

Vinolok Sustainability Report

June 2022



BOHEMIAN CRYSTAL TOP



Environmentally
Responsible
Company

Our commitment to sustainability drives all parts of the glass production and delivery.

Sustainability process

Glass, the main part of the Vinolok closure, is endlessly recyclable without any loss in quality. It can be melted repeatedly and transformed into new Vinolok closures or other glass products. Even the sealing ring is recyclable in the same way as low density polyethylene (used in juice and milk cartons). The result is 100% recyclable closure. Vinolok’s commitment to sustainability drives all parts of the glass production and delivery.

Vinolok strictly adheres to a comprehensive program of environmentally responsible business practices and manufacturing procedures that comply with all major EU standards and legislation.

Technologies are regularly submitted for voluntary audit to accredited laboratories and organizations to ensure an adequate compliance levels and to guarantee safe working conditions for our employees worldwide.



Local sources

Vinolok glass closure is made from the best raw materials mainly from local sources



At the same time production takes place in northern Bohemia, mining of glass sand, glass melting and pressing takes place [locally within 40 km](#) from the company headquarters. The company is responsible while sourcing all needed material for the overall production.

Localizing our supply chain represents a tremendous opportunity to help the environment. When we reduce shipping and storage, we also reduce emissions and energy usage.

Water conservation

Vinolok adheres to strict emission limits of pollutants set for water discharged into sewage systems. We have a closed loop of cooling water which has **reduced water consumption** in our glass melting process to minimum.



Internal recycling

99%

99% of glass cullet from the Vinolok production is used again for production of the closures. [Glass recycling has a direct impact on climate change.](#) The use of recycled glass reduces emissions (carbon dioxide) and saves energy. Recycled glass melts at a lower temperature than virgin materials. Use of recycled glass instead of virgin materials helps conserve natural resources.





Vinolok always strives to save energy throughout the whole production process

↓70%

After decentralizing the heating system in 2019 in our HQ and production plant, we reduced the incoming energy consumption (kW/h) by 70% during the first heating season compared to the same period of the previous years.

Nano washer

Nano washer with nanotechnology for washing printing inks was installed instead of the existing washer with distillation equipment

VOC (volatile organic compound) emissions into the air have been reduced by 15%. The consumption of washing solvents has been reduced by 23%. At the same time this has led to a reduction in hazardous waste from filters from the distillation equipment. The reduction occurred even though the number of printing lines has increased from 3 to 4.

