

VETRO TIME

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Glass for Christmas

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Local specialities

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**Dear readers,**

This December will be very special for Vetropack: a handover will be taking place. I will be resigning as CEO of the Vetropack Group and putting myself forward for election as Chairman at the next General Assembly in April 2018. My successor is no stranger to the world of glass. Since November 2010, Johann Reiter has headed Vetropack's largest business division, which includes two glassworks in Austria and one in Switzerland.

I am very much looking forward to my new responsibilities and challenges, which will focus on strategy, and also to working with the new CEO Johann Reiter. I will continue to stay closely involved with Vetropack in the

future and will be personally supporting certain specific projects, as keeping in touch with you all is a priority of mine. Like you, I will also continue to be a loyal reader of Vetrotime – this will certainly be more enjoyable as I no longer have to write editorials, meaning the contents of every edition will be a surprise.

This edition of our customer magazine once again has lots for you to discover. Right on the opposite page, you can read about liquid specialities making a grand entrance in their glass packaging. Although the flavours are very different, the exquisite packaging is a promise of high quality, sustainability and maximum protection. Since glass is inert, it forms a barrier that prevents anything from infiltrating or escaping from the product contents. This is what makes glass unique.

I am particularly proud of our first Group-wide training centre in Pöchlarn, Austria, where we impart glass-specific knowledge to production workers. Glass-blowing machines can sometimes act like divas, and you need to have a certain sensitivity to handle them. Quality control is just as challenging. Eyes, hands and brains must be trained in equal measure to be as good as they can possibly be and to understand and implement the processes.

While glass has been a trusted type of packaging for centuries, the last double page of this Vetrotime edition bears impressive witness to the fact that glass also makes great Christmas decoration. Seeing delicate glass marbles in all their different forms will be sure to put you into the Christmas spirit.

Dear readers, I wish you and your family a wonderful Christmas and successful New Year. Many thanks for your hard work.

Kindest regards,


Claude R. Cornaz

DISTINCTIVE DRINKS

Glass packaging for making a strong impression

Vetropack produces the perfect glass packaging for a number of local specialities famous beyond the borders of their own country. Whether it is beer, spirits or a soft drink, any product is sure to look elegantly presented in a glass bottle.



One look at a glass bottle is all it takes for consumers to know that the product it contains is a speciality. Even if it is a product they are not familiar with, the distinctive, high-quality packaging is evidence enough. This is the kind of packaging people only use for things that they care about, valuable items that are worth something to them. That is why many well-known brands opt for packaging made of glass. They know how important it is to make an unmistakable and recognisable impression at first glance. Glass packaging does not conceal anything, providing the perfect showcase for its contents. What's more, the sheer variety of glass packaging solutions knows virtually no limits. They come in all kinds of shapes, sizes, colours and finishes.

A refreshing pick-me-up

The container design used for the Swiss soft drink Rivella draws on both traditional and modern influences. The

0.33-litre bottles are produced exclusively for the catering industry. The distinctive diagonal lines on the brown and flint-glass bottles symbolise the Swiss mountains and are picked up again on the label. This popular beverage, which is sealed with a crown cork closure, comes in red (the 'original' version) and blue (a low-calorie alternative) as well as green-tea flavour. Rivella is made from whey and a secret blend of fruit and herb extracts.

Alpine herbs with a fizz

Since 1957, Almdudler has been Austria's zest for life in a bottle, its most popular and best-known alpine-herb lemonade and a fully family-owned company based on tradition and passion – in short, a truly original brand. Almdudler is made with a diverse range of alpine herbs, such as echinacea, lemon balm, sage, gentian and elder, which are processed carefully until the unmistakeable Almdudler taste



experience is achieved. Its unique flavour is matched by its equally distinctive flint-glass bottle, which features a popular couple in traditional dress on the front. This motif, containing words and images, is applied to the 0.35-litre returnable bottles using a silkscreen-printing technique. The surface of the bottles above and below the traditional Almdudler couple is slightly hatched.

Liquid chocolate

The Mozart liqueurs take you into the world of the most popular chocolates and offer pure enjoyment as an after-dinner beverage in the wonderful, quiet moments following an all-round perfect evening or as a drink to share with your friends. Both the liqueurs' quality and their spherical bottle shape are synonymous with the Mozart brand. All Mozart chocolate liqueur bottles are encased in a luxurious foil wrapper – a wrapping process that the company developed itself and is still in the process of perfecting. The special wrapping makes the Mozart family of liqueurs instantly recognisable – but also makes each individual bottle unique. The characteristic, spherical flint-glass bottles gleam in gold, white, dark brown and now also in red with Mozart Strawberry.

A bittersweet liqueur

The bottle used for Unicum liqueur boasts a rounded shape with a long and distinctive neck. The green-glass bottle containing this Hungarian bitter comes with a pilfer-proof cap and its colour is only revealed when the contents are poured out. This is because the herbal liqueur, which is distilled from over 40 herbs and spices, has an intense dark hue. It is also distinguished by its bittersweet flavour, created based on a secret recipe.

Full of spirit

An equally full-bodied and aromatic beverage is Stroh Inländer Rum from Austria, though it is not bitter at all. The drink's 0.5-litre glass bottle in its hip-flask design has served it well, barely changing in appearance in all the years since it was first introduced. The iconic bottle is characterised by its broad, slightly rounded shoulders and flat body. The shoulder area is adorned with the engraved signature of Sebastian Stroh, who founded the brand over 185 years ago. The bottle curves inwards slightly at the back and is topped with a screw cap. It also features a high-quality label on both the back and the front. Stroh Rum is Austria's oldest



spirits brand and is made from sugar-cane molasses.

