



**SD Guthrie
International**



**It is a privilege of working together.
It's a heritage of 100 years of
oils & fats processing.**



SD GUTHRIE INTERNATIONAL ZWIINDRECHT REFINERY



Today's consumers make demands. They want to know the origin of the food they eat, that it's responsibly produced as well as tasting good, and that it contributes to a healthier lifestyle, for instance, by reducing consumption of saturated and trans-fats. These demands challenge food manufacturers to develop new and innovative products.

Thank you

In Zwijndrecht, The Netherlands, SD Guthrie International Zwijndrecht Refinery (SDGIZR) produces more than 200 vegetable oils based ingredients for the entire European market for over a century. We were founded in 1914. It all began when two companies – one called Van den Bergh, the other Jurgens – started to manufacture margarine based on an invention by Mege Mouriés.

The success of SDGIZR can be attributed to the rich heritage and the company's drive to innovate in creating quality products that fulfill the high standards which oils and fats products requires. We constantly invest in new state of the art refining technologies to produce healthy and functional ingredients tailored for food and other uses. We are convinced that a sustainable business with concern for people, nature and the environment is the best long-term.

It is a privilege of working together with customers and suppliers in order to produce and supply oils and fat based ingredients. It's a heritage of 100 years of oils & fats processing.

Yours sincerely,

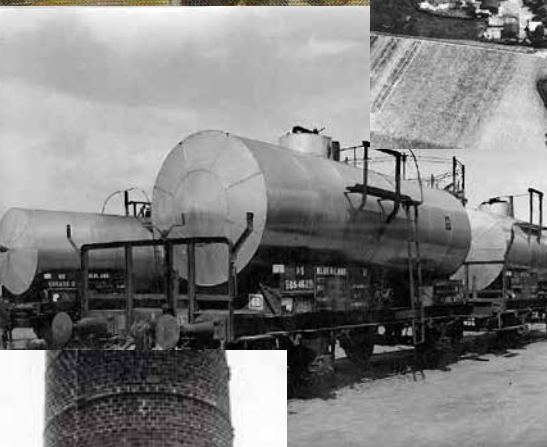
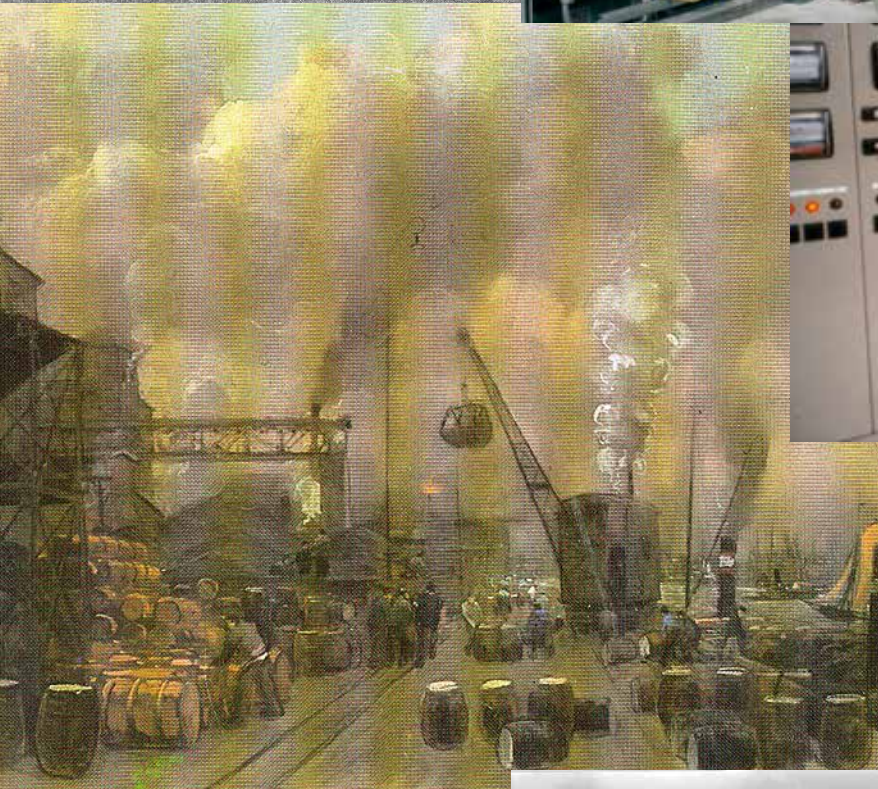
Jonathan Penefather
Managing Director



100 years of oils & fats processing in Z



wijndrecht, The Netherlands 1914-2014



The demand for the use of natural and more healthier ingredients to improve the fatty acid composition of products, are key innovation drivers for food manufacturers. We are aiming for new formulations based on healthier vegetable oils and fats that do have the right nutritional balance and simultaneously provide the desired taste and texture of foods.

