Media Release

Oerlikon Leybold Vacuum offers compact and versatile vacuum option for Food Industry

Energy Saving with Optimized Vacuum Solutions for Vacuum Baking and Freeze Drying

Cologne, March 4, 2015– Oerlikon Leybold Vacuum exhibits food processing vacuum solutions at the CFIA Rennes, France and the ANUGA Foodtec, Germany.

Oerlikon Leybold Vacuum is supplying the Food Processing Industry with advanced vacuum solutions. Apart from applications in Food Packaging, other food applications including Vacuum Baking and Freeze Drying are gaining more and more momentum, now requiring increased focus on fast and energetically effective vacuum solutions that are replacing aging and highmaintenance equipment at older food processing plants.

Beginning in 2015, Oerlikon Leybold Vacuum received a larger order from a Swiss equipment manufacturer.

The company is a world leader in food technology and developed various methods of food processing under vacuum, providing substantial improvements in product and process quality. The pump models made by Oerlikon Leybold Vacuum will be implemented in the freeze-drying system of a German supplier who produces twenty tons of instant coffee powder per day.

Modern vacuum pumps with their very compact design, high efficiency and the possibility to use an external frequency converter such as the RUVAC WH series match the requirements of the customer to an extremely high degree. These pumps can be integrated e.g. in current freeze drying system leading to a considerable savings on energy cost. At the same time these pumps delivers a higher pumping speed which will give the customer a much needed upgrade in their production with increased flexibility.

Other food processing manufacturing processes also profit from the advantages of applying modern vacuum technology, as seen in the vacuum conditioning of industrial bread baking. Here, simple physical principles are applied. At atmospheric pressure, water boils at 100 ° C. Decreasing the atmospheric pressure decreases the boiling point. If the pressure is at 42 mbar, the water already evaporates at 30 ° C, the energy necessary for baking stems from the still almost warm oven baked product. If the baked goods are subjected to vacuum cooling, this is done in 2 - 6 minutes, with the steady withdrawal of the water content preventing a possible condensation, the so-called gelatinization within the product.

This vacuum-based baking technology offers significant advantages for plant manufacturers, producers, bakers and consumers. While customers can purchase perfectly baked products almost around the clock, manufacturing and distribution channels are saving money, as significant cost reductions are possible in logistics, plant foot-print and in streamlining work economics. Depending on the plant design, cost reductions may reach 50%.

Vacuum technology with modern pump solutions therefore opens up a significant increase in the quality

and productivity, and highlights the potential for improvement in terms of production time, infrastructure,
human resources, logistics costs, raw materials and energy consumption.
The proven reliability of the variable combinations of oil-sealed SOGEVAC and RUVAC pumps with
the modern dry compressing DRYVAC pumps combined with an up-to-date technical concept will ensure optimized process stability.