Flint glass for a fine distillate

Another member of the high-proof club is Koniferum Borovička, a juniper-base distillate packaged in 0.7-litre flint-glass bottles with a screw cap. The design chosen by the Slovakian brand incorporates a slim body with rounded shoulders and a long, slender neck. The lettering "OLD HEROLD" is discreetly inscribed across the shoulder area. The dark green of the cap is picked up again on the bottle's simply designed label, where it is supplemented with red and yellow tones and images of dark-blue juniper berries.

Engraved beer bottles

One of the Czech Republic's most iconic breweries is the family-run business BERNARD, which has been producing unpasteurised beer since 1991. Its popular beer varieties come in three different glass bottles. The 0.5-litre bottle features a swing stopper, while the 0.33-litre version has a crown cork. Both are made of brown glass. The final member of the trio is a 0.5-litre green-glass bottle, which is also sealed with a crown cork. One thing they all have in

common is the name of the brewery engraved clearly but discreetly on the neck area. This design demonstrates that high-quality beers deserve exclusive glass bottles with an easily recognisable profile.

Splendid sour cherries

The Croatian port city of Zadar is home to Maraska Maraschino liqueur, which is made according to a traditional recipe based on sour cherries – and not just the flesh of the fruit itself, but the leaves and branches of cherry trees too. The Maraska cherries used originally come from Asia. The 0.5-litre flint-glass bottle is wrapped in raffia up to its shoulders. This distinctive finish was adopted back in 1806, when the crystal-clear liqueur was exported abroad for the first time. The raffia was designed to protect the bottles during their long journey. The 0.7-litre version is reminiscent of an elegant perfume bottle. This flint-glass bottle is covered with a crystal-like pattern that lends it an even more exclusive brilliance, and it is topped off with a glass ball for a stopper. As well as Maraschino, Maraska d.d. also produces other high-quality spirits and fruit juices.



Sweet and spicy

The 0.5-litre flint-glass bottle for Ukraine's Nemiroff vodka combines elegance, grace and clean-cut lines. Consumers won't be cutting their fingers on any rounded edges with this design. An extra touch of sharpness is provided by the pepper used to flavour the vodka, while honey also lends it a slight hint of sweetness, as well as its amber colouring. These two flavour components are also reflected on the transparent label. The name "Nemiroff" is engraved on the side of the octagonal glass bottle. As far as Ukrainians are concerned, a glass of vodka is a natural accompaniment to a good meal – just like beer or wine in other countries.

Multifaceted and sophisticated

The new design for the Italian Molinari liqueur, which is sweet, strong and scented, is a little over a month old. The designers involved worked on the new look for over a year. The flint-glass bottle is multifaceted and sophisticated with an elegant straight neck, while the lower section looks as if a crown cork mouth has been joined onto it. The round shoulders flow seamlessly down into the bottom third of the bottle, creating a slim shape. The crystal-clear colour, the bottle and the liqueur itself are all reminiscent of the clear and transparent language of Molinari.



Iconic design

Another example of a clear flint-glass bottle is the one used for the Italian liqueur Amaretto Disaronno. The elegant and graceful 0.7-litre bottle has a textured finish, which is designed to look like the rippling surface of a pool of water when a gentle breath of wind has swept over it. However, the amber-coloured liqueur with a hint of ruby red can still be clearly seen beneath the glass. The iconic bottle with rounded shoulders features a square closure, giving it an extra touch of elegance and making it more distinguishable. This is further emphasised by the gold lettering on the black closure and the delicious almond flavour of the liqueur itself, with its subtle vanilla note.

Unique glass containers

The world of glass packaging for well-known local specialities is richly varied. Each individual packaging design speaks its own very specific language. It either appeals to people or not; it may bring people pleasure, surprise them or even give them food for thought. One thing all these glass containers have in common is that they are distinctive and have a unique purpose: they protect their valuable contents against any foreign substances but do not impact on their flavour.

GLASS IS A WINNER

Packaging that protects

Packaging protects food and beverages by keeping the contents and the environment separate. The fact that packaging remains in constant contact with its contents raises the question of whether all packaging really is harmless to health. As well as researchers, packaging specialists are also focusing on this complex topic, which is also being intensively pursued by consumers.

Health and nutrition are among topics that have been discussed in detail for many years now. We are very conscious of what we are eating. Meals should be healthy and balanced. And recently, consumers have been taking a closer look at food packaging. Even in protective packaging, dangers lurk that could have an impact on health. The composition and possible interactions of chemicals and packaged food and drink have played a key role in the food industry for a long time now.

Laboratory examinations

In the TV series "Die Tricks der Getränkeindustrie" (the tricks of the beverage industry) by German broadcaster NDR, mineral water in PET bottles was subject to a so-called stress test. Researchers at the Labor für Rückstandsanalytik (laboratory for residue analysis) in Bremen, Germany, placed the bottles in an incubator for ten days at 60 degrees Celsius to simulate the end of the use-by date. The aim of the investigation was to examine the water for potential toxic substances as plasticisers, low quantities of which are present in PET bottles, are suspected to dissolve out of the plastic into the water.