Innovation

To respond actively to future global and local trends in the food industry SD Guthrie has three Innovation Centres around the globe: Johannesburg Kuala Lumpur and Zwijndrecht.

Our Innovation Centre in Zwijndrecht, has state-of-the-art facilities for testing prototype oil formulation in food applications and producing at pilot scale. Most advanced and complex processing techniques are available at a lab scale, including fractionation, enzymatic re-arrangement and making emulsions or pre-crystallized fats.

The R&D food application kitchen offers customers testing of new and innovative oil and fat ingredients for their products. The R&D Laboratory, Analytical and Pilot plant facilities underline our lead as the innovative player in the development of healthier and tastier oils and fat ingredients.

Our scientists and engineers are among the leading experts in the complex details of modern vegetable oil processing technology. This fundamental knowledge is essential to improve continuously and to develop new technologies to manufacture innovative vegetable oil based ingredients in the most efficient and responsible way.







Tropical Forest

West Wing



R&D C

Recent years has seen the rising importance of global challenges such as population growth pressures, climate change, resource scarcity, biodiversity loss, economic inequality and human rights. As one of the founding members of the Roundtable on Sustainable Palm Oil (RSPO) we continually seek to advance the production, procurement and use of sustainable palm oil products.

Sustainability

We believe that we can only have a successful future if we make sure it's a sustainable one.





As one of the world's largest oil palm plantations companies, we recognise the responsibility to provide a balanced approach in our plantation activities. Towards that realisation, we are constantly on the lookout for breakthroughs to improve our business operations by searching and researching for means and ways to increase yield, optimise costs and minimise wastage.

As an integrated company, we are involved in the full spectrum of the palm oil value chain. Our goal is to become the world's premier producer of sustainable palm oil and palm oil based products. We adhere strictly to the industry-proven Best Manufacturing Practices and Principles and Criteria of the Roundtable on Sustainable Palm Oil.

We see it as our responsibility to source our raw materials from sustainable sourc-

**ALREADY 2.5 MILLION TONNES
OF CERTIFIED SUSTAINABLE PALM
AND PALM KERNEL OIL AVAILABLE**



Products must be greener and healthier. Consumers want manufacturers to switch to the use of clean and sustainable processes for the production of foodstuffs. After the unhealthy trans fats have been successfully replaced by trans-free alternatives, the last 10 years, the vegetable oil industry is now on the verge of a green revolution.

Processing

In the last decades, our revolutionary improvements to processing technologies using the latest possibilities provided by science and computer informatics have resulted in significant reductions in the use of energy and chemicals and in waste produced.

We have developed two new innovative processing technologies. The first technology is soft flaking to manufacture fat flakes with less saturated fat and designed for the homogenous addition of oil soluble flavours and additives, such as specific vitamins (A, D and E), and flavours such as garlic and butter. The second technology is a new modification technique based on enzymatic re-arrangement, which provides more flexibility than traditional processes.

