Energy (ISO 50000; Denmark only). We are also developing our operations towards Occupational Health and Safety Management system (ISO 45000), the more advanced Food Safety FSSC 22000, and ISO 26000 Guidance on Social Responsibility.

We are proud to be taking part in CDP, SEDEX, and EcoVadis social responsibility platforms and evaluations. This gives us a chance to evaluate our impact on the environment and society. We progressively increase the number of farmers audited under the Farm Sustainability Assessment scheme.



WHAT WE OFFER

OUR MALTS

BREWER'S CLASSIC

VIKING PILSNER MALT
VIKING PALE ALE MALT
VIKING PILSNER ZERO MALT
VIKING VIENNA MALT
VIKING WHEAT MALT

BREWER'S SPECIAL

VIKING CARABODY MALT
VIKING OAT MALT
VIKING RED ACTIVE MALT
VIKING RED ALE MALT
VIKING CHOCOLATE LIGHT MALT
VIKING CHOCOLATE DARK MALT
VIKING MUNICH LIGHT & DARK MALTS
VIKING CARAMEL MALTS
VIKING CARAMEL PALE MALT
VIKING COOKIE MALT
VIKING DEXTRIN MALT
VIKING GOLDEN ALE MALT
VIKING RYE MALT
VIKING BLACK MALT
VIKING ROASTED BARLEY

BREWER'S ORGANIC

VIKING PALE ALE MALT ORGANIC
VIKING PILSNER MALT ORGANIC
VIKING MUNICH LIGHT ORGANIC
VIKING CARAMEL 100 MALT ORGANIC
VIKING CARAMEL 150 MALT ORGANIC
VIKING CARAMEL PALE MALT ORGANIC
VIKING BLACK MALT ORGANIC
VIKING WHEAT MALT ORGANIC

SMOKED SPECIAL

VIKING SMOKED WHEAT MALT
VIKING SMOKED MALT
VIKING LIGHTLY PEATED MALT

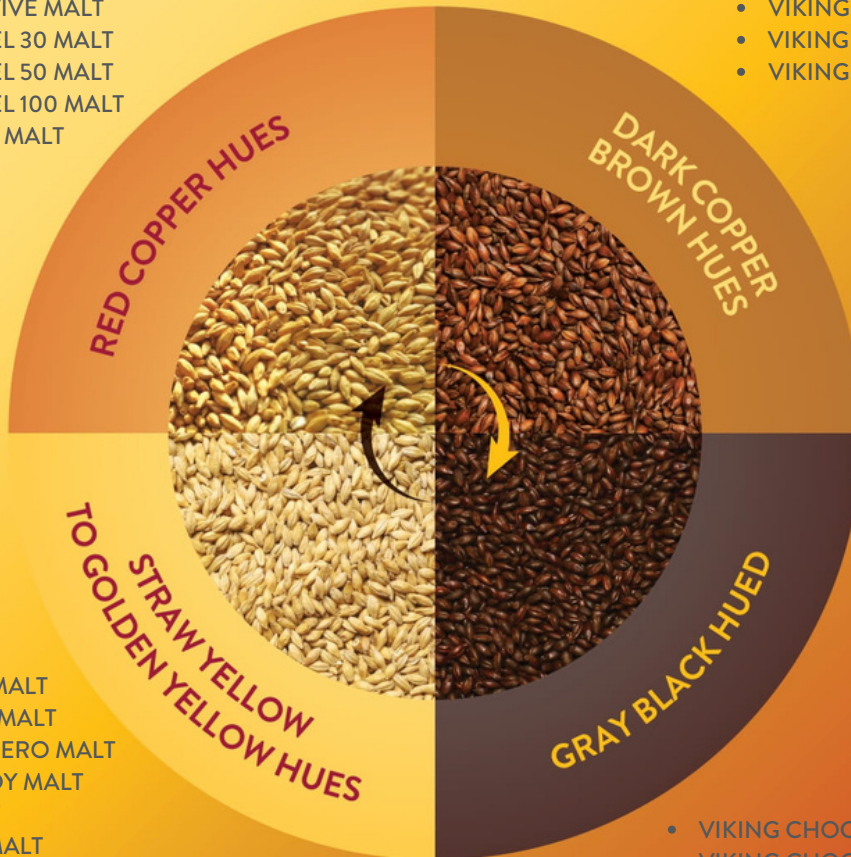
DISTILLER'S CHOICE

VIKING ENZYME MALT
VIKING POT STILL RYE MALT

MALT COLOR HUES

- VIKING MUNICH MALT
- VIKING RED ACTIVE MALT
- VIKING CARAMEL 30 MALT
- VIKING CARAMEL 50 MALT
- VIKING CARAMEL 100 MALT
- VIKING RED ALE MALT