Although the results of the analysis show that none of the examined substances are above their values allowed by law, your senses can sometimes still taste certain harmful substances. "The number of different substances that we consume every day is a particular cause for concern as harmful chemicals are in other food packaging too", says environment toxicologist Jane Muncke from the Food Packaging Forum in Zurich, Switzerland.

Well protected by and in the glass

As far as health is concerned, glass is an ideal material. The structure of glass is a solidified fluid and its pores are so small that no atoms can pass through them. This is why people refer to glass as inert – in other words, glass does not interact with the substances stored inside it. "This charac-



teristic makes it very suited to storing food", says Muncke. It is therefore the perfect packaging. Despite this, consumers often opt for materials that weigh less such as plastic when they have to walk home with the food. Vetropack also produces lightweight glass bottles that are just as good quality as the heavier versions.

INTERVIEW WITH JANE MUNCKE

Chemicals – highly complex and extremely versatile

To what extent are our food and beverages packaged in a healthy way? Do the contents and chemicals in the packaging come into contact with one another? If so, what effect does this have? Vetrotime talked to environmental toxicologist Jane Muncke (JM) about the influence of chemical substances and the Food Packaging Forum (FPF)'s latest scientific studies.



Ms Muncke, does it matter how our food and beverages are packaged? Is there a correlation between packaging and health?

JM: Food packaging releases chemical substances into food. However, the different materials differ greatly in terms of which substances get into the food and the amount of chemicals that migrate. Glass, ceramics and stainless steel are made from non-organic chemicals and are therefore very inert. The migration of chemicals is minimal. The contacts are only nonorganic – except for gaskets. Paper, plastic and composites (e.g. drink cartons) are made from organic substances – primarily synthetic, man-made chemicals that sometimes migrate to a vast extent. Experts actually believe that chemical pollution in everyday life is strongly influenced by packaging and other materials that come into contact with food.

What specific studies do you intend to carry out in the near future and why?

JM: At FPF, we are currently taking stock of substances used or found in packaging. This allows us to identify priorities for toxicological investigations, since many of the substances used have not been sufficiently, if at all, examined with respect to their toxicity.

Another project is the sustainable circular economy, whereby materials are recycled wherever possible. However, recycling can also mean that harmful chemicals remain in circulation. Recycling therefore only makes sense if risky substances do not come into contact with food.

As part of the FPF workshop entitled "Scientific challenges in the risk assessment of food contact materials",

many scientists pointed out that conducting research in this area poses a great challenge as new substances are constantly emerging. What are the difficulties of investigations like these? To what extent do highly complex materials and chemicals contribute to these challenges?

JM: Organic materials, such as plastic, are manufactured using complex chemical processes. This synthesis also gives rise to many by-products. Additional degradation products can be added as part of the manufacturing process. These so-called non-intentionally added substances, NIAS for short, are omnipresent and make up most of the migrating substances to which people are exposed when they consume food. However, these substances are often unknown because the identification process requires extremely technical work and is therefore very expensive. With the current standard approach to risk assessment it is not possible to draw any conclusions about the toxicity of these substances either. I think this is the greatest challenge – closing this huge and significant gap in knowledge. It may be that none of these chemicals pose any risk to health – but we just do not know!

What effect do chemical substances have on our health?

JM: There is generally an abundance of different ways chemical substances can interact with our bodies. As the toxicological adage goes, "the dose makes the poison", and this still often forms the basic principle of our work. Nevertheless, this principle only applies to acute toxicity – that is to say a one-off high dosage. Many factors play a significant role. People are exposed to a cocktail of chemicals throughout their whole lives. Over 100,000 different chemicals are used in consumer goods and only very tiny amounts are examined with respect to their toxicity. Substances in chemical mixtures can also intensify the

impact of the other chemicals, which can therefore lead to effects, despite all the individual substances being below their respective threshold values. For young children, even very small amounts can have a negative impact on their natural, healthy development. While this may not result in deformities, it can lead to conditions such as cardiovascular diseases, allergies, neurological disorders such as AHDS, infertility and cancer developing later on in life.

"The dose makes the poison" does not apply to all chemicals. Some substances can interact with the hormonal system. The important thing to note here is that the dose-effect correlations are not "monotonous", meaning small concentrations may bring about different or even opposite effects to high concentrations. Hormonally active substances, like Bisphenol A for example, can be present in food packaging such as in plastics or tin cans.

SIMEI@DRINKTEC

The world of wine

At the SIMEI@drinktec trade fair in the German city of Munich, in September, Vetropack Group showcased its extensive range of glass and wide mouth bottles. Visitors also had the chance to enjoy wines from the countries where Vetropack has a presence.



Vetropack Group's display focused on its comprehensive portfolio of standard wine bottles at this year's SIMEI trade fair. Visitors had the opportunity to taste wines from all Vetropack's countries in a section of the stand made up to look like a wine shop. Alongside the selection of wine bottles, there were also glass bottles and wide mouth jars on show that are used for beer, soft drinks, mineral water, fruit juice and food. The successful packaging solutions were well received by an interested audience from the industry who came primarily from the beverage and beer sector. Although SIMEI is all about wine, industry experts were in the minority as many winemakers were busy harvesting their grapes this time around. Geographically speaking, most visitors to Vetropack's stand at the

trade fair were from Germany and Austria. However, people from France, Italy, Switzerland and prospective buyers from Eastern Europe and Asia also paid a visit.

