

## **CarbAlpin: "We see big growth potential in *Food E-Commerce*".**

*Johannes Daum is head of production and sales at CarbAlpin, a well-known player on the Italian CO<sub>2</sub> market. CarbAlpin was founded with the aim of simplified access to fresh dry ice for customers from South Tyrol and Trentino. In addition to the dry ice business, they also specialize in the filling of technical- and food gas. CarbAlpin's main customers include around 130 wineries as well as companies in the refrigerated logistics, food and pharmaceutical industries.*

### **Question 1: Let us have an insight into CarbAlpin. In addition to food and technical gases, you also supply dry ice. How big are the two business areas compared to each other?**

Currently, the share of dry ice accounts for 88 % while the technical gases have a share of only 12 % of the turnover. An interesting aspect is that, unlike most dry ice production companies, CarbAlpin did not start out selling technical gases but focused initially on the production of dry ice.

Our high CO<sub>2</sub> consumption has made us a known quantity on the Italian CO<sub>2</sub> market. Meanwhile, we are venturing more and more into the field of gas filling for technical and food gases. This step is particularly important for our company, as the massive price fluctuations and supply bottlenecks on the CO<sub>2</sub> market have made us realize how important it is to be broadly positioned and able to diversify our products. Nevertheless, dry ice remains our core business and we will continue to focus on it.



Interview Partner Johannes Daum

### **Question 2: Which are your most important customer industries and which is your best-selling dry ice product?**

Our company is located in South Tyrol and is surrounded by about 130 wineries which mainly produce white wine. It was therefore no coincidence that we specialized in supplying wineries, especially for vinification by cold maceration. Thanks to our proximity and high production speed, we are able to respond optimally to the needs of wineries and have become an important partner for them.

Since wine production is a very seasonal business, it was important for us to find a stable utilization of our production machines. We have achieved this by winning new customers in refrigerated logistics. In 2021, the volume of dry ice sales in refrigerated logistics surpassed the wine production segment for the first time and is now by far our most important industry. This means that the demand for the dry ice blocks is the highest and it has replaced the previous standard 3 mm pellets.

**Question 3: You are producing your own dry ice with ASCO-Pelletizers. What is the difference or the advantages of dry ice to other cooling materials?**

Dry ice offers some distinct advantages over other coolants. It leaves no residue or moisture, is extremely cold, and allows for rapid cooling. It also sublimates without melting, making it easier to handle and dispose of. These characteristics make dry ice ideal for applications that require a dry environment, such as the food and pharmaceutical industries. For these reasons, we produce our own dry ice using ASCO pelletizers.

Our decision to use dry ice production machines from ASCO is based on our focus on quality and our need for reliable production. We cannot afford any production downtime, so we rely on ASCO's proven quality and performance. Furthermore, ASCO offers an optimal price-performance ratio, which is of great importance for our company.



Dry Ice Production Machine ASCO P28i

**Question 4: With your ASCO-Reformer you are able to produce dry ice slices and blocks from dry ice pellets. What are the application areas for dry ice slices and blocks?**

We use our reformer primarily to produce pressed dry ice blocks, which are mainly used in refrigerated logistics and food e-commerce. In particular we see food e-commerce as an industry with great potential and are counting on successfully introducing our dry ice products in this area. By using pressed dry ice blocks, we can ensure efficient and reliable refrigeration for the developing online food trade.

**Question 5: CarbAlpin has expanded its dry ice business in recent years. When and why did you decide to produce dry ice?**

Originally, we were interested in dry ice blasting technology and run initial machine tests. However, we found that it was difficult to obtain fresh dry ice in our region. When we realized the growing market for dry ice production, we made the decision not to pursue dry ice cleaning any further. We wanted to avoid competing directly with our future customers and having a conflict of interest.



ASCO Reformer

**Question 6: “Carbon Capture” is a main focus in many industries. What are your CO<sub>2</sub> sources and do you consider using recovery solutions to maximize your conversion rate from liquid CO<sub>2</sub> to dry ice?**

As we know the CO<sub>2</sub> market well, we already recognized the emerging instability and supply problems several years ago and responded accordingly. We are aware that the current development is putting smaller dry ice production companies under pressure, as they are finding it difficult to produce and sell dry ice profitably due to fluctuating market prices. For this reason, we decided to install a recovery system some time ago. We use recovery solutions to maximize our conversion rate from liquid CO<sub>2</sub> to dry ice. By recovering CO<sub>2</sub>, we can use resources more efficiently while reducing our environmental impact.

The investment in a recovery plant enables us to recover CO<sub>2</sub> from various sources and use it for dry ice production. This enables us to reduce our dependence on external CO<sub>2</sub> supplies and ensure a stable supply. It also contributes to more sustainable and environmentally friendly production, as we reuse CO<sub>2</sub> instead of treating it as a waste product.

Maximizing our conversion rate from liquid CO<sub>2</sub> to dry ice is an important aspect for us to use our production capacity efficiently and remain economically profitable. By using recovery solutions, we can achieve this goal and reduce our CO<sub>2</sub> footprint at the same time.

**Question 7: What are CarbAlpin next goals? Are there any new areas/services where you see potential for new business?**

Our next goals at CarbAlpin are to gradually expand our activities in gas filling. We have already taken the first step in this direction with the acquisition of LH900 and we do not intend to stop there. We see potential for new business areas and services in gas filling and we will continue to explore our options to diversify our business and take advantage of new market opportunities. In doing so, we will ensure that we maintain our high quality standards and meet the needs of our customers.



ASCO CO<sub>2</sub> Cylinder Filling System LH900

