

Pneumofore celebrates 90 years of success

This year marks Pneumofore's 90th anniversary, a remarkable achievement for a family business that has managed to maintain its traditional roots as well as remaining at the forefront of the pneumatic machine industry. Glass International spoke to Daniel Hilfiker, CEO of Pneumofore and nephew of the founder Jakob Hilfiker, to gain an insight into the company's past, present, and future.

According to the company's website, the word 'Pneumofore' comes from the Ancient Greek and means 'one who brings air'. It also refers to a type of shellfish that can rise and sink by releasing air: Both fitting descriptions for a company whose mission statement is to provide solutions for industrial vacuum and compressed air in applications around the world.

In 1923, under the guidance of Jakob Hilfiker, Swiss engineers at Pneumofore began to develop the world's first single stage rotary pneumatic machine. Today, engineers from the same family continue to research solutions to lower the Total Ownership Cost (TOC) of compressors and pumps.

Over the past 90 years, the company has witnessed various changes in the technology involved in pneumatic machinery. At the company's inception, the only alternative was piston technology which was multi stage with intercooling. Later on, screw technology was introduced in pneumatic machinery, but according to Mr. Hilfiker "it proved not to be as reliable or durable as the efficient rotary vane and piston units". With environmental awareness a key concern for Pneumofore, the



▲ CEO, Daniel Hilfiker

"Fast profit, big margin and short revenue, as found frequently in some companies, is absolutely not the strategy of Pneumofore."



company has stayed true to its roots and continued to develop the rotary vane technology further.

Hilfiker describes the size of his company as "limited, with €10m turnover, 50 employees, and a production plant in Turin". He is clearly proud of how the company structure works; it is, after all, unusual to find a company where the owner meets with the majority of his employees on a daily basis, and where the average length of employment is 17 years.

According to Hilfiker, the technical tradition of the company is kept alive by its willingness to support its new generations of engineers through top technical universities, with a preference for the Federal Institute of Technology in Zurich.

Business model

As for how the company does business, Hilfiker is clear on a couple of points: "Fast profit, big margin and short revenue, as found frequently in some companies, is absolutely not the strategy of Pneumofore. Swiss engineers are famous for solid, durable machinery,

continued >>

and satisfaction comes from state-of-the-art installations. It takes years, sometimes decades, to show customers the longevity of Pneumofore products, thus companies that only look for the best possible price are not the most appropriate interface for us. However, companies that think 'long term', share the same values, assume the responsibility for future generations with a genuine strategic view, these are the typical partners for Pneumofore".

When asked about the factors that have led to the success of the company, Hilfiker is equally clear: "A simple attitude of integrity and respect – integrity in terms of true catalogue data, reliable delivery dates, and continuity of honest values". And respect? "Respect is devoted to the employees, the suppliers, and the customers". Does he think these values differ from those of other companies? "The business plans of large corporations often require immediate savings or cash. Pneumofore's principles are inter-generational, and each owner has been fully involved; true long-term leaders".

Asked which product has proved the most lucrative, and why, Hilfiker has no problem declaring a winner: "The Pneumofore pump UV50 with 3.000 m3/h capacity, which serves an average of 20 DG sections on IS machines, is the most popular model in all its versions. Basically, the UV pumps used for the moulding process are air cooled up to 55° C in their Hot Climate version. This avoids problematic cooling water circuits, especially in hot climate zones. The centralised vacuum offers immense advantages but depends on correctly dimensioned pipeline systems, an expertise which is provided free from

Pneumofore. At the base of the success is the innate spirit of R&D, the engineering passion which cannot be economically determined".

Future

As for the future, are there any research and development programmes in place? "There are prototypes of new machines, newborns, which need attention and careful monitoring before entering the Pneumofore range of products.

Historically, the rotary vane air ends offer a lifespan of up to 50 years of continuous operation, and the warranty on Pneumofore air end is five years, thus tests are severe and long lasting.

The company is presently dedicated to variable speed solutions, as the bottle size, shape, weight and quality features are variable on the same IS machine. Where production is flexible and dynamic, Pneumofore offers a solution for the long-term vacuum and compressed air supply in the moulding process.

"The idea of TOC is to diffuse; you do not just buy the machine at a cost which is negligible, more importantly, you generate a power consumption which has to be kept as low as possible with a very high machine efficiency, for the minimal Life Cycle Cost of the investment itself. Because of the low thermodynamic efficiency factor of compressors and vacuum pumps, these machines consume a lot of electrical power running 24/7 and this cost is monitored accurately, as it represents the widely largest cost within the TOC".

As for the industry as a whole, what are the significant changes that Hilfiker has witnessed in the glass industry over the past 10 years? "The trend in the

1980's and 90's was to conglomerate international glass factories and form global groups, with a tendency to consider traditional glassworks as a financial asset. We have seen plants changing name and ownership in a matter of months, increasing the communication gap between financial controllers and production teams. Multinational groups have reached a huge size in both production capacity and turnovers. Management philosophies are influenced by expert CFO's that may have difficulty meeting the requirements of the shareholders".

And what about Pneumofore? "When we go back to the production floor, all decisions are taken on the grounds of reliability and efficiency. This is the philosophy and the governing line of Pneumofore: When I have to be responsible for today's decision for the next few decades, I refer to experts, and spend more now but spend much less later".

China

And finally, the question of China. Just how much of a challenge is there from manufacturers in developing nations, such as China? "The global economy is challenging for modern entrepreneurs, unfortunately rules differ from UE to US or China, and essential rights like intellectual property are not common. As a consequence, latest inventions are not patented, as they would be public and accessible after only 20 years. The Chinese IS machines seen in North Africa did not meet the standard of European-made IS machines. Again, the low purchasing price usually hides immense and costly surprises".

Hilfiker is confident in the face of the influx of overseas products, that Pneumofore will stand the test of time: "Pneumofore constantly invests in R&D so that competitors cannot easily copy us. With a furnace life of more than 12 years, where initial investment cost must be amortised within eight years, all involved production machinery can be precisely analysed in all their features. When the furnace is rebuilt for the second time and all the machines have been replaced, but the Pneumofore pump and compressor keep on running; that is when the evidence cannot be neglected". ■

Pneumofore, Rivoli, Italy
Website www.pneumofore.com



◀ Rotary vane vacuum pump mod. UV50.