The wine technology trade fair SIMEI has been held in the Italian city of Milan since 1963. In 2017 however, it made its debut appearance as part of the Munich-based drinktec, which specialises in products for the beverage and liquid food industry. drinktec, which takes place every four years, set a new record this year with more than 76,000 visitors from over 170 countries and 1,749 exhibitors. It is one of the world's leading trade fairs for the food and drink industry.

RIGA FOOD 2017

Huge interest in wide-mouth glass containers

The 22nd Riga Food trade fair, a showcase for international gastronomy, took place in September in the Latvian capital Riga. Vetropack Gostomel had a stand there, where it presented a diverse range of glass containers.

An array of glass bottles and jars for craft beer, wine, spirits, mineral water, food and many other delicacies went on show to visitors at the stand run by Vetropack's Ukrainian plant at the Riga Food trade fair. Guests were particularly impressed by the range of wide-mouth glass jars in all shapes and sizes. After all, preserving fruit and vegetables is traditionally a big part of Latvian cuisine and culture, as is the market for jam, honey, meat and fish in jars.

Riga Food is one of the largest trade fairs for the food industry in the Baltic region. Held in Latvia's capital city, the fair gave experts, customers and other interested visitors a comprehensive insight into the latest developments in the food and beverage industry – from production and packaging solutions through to technology. As well as providing a showcase for both local and foreign products, the trade fair



offered a fringe programme including workshops, fascinating demonstrations and professional courses. Around 714 companies from 37 different countries took part in this year's event, which attracted almost 39,000 visitors over the course of four days to Riga Food.

FURNACE REPAIR

A sustainable investment

After eleven years of uninterrupted operation, the flint-glass furnace at Vetropack's Ukrainian glassworks in Gostomel has been overhauled. Now that it has been brought up to the latest technological standard, it is more energy-efficient than ever and has a higher melting capacity.

Furnaces run round the clock, 365 days a year. They are scheduled for a complete renovation every ten years or so, as was the case for the flint-glass furnace at Vetropack Gostomel. Over the past eleven years, some 810.5 thousand tonnes of molten glass have been processed here to turn into glass bottles and wide-mouth jars.





Aside from the usual maintenance work, this overhaul had a special purpose – to reduce the furnace's exhaust emissions and energy consumption. The base of the furnace was therefore reconstructed, along with the forehearth and the equipment for filtering exhaust gas and carrying out automatic furnace checks. These renovations also help to cut down on energy costs and increase the furnace capacity in general.

At the hot end, the existing production machine with eight stations has been replaced by a newer model with ten. This offers the option of producing lightweight glass containers. Vetropack Gostomel has cutting-edge technology at its disposal at the cold end too: the testing procedure guarantees the quality of narrow-necked bottles and wide-mouth jars and ensures they are packaged quickly.

ITALY

Production: upgrading the cold end

The cold end at Vetropack's Italian glassworks has been upgraded, with engineers from Vetropack Italia working closely with the Group's specialists.

The right technical conditions need to be in place if a high level of production quality is to be guaranteed. The cold end at Vetropack Italia has recently been brought in line with the latest cutting-edge technology after undergoing a continue overhaul – from the annealing Lehr right through to the palletiser. The site was previously home to Vetropack Group's last surviving manually-operated production line. It now runs automatically. Automating the quality control and packaging processes makes it much easier to produce special bottles.

The technological upgrade also comes in response to the need to produce two different items at the same time, regardless of their shape and weight. Everyday tasks can now be completed more quickly and the corresponding quality standards achieved more efficiently.



PRIX VETROPACK 2017

An award-winning Chasselas

The Prix Vetropack award is presented by Vetropack Switzerland every year at the Internationale Weinprämierung Zürich (Zurich international wine competition) in Switzerland. This year, the accolade went to the Chasselas wine "Caviste Blanc" 2016, Ollon AOC Chablais, from the Western Switzerland wine cooperative "Artisans Vignerons d'Ollon".



Christine Arnet, Head of Marketing and Sales at Vetropack Switzerland (right) and Vratislav Prevor, Sales Manager for Wine and Spirits at Vetropack Switzerland (left) present the Prix Vetropack to Riccardo Mattei, Director (second from right) and Luis Nunes, Oenologist, from Artisans Vignerons d'Ollon.

Every year, Vetropack awards the Prix Vetropack to the producer of the best Swiss white or red wine made from one of the main grape varieties. These include Chasselas and Müller-Thurgau (Riesling-Silvaner) for white wines and Pinot Noir (Blauburgunder), Gamay and Merlot for red ones. The winners are given the chance to have their own customised wine bottle produced with the help of experts from Vetropack Switzerland. This year, the prize has been presented to the

Ollon wine cooperative for the Chasselas "Caviste Blanc" 2016, Ollon AOC Chablais. The motif on the label – "the cellar master" – is inspired by a painting by Frédéric Rouge and has been featured on wines from the "Caviste" range ever since 1925. The Swiss artist had heard of the highly acclaimed skill of the winemakers and produced this drawing as a tribute to them, bringing together knowledge and tradition.

FEVE – 40 YEARS

Making great strides towards the future

The European Container Glass Federation (FEVE) is celebrating its 40th anniversary this year. Over the past few years, the European container glass sector has evolved into a modern and innovative industry, specialising in developing and producing environmentally friendly glass packaging.



