

Vacuum Installation for IVC in Piedras Negras, Mexico

Two Pneumofore UV100 vacuum pumps were commissioned in November 2019 and have been running 24/7 since then. Air-cooled, equipped with Variable Speed (VS) drive, these machines are perfectly suited for the vacuum supply of three IS lines in the new fifth furnace.

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This important installation comprised of two UV100 vacuum pumps supplies a total capacity of 12.800 m³/h, with the extraordinary adaptability to reach as low as 1.900 m³/h based on the production needs. The vacuum level is set here at 350 mbar(a), as required to run the hollow glass moulding process on the IS machines.

The production requirements, which may vary considerably due to the different mould shapes and the changing number of IS machines in operation, are well matched with constant vacuum thanks to the immediate data exchange that adapts the rotation speed of the UV100 vacuum pumps by means of the on-board VS drives.



Pneumofore UV100 Vacuum Pumps in Industria Vidriera de Coahuila (IVC)

At IVC, the digital communication is based on Rockwell Allen-Bradley components. Pneumofore designed a tailor-made vacuum system using the same communication protocols for the full integration with the remote monitoring and management system of the entire plant.

The flexible engineering approach of Pneumofore, akin to the flexibility of the vacuum system itself, fully met the customers' needs.

The local climatic circumstances in Mexico were taken into consideration, with the installation of these two air-cooled UV100. The pump room daytime temperature in Piedras Negras reaches easily 42°C, thus oversized cooling systems were installed on the machines for the lubricant circuit and the electrical panel.

The commissioning of the vacuum system was in November 2019. In just two days a Pneumofore engineer verified the correct positioning and installation of the vacuum pumps, the connections to pipes and the electric system, as well as the remote communication channels.

The collaboration between IVC and Pneumofore was smooth, based on similar production values and an ethical approach to work.

A vacuum installation of this size necessitates specific and detailed attention to the piping system, the pipe diameters and accessories. The entire system was designed, discussed and verified well ahead. The technical teams of Pneumofore and IVC collaborated at the outset of the project. The IVC engineers also appreciated their total independence in maintenance and the rare service needs of the Pneumofore vacuum pumps.

For the successful expansion of Pneumofore in the glass industry of Mexico, a great support was provided by the local partner, Alejandro Ontiveros Lozano (Ontal). The hundreds of Pneumofore vacuum pumps working in glass production plants worldwide, some running continuously over more than 50 years, represent also an incomparable reference portfolio.

With local and international travel restrictions due to the pandemic, most manufacturers find it difficult to provide timely service and assistance. Pneumofore machines guarantee instead peace-of-mind even in difficult circumstances, as all machines are designed for efficient longevity and tested in-depth before delivery. The ease of service and maintenance operations make the Pneumofore UV vacuum pumps the preferred solution for responsible technicians in glassworks worldwide.