

ASCO builds 312 MTPD CO₂ recovery plant for bio-refinery in Belgium

The Swiss ASCO CARBON DIOXIDE LTD is exclusive supplier of a CO₂ recovery plant for the new major project of Alco Bio Fuel, industrial gas specialist Messer and IJsfabriek Strombeek. Together, the three companies invest about 15 million euros in a new CO₂ recovery plant at the Port of Ghent.

In subsequent interview, ASCO Director Sales & Engineering Plants Marius Gorczyca explains why ASCO is just the right supplier for this major project and how the implementation process looks like.

Please tell us what the new project is all about.

The bio-refinery Alco Bio Fuel (ABF) and the industrial gas suppliers Messer and the Belgian gas company IJsfabriek Strombeek are joining forces to reduce CO₂ emissions in Belgium. Together they are investing about 15 million euros in a brand-new carbon dioxide recovery plant, established at Alco Bio Fuel in the Port of Ghent. During the summer of 2016, this new plant will be operational and process no less than 100,000 tons of green CO₂ each year. The required plant technology in its entirety will be provided by ASCO.

Can you briefly explain the advantages of such a recovery system.

This new ASCO plant recovers and purifies the CO₂ gas released during the ethanol fermentation process and converts it into a liquid. Result: a reduction of CO₂ emissions by 100,000 tons per year which allows ABF to lower their CO₂ footprint significantly.

Why do you think that the decision was made on a CO₂ recovery plant from ASCO?

As already announced last year, the business divisions for CO₂ production and recovery plant construction and dry ice technology of the German BUSE Gastek GmbH & Co. KG have completely been integrated to ASCO CARBON DIOXIDE LTD. Thanks to this merger, we were able to pool our strengths efficiently and expand our combined know-how as well as our product portfolio. Especially in the complex field of CO₂ recovery we can now meet the growing economic and environmental customer needs with innovative solutions. Also,

we are able to realise such large-scale projects with capacities of over 100,000 tons of CO₂ recovery per year.

Please tell us a few words about the implementation process?

The launch of this project was already carried out in May this year. The special feature here: ASCO will also take over the installation of the plant which will be delivered as so called “turn key”. We expect the customer to start with the CO₂ recovery summer 2016.

What exactly is included in the ASCO portfolio for plant technology?

With our strong engineering team we are able to cover virtually all market needs in the wide field of CO₂ production and recovery. ASCO offers solutions for various CO₂ sources, whether it be natural sources, stack gas from combustion of fossil fuels, brewing and other fermentation processes, flue gas from the production of ammonia, hydrogen or ethylene oxide or numerous other industrial sources. The plant capacity depends on the type of installation and goes from 35 kg/h for test facilities up to 15,000 kg/h for large systems for the gas industry. Just this month, we are installing a plant with a daily capacity of 360 MT/D for a customer working in the gas industry in the Caucasus region.

What is ASCO’s individual key to success?

"All about CO₂" – our credo says it all. We are exclusively dedicated to this gas in all its facets and versions. Our complete range of CO₂ and dry ice solutions also includes special projects, security concepts, training and consulting. Utterly all components which are required on the road to a successful CO₂ project.

An also important factor for success is customer care offered by our customer service after a project is finished. So we ensure a sustainable customer satisfaction.

Do you consider the current project an exception in terms of sustainability or are there signs of changes recognisable in handling industrial produced CO₂?

The trend is clearly more and more towards CO₂ recovery from already existing stack gas or natural sources, not least because of the environmental benefits like a reduced CO₂ emission. Of course, economical factors such as lower operating and production costs and an independence of external CO₂ suppliers play a crucial role for companies as well. Not to disregard that we serve the most diverse markets worldwide. However, companies are becoming more and more aware of the possibilities to recover CO₂ from various sources rather than to produce it themselves – even in third world and emerging markets. This

rethinking process is definitely an important step in the right direction in order to effectively reduce CO₂ emissions.

Future prospects: What is your opinion regarding market development in the next few years? How exactly does ASCO's role look like?

Companies are becoming less able to deny the idea and importance of sustainability. From our point of view, CO₂ recovery facilities are firmly connected with ecological approaches and it is ASCO's highest priority to advance these technologies. We continue to be expansion-oriented and pursue a variety of projects, especially in the wide field of CO₂ recovery. We want to identify opportunities for our customers so they truly consider an own CO₂ recovery onsite, also from sources with lower purity such as stack gas. This approach is of utmost importance to us. Our ASCOSORB CO₂ stack gas recovery technology provides a very energy-efficient CO₂ production which pays off for companies both ways, ecologically and commercially. Thanks to the merger with BUSE, major projects like the one at the Port of Ghent can now be realised successfully.

Graphical material:



Marius Gorczyca, Director Sales & Engineering Plants at ASCO, answers questions about the new major project of a 312 MTPD CO₂ recovery plant in Belgium and the extended ASCO portfolio for plant technology.

About ASCO

Swiss ASCO CARBON DIOXIDE LTD is a provider of complete CO₂ and dry ice solutions with customers worldwide. The product range goes from CO₂ production and recovery plants, recovery from waste products with highly concentrated CO₂ to CO₂ recovery from biogas. The plant capacity depends on the type of installation and goes from 35 kg/h to 15.000 kg/h.

Furthermore we provide you with dry ice blasting units, dry ice production machines, CO₂ cylinder filling systems, CO₂ vaporisers, CO₂ storage tanks, CO₂ dosing systems for water neutralisation and various other CO₂ and dry ice equipment. Thanks to this broad product range and more than 120 years of practical experience in the wide field of CO₂ and dry ice, customers benefit from individual, complete CO₂ solutions

from a single source. Since 2007 ASCO has been part of the international industrial gas enterprise Messer Group and is its competence centre for CO₂. By joining forces with the German BUSE Gastek GmbH & Co. KG, based in Bad Hönningen, in the year 2014, the expertise and product portfolio was pooled and significantly expanded. This applies in particular to the complex field of CO₂ recovery. www.ascoco2.com

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