FEVE has been representing the container glass industry at international and European level since 1977, leading discussions with European institutions and agencies on issues surrounding the environment and health, trade and other important matters relating to glass production. FEVE plays a leading role in promoting glass and its unique advantages as a packaging material from an environmental, economic and social perspective.

Looking back over the last 40 years

Back in the 1970s, the first containers for recycling glass were starting to appear in many parts of Europe. Vetropack was one of the pioneers of used glass recycling in Switzerland, pursuing the aim of a sustainable closed-loop economy to completely reintegrate raw materials back into production beyond the life cycle of an individual product. It is still leading the way today. There are now more than 1.5 million very well-used glass containers across Europe. By exploiting used glass – a key raw material for the glass industry – it has been possible to reduce energy consumption by 80 per cent and CO₂ emissions by 70 per cent overall.



In the past 40 years, glass production in Europe has grown by around 40 per cent. To stay up to date and at the cutting edge, the container glass industry invests EUR 610 million each year in innovations and improvements relating to energy efficiency and the emissions given off during production. Thanks to these innovations, glass packaging products are now 30 per cent lighter than they were, without compromising on their excellent quality or exclusive design.

The advantage of glass

Surveys carried out by FEVE show that many Europeans prefer glass as a packaging material. This is undoubtedly partly thanks to the Friends of Glass initiative launched in 2009, which actively promotes the use of glass. With a highly committed campaign full of clever ideas, the scheme demonstrates to consumers why glass should be their first choice when it comes to health, family and the environment.

To make sure glass remains a sure favourite, FEVE continues to work on innovations, sustainable developments and helping to build a future-oriented recycling economy.

CLEAR VIEW

Marinated vegetables

With its two wide-mouth jars, Vetropack Moravia Glass demonstrates just how wonderful vegetables look in a jar. One is tempted to open the clear glass jars and taste their contents right away.

Both of the wide-mouth jars, which are made from flint glass at Vetropack's Czech plant, are designed for the vegetable mixtures produced by NÁHLÍK transport, s.r.o. The contents are clearly visible, and not just because flint glass does not hide anything. Even the round label resplendent on the twist-off cap allows for a free view of the appetising contents. The 520-ml glass container encasing peppers filled with fresh cheese and marinated cabbage is reminiscent of an amphora – a famous vessel dating back to the ancient world. Oil, wine and grains were just some of the things stored and transported in these bulbous, narrow-necked jugs with two handles. The slightly spicy peppers, grown in the South Moravian region of the Czech Republic, are also surrounded by oil – sunflower oil, to be precise.

Soaking in a sweet-and-sour liquid rather than oil, the vegetable mixture features onions, gherkins, peppers and carrots laid out in aesthetically pleasing layers of each type of vegetable. This mixture in a 425-ml jar is the perfect accompaniment for a variety of dishes.



BLOSSOM HONEY

In sync with nature

Honigmayr's honey comes from plants around the world and is available in wide-mouth jars by Vetropack's Austrian plant. It is available in 500 g jars for a small treat, while the 1 kg jar is a good option for those who like to use more honey to sweeten their food.



The wide-mouth jars made from flint glass are available in a new design for the honey produced by the Austrian family-owned company Honigmayr. The 400 ml and the 700 ml jars by Vetropack Austria boast elegance and simplicity as well as a new opening. The lid of the deep twist-off closure is slightly higher than the usual one. The paper labels are adorned with a drawing, such as of flowers for the blossom honey. The product name and logo are naturally both clearly visible on the label.

The Salzburg company has a long-standing tradition of producing high-quality natural honey dating back to 1920. The quality of every jar is checked and verified manually. This is because Honigmayr does not just focus on quantity, but rather on quality. Routine, expertise and a love of the craft are at the heart of all it does. And of course the honey suppliers themselves – this natural product would not exist were it not for the bees.

REFINED DISHES

A wide array of vegetables in one jar



For its new vegetable semi-products, the food and beverage manufacturer Hamé based in the Czech Republic has opted for wide-mouth jars made from glass. These are produced at Vetropack's Czech plant in Kyjov.

Vegetable mixture Peperonatka produced by the Czech food and beverage manufacturer Hamé is a great choice for those who want to prepare a quick yet healthy meal. Vetropack's 375-ml wide-mouth jar can be opened easily and efficiently in one go. The contrast of the luminous red contents, the yellow screw lid and the colourful label create a harmonious overall look.

Peperonatka is made of a combination of chopped tomatoes, peppers, onions, courgette, carrots, garlic and tomato purée. It can be prepared with different types of meat. Whether it is baked, cooked, stewed or prepared as a sauce, Peperonatka lends every dish an intense and aromatic flavour.

SOFT

Shaped by water

This glass bottle, designed to resemble an oxygen cylinder by Vetropack's Ukrainian plant, is filled with mild vodka. This taste is the result of its special manufacturing process, which mimics a waterfall.

You should never drink vodka as if it were water. Nevertheless, the flint-glass bottle by Vetropack Gostomel brings water to mind because of its unique closure which looks like a tap's screw top. The same floral pattern can also be seen directly beneath this distinctive cap, above the short neck. The body of the bottle is elegant and linear. The three feet attached to the bottom are one of the 0.5-litre bottle's eye-catching features, which make the bottle appear bigger. The whole design resembles an oxygen cylinder.

