

Sullair Rotary Screw Compressor Reliably Serves Guatemalan Brewery for Over 27 Years

The Cerveceria Nacional, S.A. brewery in Quetzaltenango City, Guatemala, is the country's oldest brewery, and it owes a small part of its quality reputation to a Sullair rotary screw compressor that has been providing dependable service since 1978. A unit of Castillo Corporation, the Cerveceria brewery reputedly produces the best beer in Central America and has won several international awards.

Maintaining such high product quality standards as Cerveceria's business grew required parallel investments in plant and equipment. So as the brewery's production increased, the original 100 hp Sullair compressor was later joined by three more Sullair compressors to keep pace with the facility's growing air needs.

Compressed Air Used for Vessel Cleaning

Before every batch of beer is started, the Cerveceria brewery sanitizes its vessels; part of this operation uses 100 psi compressed air for thorough blast cleaning and drying. This operation consumes the majority of the brewery's compressed air capacity.

Any brewmaster will tell you that spotless cleanliness is as important to quality beer as fine ingredients and the best brewing recipes. Brewing vessels and piping must be kept meticulously clean to prevent unwanted microbes and other contaminants from interfering with fermentation and flavor development. Clean, oil-free air is essential to the cleaning process.

100 hp Compressor Installed in 1978

In 1978, the Cerveceria brewery needed to replace a Nash 150 hp compressor with a capacity of 350 cfm at 100 psi. Distribuidora Tecnica, S.A., Sullair's distributor in Guatemala, helped the brewery select a Sullair model 25-100H 24KT™ rotary screw compressor. Mr. Cortez, the plant engineer at the time, was surprised to learn that the new Sullair unit was capable of delivering 450 cfm of air at 100 psi using a smaller, 100 hp drive motor.

The compressor, along with new drying and filtration equipment, was installed and started up in August, 1978. The brewery air system was designed to very high, food-grade standards, with all-stainless steel piping and a dedicated clean machine room.

APPLICATION REPORT

Additional Compressors Installed in 1990, 1996 with Integrated Control

As Cerveceria Nacional's production expanded, the brewery needed increased compressor capacity. With 12 years of reliable performance from the first Sullair compressor, brewery engineering staff specified two Sullair model 20-100H 24KT™ compressors in 1990, and another of the same model in 1996.

Output control on individual compressors is accomplished with Sullair's variable-capacity "spiral valve" technology, which progressively opens and closes a series of bypass ports on the Air-end to adjust the effective compression volume. This allows the motor and Air-end to run at optimum speed and maintain peak efficiency. Energy cost savings with this technology can reach 17%, and it is especially well-suited for meeting fluctuating air demands like those in the Cerveceria brewery.

Each of the newer compressors is equipped with Sullair's Supervisor™ controller, which monitors operating conditions and indicates servicing needs. All four of the brewery's Sullair compressors work in sequence through a Sullair Master Energy Conservator™ controller that regulates operation of each machine to meet air demand in the most economical way. According to Mr. Otto Rojas, Cerveceria's plant engineer, "The controllers are excellent tools that help us operate our compressed air

system at the lowest cost. We save on operating energy. And they help us keep up good preventive maintenance and accurate filter change intervals. Everything is based on the controller's electronic odometer."

Regular Maintenance a Key to Reliable Operation

Distribuidora Tecnica, S.A. helped the brewery set up a long-term preventive maintenance program. The distributor organization trained staff of Cerveceria Nacional to perform all aspects of maintenance. The brewery runs its day-to-day maintenance program, and consults with Distribuidora Tecnica on an as-needed basis to keep the program up to date.

Says Mr. Rojas, "Distribuidora Tecnica, S.A. has a close relationship with us. When we request support from them, they spend the time and resources to fulfill our needs and make sure our equipment continues to perform at one hundred percent."

The brewery uses Sullair's 24KT™ silicone-based semiorganic lubricant. In Sullair compressors designed to operate with this fluid, it provides such complete protection that Sullair warrants a 24KT™ Air-end for ten years—the best warranty in the industry.

27 Years of Operation without an Air-end Overhaul

Because Cerveceria Nacional has made an ongoing investment in proper operation and consistent maintenance,

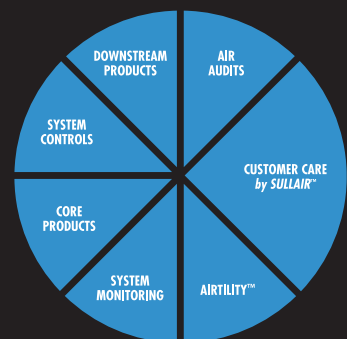
the original Sullair 25-100H 24KT™ compressor has accumulated its impressive 27-year record of reliable operation. Filter changes have been routine; the most significant maintenance operation was replacement of a heat exchanger. However, the machine is still operating with its original Air-end, which has never been opened for replacement of bearings or rotors.

Says Mr. Rojas, "All the components of the system are of very high quality. This helps us realize significant savings on maintenance and spare parts. We get very high quality air from our Sullair equipment, which brings many benefits to our process here at Cerveceria Nacional S.A."

Mr. Rojas continues, "We're very satisfied with our Sullair compressors; their reliability is a perfect complement to our production needs."



Sullair offers AirMetrix™ solutions that help reduce energy costs and improve productivity by analyzing, managing, and controlling the total compressed air system.



For more information on Sullair products and services, please contact your local Sullair distributor.



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