- VIKING CARAMEL 200 MALT
- VIKING CARAMEL 300 MALT
- VIKING CARAMEL 400 MALT
- VIKING CARAMEL 600 MALT



- VIKING PILSNER MALT
- VIKING PALE ALE MALT
- VIKING PILSNER ZERO MALT
- VIKING CARABODY MALT
- VIKING OAT MALT
- VIKING VIENNA MALT
- VIKING WHEAT MALT
- VIKING RYE MALT
- VIKING CARAMEL PALE MALT
- VIKING COOKIE MALT
- VIKING DEXTRIN MALT
- VIKING GOLDEN ALE MALT

- VIKING CHOCOLATE LIGHT MALT
- VIKING CHOCOLATE DARK MALT
- VIKING BLACK MALT



BREWER'S CLASSIC

VIKING PILSNER MALT



MALT CHARACTER

Viking Pilsner Malt is made from 2-row spring barley. Steeping and germination conditions are chosen to promote even germination and homogenous modification. The final air-on temperature in kilning is typically 80–85°C. Pilsner malt flavor is usually described as malty, slightly nutty and sweet. Great malt for all malt beers but there is enough activity and character for base malt use in many brewing applications.

APPLICATIONS

For all kinds of beers or whiskies. The color of Viking Pilsner Malt is low.



MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 80
COLOR	°EBC	3.0–4.2
PROTEIN	% dm	max. 12.5
SOL. NITROGEN	mg/100g	600–800
FREE AMINO NITROGEN	mg/l	min. 130
BETA-GLUCAN	mg/l	max. 200
FRIABILITY	%	min. 80
DIASTATIC POWER	WK dm	min. 250

PRODUCTION:



Finland



Poland



Sweden



Lithuania



Denmark

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING PALE ALE MALT



MALT CHARACTER

Viking Pale Ale Malt is made from 2-row spring barley. High degree of modification promotes easy processing. Flavor contributes specially to malty, sweet and nutty notes. It is ideal malt for ales and special lagers. The coloring power of Viking Pale Ale Malt is not too strong, which makes it also suitable for subtle color correction of regular lagers.

APPLICATIONS

For all kinds of beers or whiskies. The color of Viking Pale Ale Malt is rather low. Usage rate up to 100%.

MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 80
COLOR	°EBC	4-7
PROTEIN	% dm	max. 12.5
KOLBACH INDEX	%	min. 42
FREE AMINO NITROGEN	mg/l	min. 130
BETA-GLUCAN	mg/l	max. 200



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING PILSNER ZERO MALT



MALT CHARACTER

Viking Pilsner Zero Malt is made from 2-row null-LOX spring barley. As a special feature in null-LOX varieties is that Lipxygenase activity is zero, affecting positively on flavor stability of beer. Steeping and germination conditions are chosen to promote even germination and homogenous modification. The final air-on temperature in kilning is typically 80-85°C. Viking Pilsner Zero Malt flavor is very close to traditional pilsner malt and usually described as malty, slightly nutty and sweet. Great malt for all malt beers but there is enough activity and character for base malt use in many brewing applications.

APPLICATIONS

For all kinds of beers. Dosage rate up to 100%.



MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 80
COLOR	°EBC	3.0–4.3
PROTEIN	% dm	max. 12.0
SOL. NITROGEN	mg/100g	max. 800
FREE AMINO NITROGEN	mg/l	130–185
BETA-GLUCAN	mg/l	max. 200
FRIABILITY	%	min. 80
DIASTATIC POWER	WK dm	min. 250

PRODUCTION:



Finland Poland

PACKAGING:



Bags Big bags Containers Bulk

VIKING VIENNA MALT



MALT CHARACTER

Viking Vienna Malt is cured at slightly higher temperatures than pilsner malt. Consequently, Vienna Malt gives a golden-colored beer and increases body and fullness. Due to the higher curing temperature, the enzyme activity of Vienna Malt is slightly lower than that of pilsner malt. The flavor of Vienna Malt is subtle, including maltness, some sweetness, baked bread-like, and hints of caramel aromas. Slightly nutty sensations can also be found.

APPLICATIONS

Viking Vienna Malt is well suited for relatively pale colored beers. Typical application is to enhance color and aroma of light beers. Vienna Malt also has its own beer type, Vienna lager, which is famous for its deep golden color and malty taste.

MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 79.0
COLOR	°EBC	7-10
PROTEIN	% dm	max. 12.5
FREE AMINO NITROGEN	mg/l	min. 130
SACCHARIFICATION	min.	max. 15
FRIABILITY	%	min. 80



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING WHEAT MALT



MALT CHARACTER

Viking Wheat Malt is made from high-quality wheat. Varieties suitable for brewing purposes are used. The malting process does not differ much from pilsner malt production. The final air-on temperature is normally 72-80°C. Wheat Malt comes naturally without husk. The diastatic power of that malt is good, but the alpha-amylase activity level is only modest.

APPLICATIONS

Viking Wheat Malt is used mainly for wheat beers and some other top fermented beers. Wheat Malt is also used for lager beers for flavor enrichment and to improve foam stability. Typical rate of usage is around 50% of the grist for wheat beers and appr. 20% for the premium lagers.



MOISTURE	%	max. 6.0
EXTRACT FINE	% dm	min. 82
COLOR	°EBC	3.0-5.5
PROTEIN	% dm	max. 14.0
pH		5.7-6.3
SOL. NITROGEN	mg/100g	max. 900
FREE AMINO NITROGEN	mg/l	min. 130
DIASTATIC POWER	WK dm	min. 250

PRODUCTION:



PACKAGING:





BREWER'S SPECIAL

VIKING CARABODY MALT



MALT CHARACTER

Viking CaraBody Malt is a gently malted and slightly caramelized special malt product. Flavor is soft and balanced containing a clear cereal note. Taste impact is in general low, but some sweetness and malty notes can be found. Main intention of this malt is to give body into any beer, but especially low-colored beers. This malt will also support head retention. Viking CaraBody Malt is produced from 2-row spring barley.

APPLICATIONS

For all kinds of beers. Dosage rate up to 10%.



MOISTURE
EXTRACT FINE
COLOR

%	max. 7.0
% dm	min. 75.0
°EBC	max. 8.0

PRODUCTION:



PACKAGING:



VIKING OAT MALT



MALT CHARACTER

Viking Oat Malt is traditionally malted oat. Oat Malt comes with a natural large husk that gives support during sieving operation. The taste of Oat Malt is soft and the impact of it is more balancing being a great base for many hop and malt cocktails. Oat Malt is also expected to bring a creamy and velvety mouthfeel into your beer.

APPLICATIONS

For many kinds of beers. Dosage rate up to 20% (30%.)

MOISTURE	%	max. 7.0
EXTRACT FINE	% dm	min. 58
COLOR	°EBC	3.0-6.5
FOREIGN MATTER	%	max. 4.0



PRODUCTION:



Finland

PACKAGING:



Bags



Bigbags



Containers



Bulk

VIKING RED ACTIVE MALT



MALT CHARACTER

The unique characteristics of this exceptional malt are based on a special variety and a complex malting process with a curing temperature of over 100°C. Viking Red Active Malt gives a pure malty, nutty, and clean long-lasting flavor together with unique amylase activities for this color level. This is a real single variety malt for any reddish brew.

APPLICATIONS

Viking Red Active Malt is the ideal malt for any ales, dark lagers, festival beers, and bocks for underlining malty flavors and full-bodied taste, but also boosting up the red tinted colors. The strong enzyme activity gives good potential for developing recipes with adjuncts or non-active malts. With this malt, if you are heading to strong reddish color you do not need to dilute the color down with pale malts. Dosage up to 100%.



MOISTURE	%	max. 4.5
EXTRACT FINE	% dm	min. 78.0
COLOR	°EBC	30–40
PROTEIN	% dm	max. 13.5
FREE AMINO NITROGEN	mg/l	min. 130
SACCHARIFICATION	min.	max. 20
pH		max. 5.6
DIASTATIC POWER	WK dm	min. 200
DMSP	ppm	max. 2.5
ATTENUATION	%	min. 75

PRODUCTION:



Finland

PACKAGING:



Bags



Big bags



Bulk

VIKING RED ALE MALT



MALT CHARACTER

Viking Red Ale Malt is aromatic malt rich in melanoidins. It is recommended for dark beers to enhance reddish color and aroma. A special malting program is used to ensure the right flavor and aroma through a controlled Maillard reaction. Flavor of Red Ale Malt is malty and bitter but also roasted and nutty flavors can be found with a longlasting linger. Red Ale Malt is also slightly acidic. The amylolytic activity of Red Ale Malt is low.

APPLICATIONS

Viking Red Ale Malt is strongly aromatic malt, with coloring capability. It is ideal for special ales like APA, IPA, Red Ale and Dark Lagers. Recommended usage is up to 20% of the grist.

MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 5.0
min. 75.0
60-80



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING CHOCOLATE LIGHT MALT



MALT CHARACTER

Viking Chocolate Light Malt is produced by roasting from pilsner malt. The amylolytic activity of Chocolate Light Malt is zero. The amount of fermentable extract is rather low.

APPLICATIONS

Viking Chocolate Light Malt is mainly included in porters and stouts, but it can also be used for any other dark-colored beers like dark ales due to its strong coloring value. Chocolate Light Malt contributes roasted flavors and aromas with hints of dark chocolate and coffee in any beer. Already with rather low dosage portions, a remarkable increase in color can be found together with changes in flavor and aroma. Typical dosage rate of Chocolate Light Malt is normally under 5–10%.



MOISTURE
EXTRACT FINE
COLOR

%	max. 5.0
% dm	min. 68.0
°EBC	350–450

PRODUCTION:



Poland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING CHOCOLATE DARK MALT



MALT CHARACTER

Viking Chocolate Dark Malt is produced by roasting from pilsner malt. Final temperature and roasting time are somewhat lower compared to our Black Malt. The amylolytic activity of Chocolate Dark Malt is zero. The amount of fermentable extract is rather low.

APPLICATIONS

Viking Chocolate Dark Malt is mainly included in grists for porters and stouts, but it can also be used for any other dark-colored beers like dark ales due to its strong coloring value. Chocolate Dark Malt contributes roasted flavors and aromas with hints of dark chocolate and coffee in any beer. Already with rather low dosage portions, a remarkable increase in color can be found together with changes in flavor and aroma. Typical dosage rate of Chocolate Dark Malt is normally under 10%.

MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 67.0
COLOR	°EBC	800-1000



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING MUNICH LIGHT&DARK MALTS



MALT CHARACTER

Viking Munich Malt is made from 2-row spring barley. Curing temperatures in the range of 110–120°C give the malt an aromatic, nutty character. The high curing temperature results in clearly reduced enzyme activities compared to Pilsner Malt.

APPLICATIONS

Viking Munich Malt is the ideal malt for dark lagers, festival beers, and bocks for underlining malty flavors and full-bodied taste. The decreased enzyme activities have to be taken into consideration when designing the brewing recipe.



MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 78.0
COLOR (Light)	°EBC	14–18
COLOR (Dark)	°EBC	20–24
PROTEIN	% dm	max. 12.5
FREE AMINO NITROGEN	mg/l	min. 120
SACCHARIFICATION	min.	max. 20

PRODUCTION:



Finland Poland Denmark

PACKAGING:



Bags Big bags Containers Bulk

VIKING CARAMEL MALTS



MALT CHARACTER

A high degree of caramelization is characteristic of this malt. The amylolytic activity of Viking Caramel Malts is zero. Maillard products formed in the process can act as antioxidants and contribute to flavor stability. These malts bring caramel aromas of varying intensity to the beer. The darkest ones even with coffee and chocolate nuances color and greater fullness. Color varies from red-copper to dark copper-brown hues. Caramel Malts usually improve foam quality and head retention. The enzymatic activity of Viking Caramel Malts can be considered zero.

APPLICATIONS

Viking Caramel Malts are well suited for winter beers, ale-type beers, and other aromatic beers like dark lagers and stouts. Small amounts can be used for color adjustment and flavor enrichment of pale lagers as well.

MOISTURE (Caramel 30)	%	max. 7.0
MOISTURE (Caramel 50-600)	%	max. 6.0
EXTRACT FINE (Caramel 30-50)	%	min. 75.0
EXTRACT FINE (Caramel 100-200)	%	min. 74.0
EXTRACT FINE (Caramel 300)	%	min. 70.0
EXTRACT FINE (Caramel 400-600)	%	min. 68.0
COLOR (Caramel 30)	°EBC	25-35
COLOR (Caramel 50)	°EBC	40-60
COLOR (Caramel 100)	°EBC	90-110
COLOR (Caramel 150)	°EBC	140-160
COLOR (Caramel 200)	°EBC	180-220
COLOR (Caramel 300)	°EBC	270-330
COLOR (Caramel 400)	°EBC	350-450
COLOR (Caramel 600)	°EBC	550-650



PRODUCTION:



Finland Poland

CARAMEL 30, 400, 600
- PRODUCED ONLY IN POLAND

PACKAGING:



Bags Big bags Containers Bulk

VIKING CARAMEL PALE MALT



MALT CHARACTER

Viking Caramel Pale Malt is produced from green malt. Despite the low color value, Caramel Pale is true caramel malt, i.e. the starch has been gelatinized and saccharified within the kernel. Caramel Pale is sweet and caramel-like having also toffee and fruity notes. The enzymatic activity of Caramel Pale is negligible.