The Vozduh vodka produced by the Ukrainian company LLC National Vodka Company boasts a mild taste, which it gets from the special manufacturing process. The vodka is enriched with oxygen in a special whirlpool during the distillation process, which mimics a waterfall from a height of three metres splashing into a mixing tank. The company, which is based in the Cherkasy region (south-east of Kiev), further developed and modernised this technology especially for this particular vodka.





TAGTRAUM

Sweet dreams

Vetropack Austria produces wide-mouth flint glass jars for the new "Tagtraum" ("Daydream") product range from Darbo. They say that good things come in small packages – that is certainly true of both this 105-ml glass container and its light and airy contents.

Small, sweet and perfect for a fruity snack. This sums up the fruit mousse produced by Darbo and the glass packaging it is encased in. The 105-ml jar with its striking bulbous shape is made at Vetropack's Austrian plant in Pöchlarn. It comes wrapped in a cardboard sleeve, which had to be perfectly coordinated with the jar inside since the glass container itself, which features a twist-off cap, has no other label once it has been released from its wrapper. It therefore offers a wonderful uninterrupted view of its mouth-watering chilled contents.

Amid all the hustle and bustle of everyday life, don't we all wish we could take a moment from time to time just to sit back and dream? Our wish has been granted thanks to this combination of exquisite fruit and coconut extract. The light and fluffy fruit cream, which is available from Austrian supermarkets, is vegan-friendly, lactose-free and comes in three flavours: strawberry and raspberry, mango and passion fruit or fruits of the forest.

SYMBOLIC

From Albania's largest brewery

Vetropack Straža makes the green glass bottles for the "Birra Tirana" beer, brewed in Albania's capital city. The 0.33-litre glass container is adorned with key symbols stemming from Albania's history.

The emblems of Albania's capital city are brought to life on the beer's green glass bottle, with engravings of a horse, the clock tower or the Skanderbeg monument, among other things. The ruling prince George Kastrioti, known as Skanderbeg, defended Albania against the Ottomans in the 15th century – something he has been hailed a national hero for ever since. The glass specialists at Vetropack's Croatian plant produce the 0.33-litre bottle with a crown cork for the Tirana beer. The glass container has a long bottle neck and a similarly long, slightly contoured body.

"Birra Tirana" is Albania's largest brewery and has been producing beers, such as Pilsners and lagers, since 1960. The hop drinks contain malt, hops, yeast and water. The light and clear colour and delicate flavour of the humulus lupulus hop, which is also called the "common hop" among specialists, are characteristic features of the beers. The Birra Tirana products stand out from the crowd thanks to their taste and premium quality ingredients.



STRONG

A vodka steeped in tradition

The Lviv distillery produces distilled drinks of a superb quality. Delights like these belong in high-quality glass packaging, such as Vetropack Gostomel's flint-glass bottles.

Pronounced yet soft shoulders and a long bottle neck lend the Lemberg Vodka produced by the JSC Lvivska Distillery an elegant yet grounded appearance – as though not even a gust of wind could topple this traditional vodka. The 0.7-litre flint-glass bottles are produced by the glass specialists at Vetropack's Ukrainian plant in Gostomel. The two black-and-white labels are also round like the bottle's shoulders. Lviv's coat of arms – a wall with three turrets and a lion under an archway – is engraved into the upper part of the bottle's reverse side. The lower part of the one-way bottle with a cork cap bears a transparent label with a painting of the city of Lemberg, the German name for Lviv.

The Lviv distillery has already received a great many awards for its spirits and is well known beyond the country's borders. The specialists use grain alcohol graded "Lux" for their vodka. Before the vodka is bottled, it passes through a filter with charcoal and quartz sand, giving it a clear and soft flavour.

**POWERFUL**

Fruity beers

Vetropack's Ukrainian plant in Gostomel produces the long-necked bottles for the GAISER mixed beer drinks. They contain water from the Poltavpivo brewery's own spring.



Cherry or lemon? These are the flavours on offer to consumers of the GAISER mixed beer drinks created by the Ukrainian Poltavpivo brewery. The 0.42-litre bottles by Vetropack Gostomel stand out because of their tall and thin body. Their round shoulders, narrow neck and pull-off cap provide the finishing touches to the whole look. In the flint-glass containers, the redness of the cherries and the yellow of the lemons shine brightly and attract attention. "GAISER Kriek Max" is a Belgian cherry beer with a balanced sweet-and-sour cherry flavour as well as a bitter beer taste. "GAISER Lemon" refreshes the palate thanks to its powerful lemon taste combined with subtle notes of grapefruit.

Poltavpivo uses its own spring for the excellent beers, which are renowned far beyond the country's borders. The combination of local water, modern technology and natural ingredients ensure full-flavoured beers. Whether they are an alternative drink before dinner or a fruity accompaniment to tasty meals – GAISER mixed beer drinks are a highlight both in terms of style and taste.



ARTISTIC

Classic packaging enhanced with striking designs

Vetropack's Croatian glassworks in Hum na Sutli produced the glass bottles for a special limited edition of Coca-Cola in Serbia. Vibrant sleeves designed by Serbian artists lend an unforgettable touch of local colour to the iconic contour bottle design.

Whether it comes with or without a label, the Coca-Cola glass bottle is unique and famous the world over. For a special edition to be sold in Serbia, Vetropack Straža produced 0.33-litre flint-glass bottles with a crown cork closure. However, all consumers can see of the crystal-clear bottle itself is its silhouette, as it is virtually entirely covered with a colourful printed sleeve. This is the second time that Coca-Cola has launched an exclusive limited edition of glass packaging for its iconic soft drink.