Washing solvents

↓23%

VOC emissions

↓15%



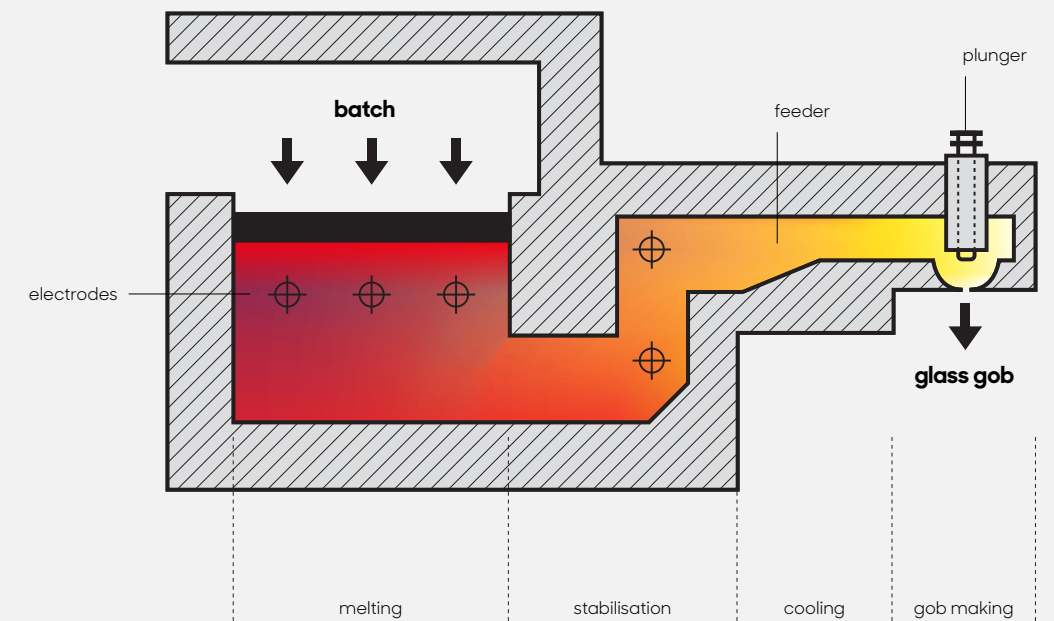
Glass melting

At Vinolok we use the most efficient electric glass melting.

This method does not pollute the immediate surroundings of the production plant with fumes, as there is very little direct emission of combustion products and dust.

Preparation of the batch

Preparing the right mixture is essential to maintain 100 % glass quality. We only buy certified materials and verify their quality. That is why we regularly perform chemical analysis of our glass. There are automatic mixers in our plant that ensure accurate dosing of each component and help us prepare a batch with minimal variation of the components of the mixture. The whole batch is completed by adding cullets to the mixture which facilitates the melting process, is less energy intensive and chemically more stable. The amount of cullet is constantly checked and optimized by our technologists. We also have a sophisticated system for marking individual containers using codes and colours in order to deliver the right batch to the right furnace.





Waste managament

From factories to offices,
Vinolok company seeks
to reduce waste through the
following initiatives:

- production (glass) waste is recycled to become a new, usable material
- recycling bins are placed in each production plant, office and common area
- waste from the employee canteens is transported to a biogas plant for energy production
- drinking tap water is available in all manufacturing plants and office buildings, as well as Soda Streams and water barrels to reduce the number disposable plastic bottles
- only at the production site, we save 8760 bottles/year

Packaging and shipping

68%

The cardboard box in which closures are supplied is made of recycled material (68%) and is suitable for further recycling after use. The surface is made of primary fibre to ensure the hygiene of the packaging.

New design of Vinolok cardboard boxes reduced the consumption of used material by 19% compared to the existing box

The new design is the result of process that strives for cost savings and material consumption. Developed together with SmurfitKappa

-19%



100%

The pallets used to transport Vinolok closures are 100% reusable.

The new stretch wrap is used for the final packaging of pallets. New stretch MimaLite wrap, has the same material composition as the previous one, lower weight 34 % of previous wrap), smaller volume .

34%



80%

The trays that hold the closures in place during transport are made of PET three layer foil. The inner layer, which represents 80% of the total blister thickness, is made of already recycled PET material. Both outer layers are made of virgin PET material and thus meet the hygienic specifications or the material coming into contact with food. The entire tray is completely recyclable.

The efficient design of the trays allows them to be stacked tightly on top of each other and wrapped into a sturdy package. Smaller quantities can be thrown in the recycle bin for plastic. Larger quantities can be provided directly to a PET recycling company. Vinolok is ready to help customers find the nearest PET recycling company.





Fully
recyclable
closure

Fully
recyclable



The glass body



Glass is the main part of the Vinolok closure. It can be melted repeatedly and transformed into new Vinolok closures or other glass products. Glass is a substance made from natural materials and it is one of the few materials that is fully recyclable without loss of quality. Glass is an archetype of sustainable packaging and as such is usually the first choice for consumers who are environmentally conscious.

Fully
recyclable



The sealing ring



It is made of EVA (Ethylene Vinyl Acetate Copolymer) manufactured by DOW. It is not silicone resin and it is **PVC , phthalates and bisphenol A free**. It complies with European regulations for materials intended to come into contact with food and beverages. **It is not glued to the closure**, you can remove it by hand and recycle in the same way as low density polyethylene (used in juice and milk cartons).

For the love of nature



vinolok.com/sustainability