APPLICATIONS

Viking Caramel Pale is used to produce a full-bodied beer with a clean, round flavor. Due to its low color value it is suitable also for light-colored beers. Dosage rate is typically up to 30%.



MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 7.5
min. 77.0
6-10

PRODUCTION:



Finland Poland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING COOKIE MALT



MALT CHARACTER

Viking Cookie Malt is produced by roasting from high-quality pilsner malt. Unlike caramel malts, the grain structure is not vitreous, but when cut they are floury, just like other basic malts. As its name stands Viking Cookie Malt contributes mild and pleasant roasted cereal flavors and aromas with hints of popcorn and biscuits.

APPLICATIONS

Viking Cookie Malt is mainly included in grist for ales and lagers, but it can also be used for any beer where nice golden color and typical flavors are favored. Often used in Belgian beers, IPAs and dark strong styles. Already with rather low dosage portions, the effect on flavor can be noted. Typical dosage rate of Viking Cookie Malt is normally under 20%.

MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 6.0
min. 72.0
40-60



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING DEXTRIN MALT



MALT CHARACTER

Viking Dextrin Malt has an outstanding flavor after going through special steeping and germination conditions and a prolonged kilning program. The amylolytic activity of this malt is modest. Viking Dextrin Malt brings to the beer a pleasant, sweet malt aroma, toffee, breadcrumbs, and cookies. It also brings a lot of dextrins, which increase the fullness of beer.

APPLICATIONS

Viking Dextrin Malt can be used in grists for ales and lagers to give fullness and sweetness in the overall taste, supporting good head retention. As Dextrin Malt is light colored with not too overwhelming taste dosage rate can be up to 30%.



MOISTURE	%	max. 6.5
EXTRACT FINE	% dm	min. 79.0
COLOR	°EBC	8-14
PROTEIN	% dm	max. 12.0
FREE AMINO NITROGEN	mg/l	min. 120
DIASTATIC POWER	WK dm	max. 200
APPARENT ATTENUATION	%	min. 70

PRODUCTION:



Finland

PACKAGING:



Bags

VIKING GOLDEN ALE MALT



MALT CHARACTER

Viking Golden Ale Malt is made from 2-row spring barley. Malting process parameters have been chosen to promote a high degree of modification for easy processing. Viking Golden Ale Malt has reduced enzymatic potential. Strong flavor contributes malty, cookie, sweet and nutty notes with great balance of those. Golden Ale Malt is ideal for ales and special lagers. The coloring power of Golden Ale Malt is not too high, which makes it also suitable for subtle color correction of regular lagers giving a noticeably hue towards gold.

APPLICATIONS

For all kinds of beers but especially golden color ales and lagers. Usage rate up to 50%.

MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 80.0
COLOR	°EBC	9–14
PROTEIN	% dm	max. 12.0
FREE AMINO NITROGEN	mg/l	min. 130
KOLBACH INDEX	%	min. 43
FRIABILITY	%	min. 75



PRODUCTION:



Finland

PACKAGING:



Bags



Bigbags



Bulk

VIKING RYE MALT



MALT CHARACTER

Viking Rye Malt is produced from high-quality rye. The malting process does not differ much from pilsner malt production. Final air-on temperature is normally 72-80°C. Rye Malt gives a characteristic rye and honey aroma, reminiscent of rye bread or pumpernickel.

APPLICATIONS

Viking Rye Malt can be used in breweries' specialty rye beers, Rye Lager, Rye Ale (Roggenbier). Nowadays, more and more beers from the IPA family are appearing with the addition of rye malt. This malt gives a golden color and a typical rye flavor. We recommend to keep the dosage of Rye Malt under 7% to avoid wort separation problems.



MOISTURE	%	max. 6.0
EXTRACT FINE	% dm	min. 81.0
COLOR	°EBC	4-10
FOREIGN MATTER	%	max. 4.0

PRODUCTION:



Finland

PACKAGING:



Bags

VIKING BLACK MALT



MALT CHARACTER

Viking Black Malt is produced by roasting pilsner malt. Final temperature is more than 200 °C. The amylolytic activity of Black Malt is zero. The amount of fermentable extract is low.