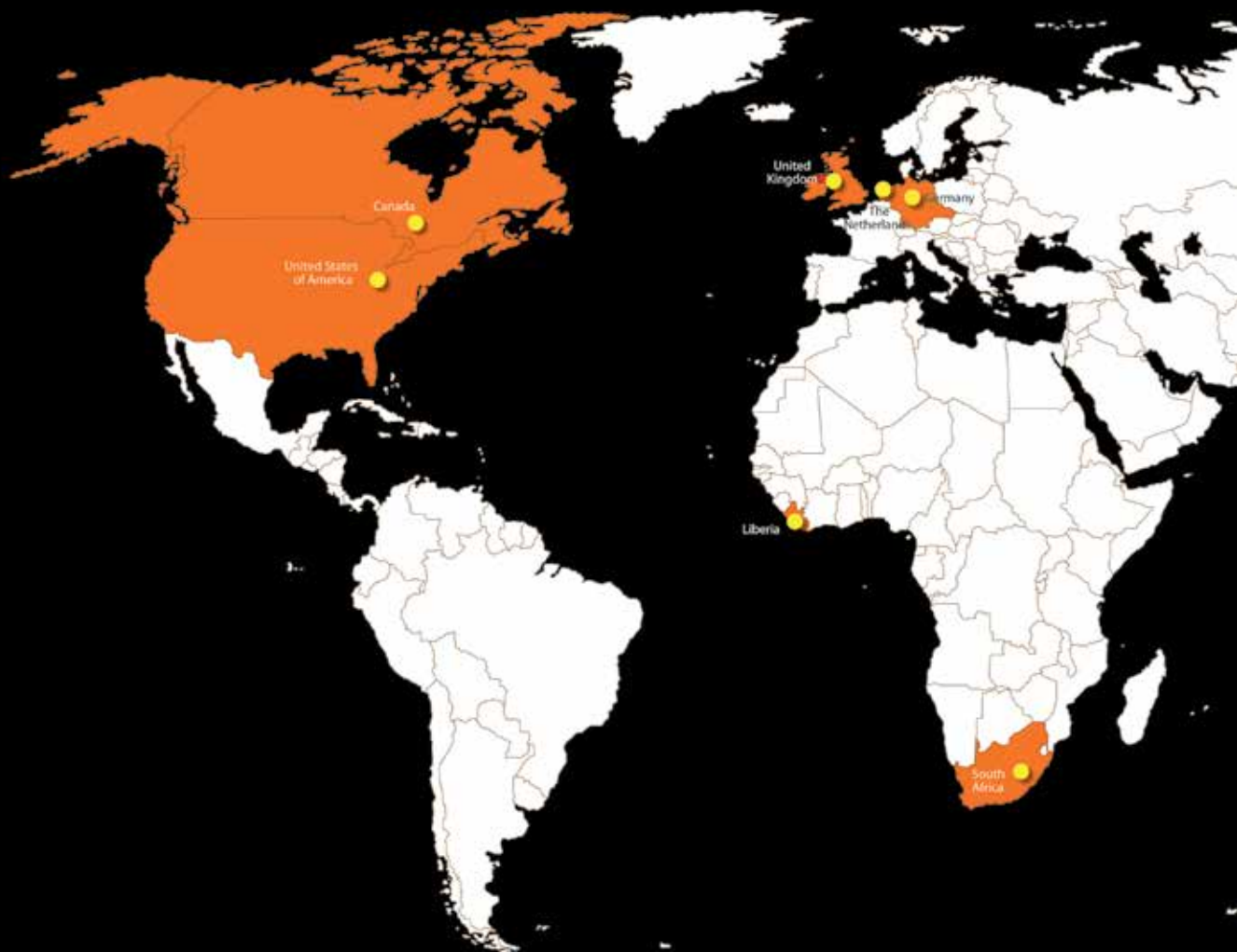
All our new processes offer opportunities for developing products with specific functionalities. Moreover, we are committed to sustainability through the implementation of clean production.



We believe in a honest and open dialogue with customers and society in order to develop responsible value innovations that life may be more enjoyable for the people who use our products. We have the adaptability, empathy and resources to produce tailor-made vegetable oil based ingredients for over a century.

SD Guthrie International Zwijndrecht

Our company strength is the diversity of vegetable oil processing, ranging from hydrogenated to fractionated, double-fractionated, enzymatic re-arrangement and interesterified oils at one site. At the same location, we also produce natural lecithin based on fractionation and hydrolyses which can be used direct in the end application or pre-blended with our vegetable oils.



The SD Guthrie International is part of a Malaysia-based diversified multinational corporation involved in the plantation, industrial equipment, automotive, property, energy & utilities and healthcare sectors. Committed to developing a sustainable future, SD Guthrie strives to integrate social responsibility and environmental stewardship into the way to conduct business.

SD Guthrie

SD Guthrie is the world's largest listed palm oil producer and the leader in plantation sustainability. As one of the founding members of the Roundtable on Sustainable Palm Oil (RSPO), Sime Darby is the largest supplier of certified sustainable and traceable palm oil and palm kernels. SD Guthrie employs more than 85,000 people across its global operations.



Our reputation for high-quality margarine hardstocks is based on our in-depth knowledge of and experience with processing oils and fats. In fact, hardstocks have been our core business for almost 100 years.

Margarine Hardstock

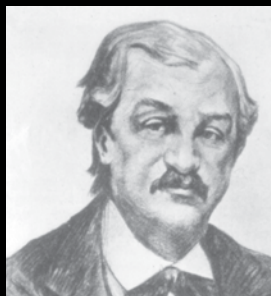
In 1869, Napoleon III directed his scientists to find an alternative to dairy butter that would have a longer shelf life. In response, French food chemist Hippolyte Mège Mouriès developed the process to manufacture margarine using liquid oil and hardstock to produce a water-in-oil emulsion.