Six local artists designed the close-fitting sleeves based on the theme of "values and typical characteristics of the Serbian people". Hospitality, ingenuity, creativity, a love of music and good entertainment are just some of the qualities that inspired the six distinctive Coca-Cola bottle designs created by Nemanja Jehlička, Monika Lang, Aleksandar Savić, Vesna Pešić, Petar Popović Piros and EmaEmaEma, artists who are well-known in their country.

ALCOHOL-FREE

New size

Designed with clear lines and a taste that is just as clear, the Italian soft drink Ginger Baladin stands out from the rest. Vetropack Italia produces the flint-glass bottles, which now hold 0.33 litre rather than 0.25 litre.

Great news for lovers of Ginger Baladin: the popular soft drink is now available in a larger bottle. Vetropack's Italian plant in Trezzano sul Naviglio manufactures the 0.33-litre bottle. The orange-coloured Ginger Baladin shines particularly brightly through the flint glass. The engraving with the logo and the company name adorn the glass container, which boasts a crown cork.

Don't be fooled by its name – the soft drink does not actually contain ginger, but rather water, cane sugar, lemon juice and herbs. Bitter and sweet orange zest, spices and a hint of vanilla give the drink refreshing yet tangy notes.



FOR THOSE WITH A SWEET TOOTH

Sweet and fruity delights as far as the eye can see

Vetropack's Czech plant in Kyjov has come up with two dazzling flint-glass containers from its standard range for the food manufacturer Madami. Lovers of sweet things can enjoy raspberries in two different varieties and honey containing pieces of orange.

The glass containers produced by Vetropack Moravia Glass for the Czech food producer Madami are full of contrasts. The 1-litre bottle for the raspberry concentrate has a slim body, which tapers slightly from the shoulder to the top. The twist-off cap creates that well-known "pop" sound when opening the bottle. Fruit concentrate is perfect for making exquisite hot drinks or for refining dishes. The raspberries are full of summer flavour, which is great for conjuring up a bit of sunshine on cold winter days too.



The "warm raspberries" have the same taste and are stored in a 520-ml flint-glass jar shaped like an amphora. Covered with gold and pink paper, the twist-off cap also has a gold band bearing the label. The raspberries can be used to refine desserts or sweet dishes. Madami also uses this jar for its honey featuring candied oranges and slices of fresh orange. This sweet spread also contains orange and fruit concentrate – so lovers of fruity honey can rejoice!

MAJESTIC

150-litre anniversary wine bottle

Vetropack Switzerland joined forces with its customer Les Domaines Rouvinez to create a special 150-litre wine bottle for the "Foire du Valais" autumn trade fair in Martigny, Switzerland. It was designed to celebrate both the 7,000,000th visitor to the trade fair and the 70th anniversary of the Rouvinez vineyard, which produces the fine wine contained in the bottle. The anniversary bottle was made by Normag Glas in Hofheim am Taunus, Germany.

The Martigny-based organisation Cevins SA (a subsidiary of Les Domaines Rouvinez) offers a full range of winemaking services – from cultivating the vines right through to filling the bottles. The company buys in bottles for its wines from Vetropack Switzerland. To mark the 7,000,000th visitor to the "Foire du Valais" autumn trade fair, which attracts 400 exhibitors, Vetropack's glass specialists teamed up with Cevins to develop a gigantic flint-glass bottle to hold 150 litres of wine from the Rouvinez vineyard, which is also based in the Valais region. Domaine Rouvinez celebrated its 70th anniversary this year. The bottle was produced by the German company Normag Glas, which specialises mainly in laboratory and process technology. Such an impressive bottle as this deserved to be showcased in an appropriately dignified way. It was therefore majestically enthroned on a specially



made wooden pedestal that could be tipped to pour out the wine, making it much easier to do so.

TRAINING CENTRE

Training on the job

It's that time again! The first courses for production staff recently got under way at the Group-wide training centre in Pöchlarn, Austria. The programme looks at glass-specific expertise, efficiency and quality as well as production output.