APPLICATIONS

Viking Black Malt is used in dark beers like stouts and porters, mainly for its strong coloring ability. Normally portions of 1–2% give a remarkable increase in color without significant change in flavor. By raising the percentage of Black Malt in the malt bill the changes in taste can be found quickly. Dosage rates of more than 10% are rare.

MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 5.0
min. 65.0
1200–1500



PRODUCTION:



Finland Poland

PACKAGING:



Bags Bigbags Containers Bulk

VIKING ROASTED BARLEY



MALT CHARACTER

Viking Roasted Barley is produced by roasting good quality malting barley grains. The roasting process is similar to that of Black Malt with extra care taken to not burn the grain. Final temperature is more than 200°C.

APPLICATIONS

Viking Roasted Barley is used in dark beers like stouts and porters, mainly for its strong coloring ability. Roasted barley will impart a dry flavor and substantial color.



MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 5.0
min. 63.0
900–1200

PRODUCTION:



Poland

PACKAGING:



Bags



Big bags



Containers



Bulk



**BREWER'S
ORGANIC**

VIKING PALE ALE MALT ORGANIC



MALT CHARACTER

Viking Pale Ale Malt Organic is made from 2-row spring barley. High degree of modification promotes easy processability. Malt flavor contributes especially to sweet and nutty notes. It is ideal malt for ales and special lagers. The coloring power of Pale Ale Malt is not too strong, which makes it also suitable for subtle color correction of regular lagers.

APPLICATIONS

For all kinds of beers or whiskies. The color of the Pale Ale Malt Organic is rather low.



MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 78.0
COLOR	°EBC	4-7
PROTEIN	% dm	max. 12.5
KOLBACH INDEX	%	min. 42
FRIABILITY	%	min. 75

PRODUCTION:



Finland Poland

PACKAGING:



Bags Big bags Containers Bulk

VIKING PILSNER MALT ORGANIC



MALT CHARACTER

Viking Pilsner Malt Organic is made from 2-row organic spring barley. Steeping and germination conditions are chosen to promote even germination and homogenous modification. The final air-on temperature in kilning is typically 80–85°C. Pilsner Malt Organic flavor is usually described as slightly nutty and biscuit.

APPLICATIONS

Viking Pilsner Malt Organic can be used for all kinds of organic beers or whiskies. The color of this malt is low.

MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 79.0
COLOR	°EBC	3–5
PROTEIN	% dm	max. 12.5
SOLUBLE NITROGEN	mg/100g	600–900
FREE AMINO NITROGEN	mg/l	min. 130
FRIABILITY	%	min. 75
DIASTATIC POWER	WK dm	min. 220



PRODUCTION:



Finland Poland Sweden Denmark

PACKAGING:



Bags Big bags Containers Bulk

VIKING MUNICH LIGHT MALT ORGANIC



MALT CHARACTER

Curing temperatures in the range of 110–120°C give the malt an aromatic, nutty character. The high curing temperature results in clearly reduced enzyme activities compared to Pilsner Malt.

APPLICATIONS

Viking Munich Light Malt Organic is ideal malt for dark lagers, festival beers and bocks for underlining malty flavors and full-bodied taste. The decreased enzyme activities have to be taken into consideration when designing the brewing recipe.



MOISTURE	%	max. 5.0
EXTRACT FINE	% dm	min. 78.0
COLOR	°EBC	14–20
PROTEIN	% dm	max. 12.5
FREE AMINO NITROGEN	mg/l	min. 130
FRIABILITY	%	min. 75
SACCHARIFICATION	min.	max. 20

PRODUCTION:



Finland Poland

PACKAGING:



Bags Big bags Containers Bulk

VIKING CARMEL 100 MALT ORGANIC



MALT CHARACTER

Viking Caramel Malt 100 Organic is made from organic green malt. A high degree of caramelization is characteristic of this malt. The amylolytic activity of Caramel Malt 100 Organic is zero. Maillard products formed in the process can act as antioxidants and contribute to flavor stability. Caramel Malt 100 Organic usually improves foam quality and head retention.

APPLICATIONS

Viking Caramel Malt 100 Organic is well suited for winter beers, ale-type beers, and other aromatic beers like dark lagers and stouts. Small amounts can be used for color adjustment and flavor enrichment of pale lagers as well.

MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 6.0
min. 75.0
90–110



PRODUCTION:



Finland Poland

PACKAGING:



Bags Big bags Containers Bulk

VIKING CARMEL 150 MALT ORGANIC



MALT CHARACTER

Viking Caramel Malt 150 Organic is made from organic barley green malt. A high degree of caramelization is characteristic of this malt. The amylolytic activity of Caramel Malt 150 Organic is zero. Maillard products formed in the process can act as antioxidants and contribute to flavor stability. Caramel Malt 150 Organic usually improves foam quality and head retention.