Using this process, margarine production began in the Netherlands in 1871. With a direct connection to those early days, we have a firm foundation for continuing to offer a very wide range of margarine hardstocks.

Margarine and low fat spreads are now considered to be healthy alternatives to butter because in general they contain less saturated fat. In addition, spreads made with sunflower or rapeseed oils have higher levels of healthy polyunsaturated fats.



Napoleon III



Mège Mouriès



S. v.d. Bergh



J. Jurgens



Recipe 40% Low Fat Spread

Water phase	56,2%
Delico® 510	39,5%
Sunlec® C	0,5%
Vitolio® 150	0,1%
Butter flavour	0,01%
Other	3,69%

Delico® is our brand of hardstocks used in the production of consumer margarines, spreads and cooking oils. At the very heart of margarine, Delico® Hardstocks are blends of processed vegetable oils designed to give the texture, taste and consistency you want in your product. Delico® Hardstocks can be tailored to the needs of the most discerning margarine manufacturers, and thus to the demands of consumers for healthy, tasty products.



Delico® Product Range

Delico® 100 Liquid margarines, cooking oils and peanut butter

Delico® 200 Full fat margarines

Delico® 300 Margarines & reduced fat spreads

Delico® 400 Low fat spreads

Delico® 500 Margarines or spreads with added nutritional properties

Consumers love the pleasant taste sensation of filled chocolates like bonbons. After the first bite into the chocolate the taste of the filling should be smooth and soft. MasterCraft® meets consumer demand for luxurious products that look good and deliver the ultimate taste experience so loved in products of indulgence.

