



The first contact with Sişecam, the prestigious glass producer in Turkey, goes back to 1997. The air cooled, ready-to-use UV pumps were first installed in new Russian plants of the Sişecam group. In June 2008 also the traditional Yenishir plant was supplied with two UV50 pumps.

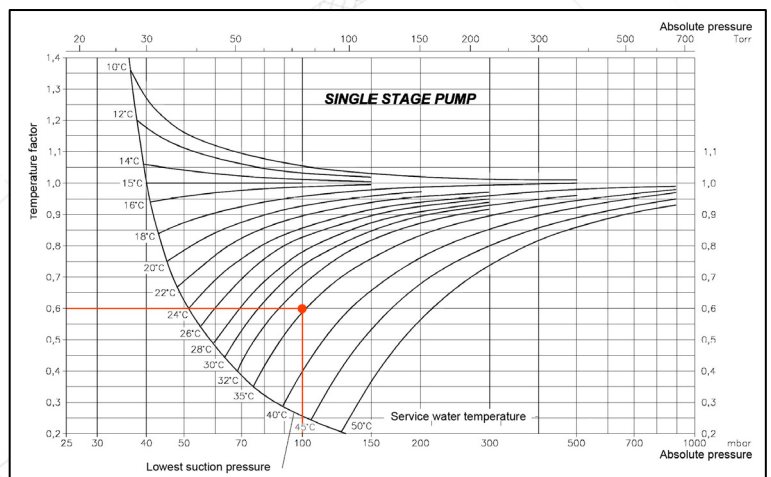
The oldest Sişecam hollow glass factory is sited near Istanbul and the vacuum was generated by liquid ring pumps. A reliable, durable but costly solution in terms of power consumption. The considerable high temperature of the cooling water used for liquid ring pumps made their efficiency quite low, see the table below with "Temperature Factor" versus "Absolute Pressure" showing the curves at different service liquid temperatures. An example: a liquid ring vacuum pump with cooling water of 35° C at 100 mbar(a) reduces the capacity by more than 40%, thus a nominal capacity of 3.000 m³/h at 15° C becomes less than 1.800 m³/h using water of 35° C. Following this physical phenomena, several alternative technologies were tested in the plants near the headquarters of Sişecam.

For the new factories in Russia, where cooling water is exposed to the opposite risk of freezing, many air cooled UV pumps were installed, mainly models UV30 and UV50. The oldest Pneumofore delivery to Sişecam in Russia was 1 x UV30 and 1 x UV16 in Gorohovets during 2002. The latest was 2 x UV30 in Kuban and 2 x UV50 in Ufa Plant during 2008 with the total of 10 UV pumps now operating in Russian Sişecam glassworks.

The Pneumofore engineer visiting the Yenishir plant in June 2008 found a vacuum system with all pipes and filters regularly installed. After negative experiences with other pumps and following the positive performance of UV's in Russian Sişecam plants, the engineers in Yenishir welcomed the installation of 4 x UV50 units as main vacuum source, keeping the old, water cooled pumps on stand-by.

The design criteria of UV pumps are simplicity in operation and maintenance, constant performance over years, trouble free operation and OEM independence, all values tested and confirmed in distant Russian glassworks. The presence of Pneumofore technicians during the start-up helps exactly to instruct and train the production and maintenance personnel, to increase their confidence into the operation of UV's, to explain how to execute maintenance themselves with regular service schedule. This generates a clear understanding of the machines, thus also the high autonomy of the pumps operators.

In July 2008 the same Pneumofore engineer was at Sişecam Yenishir again to commission the last 2 x UV50 and to verify the operation of the entire vacuum system. The previously started pumps had been running constantly and the total installed capacity of 4 x UV50 was surprisingly high, so that 1 x UV50 could be set on stand-by. Their requirements of vacuum depend on the produced glass container model and may vary strongly. The customer expressed full satisfaction, no single problem arose and this experience reinforced the precious and long collaboration of Pneumofore with Sişecam.



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