APPLICATIONS

Viking Caramel Malt 150 Organic is well suited for winter beers, ale-type beers, and other aromatic beers like dark lagers and stouts. Small amounts can be used for color adjustment and flavor enrichment of pale lagers as well.



MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 6.0
min. 75.0
140-160

PRODUCTION:



Finland Poland

PACKAGING:



Bags Big bags Containers Bulk

VIKING CARAMEL PALE MALT ORGANIC



MALT CHARACTER

Despite the low color value, Viking Caramel Pale Malt Organic is true caramel malt, i.e. the starch has been gelatinized and saccharified within the kernel. Caramel Pale Malt Organic is sweet and caramel-like having also toffee and fruity notes. The enzymatic activity of Caramel Pale Malt Organic is negligible.

APPLICATIONS

Viking Caramel Pale Malt Organic is used to produce a full-bodied beer with a clean, round flavor. Due to its low color value, it is suitable also for light-colored beers. Dosage rate is typically up to 30%.

MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 7.5
min. 77.0
6–10



PRODUCTION:



Finland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING BLACK MALT ORGANIC



MALT CHARACTER

Viking Black Malt Organic is produced by roasting organic pilsner barley malt. Final temperature is more than 200 °C. The amylolytic activity of Black Malt Organic is zero. The amount of fermentable extract is low.

APPLICATIONS

Viking Black Malt Organic is used in stouts and porters, mainly for its strong coloring ability. Normally portions of 1–2% give a remarkable increase in color without significant change in flavor. By raising the percentage of Black Malt Organic in the malt bill the changes in taste can be found quickly. Dosage rates of more than 10% are rare.



MOISTURE
EXTRACT FINE
COLOR

%
% dm
°EBC

max. 5.0
min. 65.0
1200–1500

PRODUCTION:



Finland Poland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING WHEAT MALT ORGANIC



MALT CHARACTER

Viking Wheat Malt Organic is made from high quality wheat. Varieties suitable for brewing purposes are used. The malting process does not differ much from Pilsner Malt production. Final air-on temperature is normally 72–80°C.

APPLICATIONS

Wheat Malt Organic is used mainly for wheat beers and some other top-fermented beers. It is also used for lager beers for flavor enrichment and to improve foam stability. Typical rate of usage is around 50% of the grist for wheat beers and appr. 20% for the premium lagers.

MOISTURE	%	max. 6.0
EXTRACT FINE	% dm	min. 82.0
COLOR	°EBC	4–6
PROTEIN	% dm	max. 14.0
pH		5.7–6.3
SOLUBLE NITROGEN	mg/100g	max. 900
FOREIGN MATTER	%	max. 4
DIASTATIC POWER	WK dm	min. 200



PRODUCTION:



Finland

PACKAGING:



Bags



Big bags



Containers



Bulk



SMOKED SPECIAL

VIKING SMOKED WHEAT MALT



MALT CHARACTER

Viking Smoked Wheat Malt is produced by using the oak from the unique, natural areas located in the northeast of Poland. These are called “Polish Green Lungs”. Smoke from oak gives the malt a specific and delicate smoked aroma. Due to relatively low processing temperatures, enzymatic activities and other good brewing properties are maintained. However, one should pay attention to the fact that Smoked Wheat Malt comes naturally without husk. For example “grodziskie” brews where even 100% dosages are used, some filtration aid needs to be considered.

APPLICATIONS

In the brewing, Viking Smoked Wheat Malt can be used for a beer called “grodziskie” and other special beers. It can be also used in bakeries as a spice.

MOISTURE	%	max. 9.0
EXTRACT FINE	% dm	min. 81.0
COLOR	°EBC	max. 10
PROTEIN	% dm	max. 13.5
FOREIGN MATTER	%	max. 4.0
TOTAL PHENOLS	ppm	5.0–10.0



PRODUCTION:



Poland

PACKAGING:



Bags



Bigbags



Containers



Bulk

VIKING SMOKED MALT



MALT CHARACTER

Viking Smoked Malts are produced from 2-row spring malting barley, null-LOX variety. The flavors of these malts are as with pilsner malt with rather strong smoky flavor depending on type of wood used for smoking. We can use apple, beech, cherry, sweet cherry and pear wood delivered from ecological, clean areas. Due to relatively low processing temperatures, enzymatic activities and other good brewing properties are maintained. The smokiness of our malts is relatively low, so it should be used in large doses, almost like Pilsner Malt.