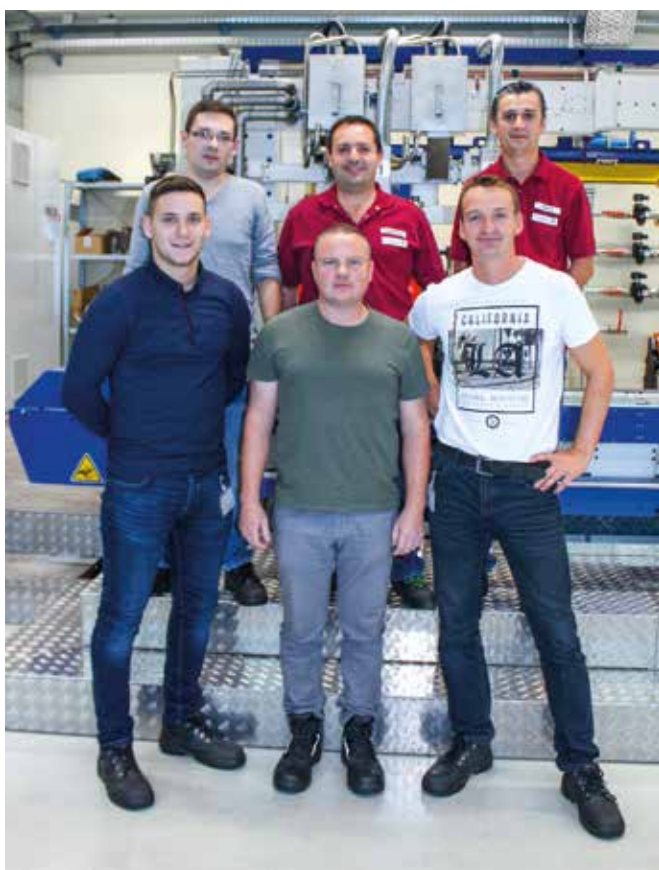
Having invested countless hours in getting this major project successfully off the ground, all those involved were visibly delighted to see the training centre open its doors. This is the first time in the company's history that Vetropack is training staff to work in its own glassworks. The centre is run by glass engineer Cristian Cassarino, an employee at Vetropack Austria in Pöchlarn. He is responsible for organising initial and further training for newcomers, career changers and glass specialists, as well as for developing Group-wide training modules on the various process stages and procedures involved in manufacturing glass. The glass technology supervisor is just the right man for the job. "It teaches me a lot too," says Cassarino. "The learning process begins as I'm preparing the courses and peaks during the courses themselves, when I work closely with the participants. I've never trained colleagues in such depth before."

Understanding and implementing the entire glass production process

Three basic courses are currently being run at the training centre. Staff learn all the ins and outs of the glass production process as well as how to correctly configure and use the technology involved. The emphasis is on training on the job. A total of four learning stations have been set up which can simulate the various stages of production. Participants can practise all the working steps at the hot end of production – i.e. at the stage when the glass is moulded – and learn how to fix faults and change the settings on the machinery. "The issue of safety is our key concern at this stage," explains Cassarino. "Work-related accidents can only be avoided if we have the right knowledge in place."



The programme is continuously being expanded and adapted to current demand and employees have the opportunity to attend week-long or even individual one-day courses. "Of course, it isn't as simple as just leaving your current shift to come and do some training," says the centre manager. "I have to consult with the supervisors and be willing to be flexible."



A new apprenticeship

After teaming up with other companies from the glass industry, Vetropack successfully set up a "Glass process engineer" apprenticeship with the aim of training its own production staff. This was in response to a previous lack of training available in Austria for aspiring glass production specialists. The dual vocational training course is practice-focused, packed full of essential knowledge and supplies Vetropack apprentices with the necessary expertise to handle the highly technical and largely automated production processes.

Johannes Schuster, who is responsible for apprentices at Vetropack Austria, is also taking the lead on this training. Each year, eight apprentices will have the opportunity to get to grips with this varied vocation in Pöchlarn and Kremsmünster, with the first due to begin in autumn 2018.



DECORATIVE

Christmas tree ornaments made from glass

Decorating a Christmas tree is a long-standing tradition. In the past, apples, nuts or sweet biscuits were often the only decoration on the green tree. In the mid-19th century however, glass baubles came into fashion and in many places to this day, they remain an essential Christmas decoration.

A decorated Christmas tree doesn't just make children's eyes sparkle. As an adult too you feel as though you have suddenly been transported back to your childhood, when you would look forward to this great moment for days on end. Or perhaps your joy and excitement had a bit more to do with the gifts under the tree? Either way, it was and still is an especially festive and reflective time each year.

From apples and nuts to glass

Did you know that, when the decorating tradition began, the tree was mostly adorned with apples, nuts, biscuits and other sweet treats? In the mid-19th century, glass Christmas tree ornaments began to be produced in the Thuringia region of

Germany. Legend has it that an impoverished glassblower from the village of Lauscha could not afford the expensive apples and walnuts so instead made Christmas-tree baubles out of glass. To this day, it still can't be proved if this is true. All we have is an order book from a local glassblower which documents an order for six dozen Christmas baubles in 1848.

What is undisputed however, is the fact that glass baubles were made in the town of Jablonec nad Nisou (formerly Gablonz) in what is now the Czech Republic, a region famous for its hollow blown glass. The popular objects were made from individual glass beads. In 1908 however, the production of these glass ornaments stopped. The baubles could be pro-



duced more cheaply in Japan and exports of Bohemian glass jewellery to India declined dramatically. This led to a new creation for which the region was still loved and famed many years later, known in German as the "Gablonzer Christbaumschmuck" (Christmas decoration from Jablonec). Christmas tree decorations were also already being made before 1914 in Moravia (the location of Vetropack's Czech glassworks) and in the Teplice region. From 1930 onwards, the region reached the pinnacle of its success, having exported up to 157 tonnes of these exclusive baubles, mainly to Switzerland, the USA, Lithuania and France.

Showcasing glass baubles

A unique collection of glass Christmas tree decorations can be seen at the Museum of Glass and Jewellery in Jablonec nad Nisou – with more than 15,000 items on display. But it is not just the size of the exhibition that is spectacular however – it is also the array of colours and shapes as well as the blend of traditional and modern decorations and designs. This diversity is grouped into eight categories in the permanent exhibition: "Baubles", "Christmas-tree toppers", "The Christmas sky", "Winter fun", "Fairy-tale Kingdom", "Inspired by nature", "The world around us" and "Exclusive pieces".

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