Confectionery Fats

MasterCraft®

SIMPLY INDULGENT

MasterCraft® Product Range

MasterCraft® 100 Cream layer fats

MasterCraft® 200 Centre filling fats

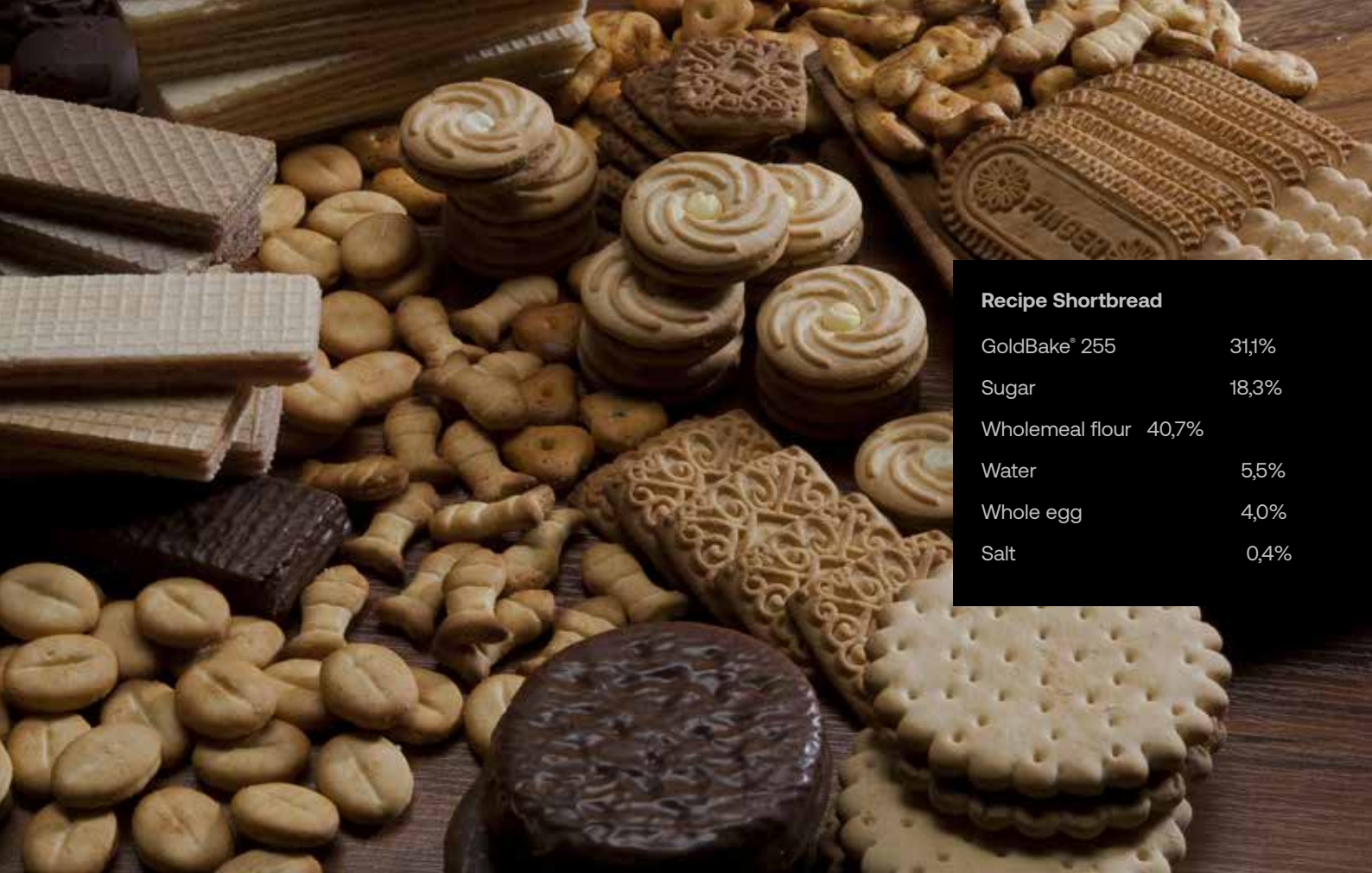
MasterCraft® 300 Solid barrier fats

MasterCraft® 400 Top coating fats

Recipe Bonbon Filling

Dark chocolate	60,6%
MasterCraft® 273	21,0%
Whipped cream	9,0%
Treacle	9,0%
Bolec® C	0,4%





Recipe Shortbread

GoldBake® 255	31,1%
Sugar	18,3%
Wholemeal flour	40,7%
Water	5,5%
Whole egg	4,0%
Salt	0,4%

GoldBake® is our brand for dough fats used in the production of doughs for biscuits, pastries, cookies and cakes. They are available as liquid fats for pre-crystallization in your votator, or as pre-crystallized fats ready-to-use in dough. The new generation of innovative GoldBake® products meets the consumers' demands for healthy, tasty products with saturated fat levels as low as 25%.

Dough Fats

GoldBake®

A TASTY BITE EVERY TIME

GoldBake® Product Range

GoldBake® 100 Traditional dough fats

GoldBake® 200 Traditional pre-crystallized dough fats

GoldBake® 300 Premium dough fats with tailored nutritional or functional properties

GoldBake® 400 Premium pre-crystallized dough fats with tailored nutritional or functional properties

GoldBake® 500 Fat solutions for bakery doughs and bakery dough ingredients

HappyCook[®]
ENJOY NATURAL CRISPINESS



Frying Oils

VitaFactor



Infant Formula Fat Blends

Vemor



Non Dairy Alternatives

UmCandle[®]



Candle Fats

umfeed[®]

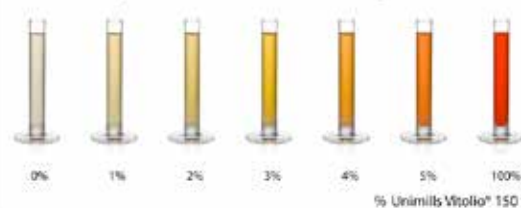


Animal and Farm Feed Fats



Vitolio® is our brand of unique natural vegetable oil ingredients. The Vitolio® selection enhances food products and meets consumer demand for genuine and natural food ingredients. It comprises a range of natural oils with nutritional values and colouring qualities.

One of the unique natural oils in this range is Vitolio® 150, containing natural beta-carotene which is used to colour foods such as margarine, mayonnaise, snacks, cheese, and bakery products. Added to food products, it can add a yellow to red colour. Vitolio® 150 contains natural antioxidants to improve shelf life and adds natural nutritional value to a finished product.



Prifex® is our brand of flaked fats at the forefront of food processing delivering customized convenience to a wide range of food products. Prifex® Flaked fats are easy to handle, have a long shelf-life and are convenient to use.

Typical applications for flakes are those that need easy mixing and dispersal of the fat without lumps or stickiness. From pizza doughs, to dry soups, to chewing gum, Prifex® Flaked fat is the product of choice for your application.



Natural Lecithin

Lecithin is the collective term used for a group of substances, also known as phospholipids or phosphatides, that are present in all animal and plant cells. Phosphatides have strong surface-active properties, which means they reduce surface tension at the interface between oil and water.

Our high quality native Sunlec® sunflower lecithin and Bolec® identity-preserved soya lecithin, we also offer lecithin products enhanced using two sophisticated processes: Enzymatic hydrolysis and fractionation.





Contact us. We'll be there for you!

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