APPLICATIONS

In the brewing, Smoked Malts can be considered Pilsner Malt with a special aroma as Smoked Malts flavor and taste profile is not too overwhelming. Viking Smoked Malts bring the smokiness inside the beer, not as a "sticker" on top. And the smokiness taste intensifies with each new sip of beer. So beers brewed with Viking Smoked Malts are very drinkable, even in large doses. Smoked Malts can be also used in bakeries as a spice.



MOISTURE	%	max. 9.0
EXTRACT FINE	% dm	min. 81.0
COLOR	°EBC	max. 10
PROTEIN	% dm	max. 12.0
TOTAL PHENOLS	ppm	5.0-10.0

PRODUCTION:



Poland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING LIGHTLY PEATED MALT



MALT CHARACTER

The flavor of Viking Lightly Peated Malt is as with Pilsner Malt with a hue of peat and smoke. Varieties suitable for a peat-curing process are used. Due to relatively low processing temperatures, enzymatic activities and other good brewing properties are maintained.

APPLICATIONS

Viking Lightly Peated Malt can be used in distilleries in whisky production. In the brewing process, as Lightly Peated Malt's flavor and taste profile are not too overwhelming, it can be considered as Pilsner Malt with a special aroma. It can also be used in bakeries as a spice.

MOISTURE	%	max. 9.0
EXTRACT FINE	% dm	min. 81.0
COLOR	°EBC	max. 10
PROTEIN	% dm	max. 12.0
TOTAL PHENOLS	ppm	3.0–10.0



PRODUCTION:



Poland

PACKAGING:



Bags



Bigbags



Containers



Bulk



DISTILLER'S CHOICE

VIKING ENZYME MALT



MALT CHARACTER

Viking Enzyme Malt is produced either from 2-row or 6-row spring barley. The steeping and germination conditions are chosen to promote enzyme release and synthesis. The kilning program is designed to preserve enzyme activity as possible.

APPLICATIONS

Viking Enzyme Malt is recommended to use when high portion of adjuncts is used in a brewing process. It is also suitable for production of quality grain whisky and pure alcohol. It can be also used for adjusting the Falling Number of baking flour. In order to optimize ethanol yield Enzyme Malt can be delivered as blends of varieties with different enzyme spectra.



MOISTURE
EXTRACT FINE
DIASTATIC POWER
ALFA-AMYLASE DU

%	max. 7.0
% dm	min. 76.0
WK dm	min. 620
dm	min. 70

PRODUCTION:



Finland

PACKAGING:



Bags



Big bags



Containers



Bulk

VIKING POT STILL RYE MALT



MALT CHARACTER

Viking Pot Still Rye Malt has gone through a special steeping, germination and kilning programs to promote high enzyme activity to support good behavior during pot still process

APPLICATIONS

Designed for rye pot still whisky process but may also be used in beer manufacturing.

MOISTURE	%	max. 7.0
EXTRACT FINE	% dm	min. 83.5
DIASTATIC POWER	WK dm	min. 280
ALFA-AMYLASE DU	dm	min. 30
GN	g/t	< 0.5
FOREIGN MATTER	%	max. 4



PRODUCTION:



Finland

PACKAGING:



Bags



Big bags



Containers



Bulk

MALT PACKAGING SOLUTIONS



Bags



Big Bags



Container
liner bags



Bulk

MALT DELIVERY SOLUTIONS



Pallets



Tipper



Silo truck



Container

STORAGE OF BAGGED MALT

Bagged malts should be stored in a clean, dry, odorless and pest-free place, at a cool (on avg. $<25^{\circ}\text{C}$) and stable temperature. Under these conditions unopened bags of malt can be stored for a minimum of 2 years from the date of bagging and unopened bags of crushed malt for a minimum 1 year from the date of bagging.



Opened bags are beyond Viking Malt's control, and we always recommend that opened bags are used at once. Anyhow, if opened bags are carefully re-sealed and then stored under the recommended conditions, they are expected to endure the storage times mentioned above.



**You should always keep the malts away from hot surfaces.
Do not inhale the malt dust.**



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PRODUCT AND QUALITY

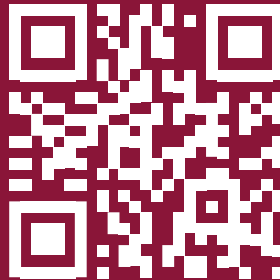
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WOULD YOU LIKE TO BE OUR PARTNER?

We are continuously looking for partners to represent Viking Malt at new markets areas.

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