

Industry Profile: Hans Rudolph



**Kelly Rudolph, president
of Hans Rudolph Inc.**

Hans Rudolph President Kelly Rudolph provides some background on his company and how it is still living up to the vision of its founder today.

AARC Times: Hans Rudolph has a unique history of being a family-owned business. Tell me a little about your company founder and why he decided to get into the respiratory marketplace.

Rudolph: In 1923, my grandfather, Hans Rudolph, came to America from Frankfurt, Germany, where he was studying engineering as an apprentice machinist. He moved in with his uncles on a farm in South Dakota for a year or so and then went on to Chicago, where he was an instrument maker. There he met his wife — my grandmother — who also immigrated from Germany. They moved to Indiana, where he got a job working in the physiology department at Indiana University, which hired him to fabricate medical equipment. That is where he made the first respiratory valve used for pulmonary function testing — the well known 2700 Series Valve that has evolved through the years due to the development of plastics and technology.



**Hans Rudolph was 90 in
this 1994 photo with Kelly,
John, and Kevin Rudolph.**

My grandparents moved to Kansas City after my father was born, and Hans went to work in manufacturing and machine shops while continuing to make respiratory valves and other products in his basement machine shop. Years passed by, and in 1960 he and his son, my father John, moved out of the basement and started our company, Hans Rudolph, Inc. The market for medical respiratory valves and other products was not large enough to support the family at that time, so they were a precision machining job shop and made valves and other respiratory products that Hans designed daily. It was their dream from the beginning to enlarge their medical parts business and get away from contract work; and in the early 1980s we were able to stop the job shop business and concentrate on making Rudolph respiratory products and custom designs for the larger companies that made the complete pulmonary testing systems.

AARC Times: How have the subsequent generations in your family worked to keep his vision alive and expand on it as technology and market conditions have changed?

Rudolph: My older brother, Kevin Rudolph, and I grew up working in the shop and directed our college studies toward coming into the business. Kevin came on board full time in the late 1970s, and I came on board in the late 1980s. Kevin took over the design side of the business from Granddad, and I took over the sales and marketing side from Dad. We both, along with Dad and Granddad, began designing and marketing many more products for many more countries and customer types. We began exhibiting at shows all over the world in 1989, and with four Rudolphs working alongside each other each day and a loyal workforce in the shop, we have been able to add new product lines and new customers and compete with manufacturers all over

the world in pulmonary testing, exercise testing, sleep apnea interfaces, noninvasive ventilation (NIV) interfaces, and many other respiratory products needed by original equipment manufacturers (OEMs), distributors, RTs, pulmonologists, sleep techs, and patients.

Kevin and I both have children who may come into the business someday.

AARC Times: Your company makes respiratory valves and other products ranging from pneumotachometers to face masks. What are your best sellers today, and why do you believe these products are leading your portfolio of respiratory products?

Rudolph: Our bread and butter has always been our respiratory and pulmonary apparatus for pulmonary function testing (PFT), exercise testing, research, flow instrumentation, lung simulators, and OEM applications. But in the last 15 years or so, we have applied much of our efforts to mask designs for CPAP/bi-level therapy for obstructive sleep apnea and NIV patients.

AARC Times: What goes into the development of your products, and how do you get respiratory therapists involved in the research and development process?

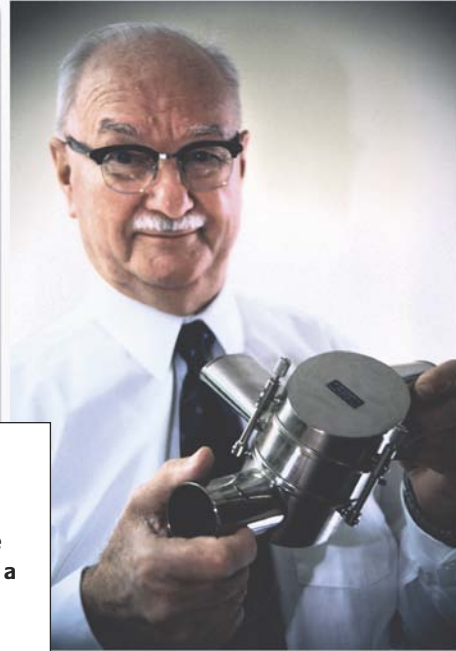
Rudolph: The development of our products starts with application ideas that are typically ours from interactions we've had with customers of all types, including respiratory therapists, physicians, technicians, engineers, OEMs, distributors, and patients. However, respiratory therapists may be our most important feedback source, due to the fact that they are working directly with patients and equipment, so they see the need for new products and modifications to existing products. They see the patient issues and what would make the patient's respiratory therapy more effective.

Our new range of CPAP/bi-level and NIV masks is a great example where we heard comments from RTs for many years and designed and made both reusable and disposable masks that work for patients wearing a mask all night and maybe all day or for just a few hours each day. Our current Full Face V2 Mask is our second generation full face CPAP/bi-level and NIV mask, and all the changes we made were based on our own observations as well as feedback from RTs, sleep techs — who are typically RTs — respiratory physicians, and patients.

AARC Times: Service is a key factor for respiratory care departments that use your products. Tell us a little about the supply/support side of your business and how it meets the needs of your customers.

Rudolph: We are a small business and do everything we can to meet the needs of all customers. When you call Hans

Company Founder Hans Rudolph proudly displays the third revision of his first breathing valve made for lung function testing back in the 1930s. He was presented with the device during a banquet held in his honor at Indiana University in the early 1990s.



Rudolph, you will talk to a real person every time. With more than competitive pricing, phone support, detailed literature, quick delivery, and a staff willing to do what it takes, our service is one of the many things we are proud of.

We do it all ourselves. We design, prototype, market, sell, ship, and service. We have our own machine shop, prototype molding, production molding, testing, research and development, assembly, and sub shops for outsourcing; and we have the controls in place through our tightly controlled and audited Quality System, which includes compliance to the standards of ISO 9000:2000 and ISO 13485:2003, CE Mark, and U.S. Food & Drug Administration-Cleared products.

AARC Times: What are some of the new products on the horizon at Hans Rudolph, and what do you believe they will add to the respiratory marketplace that may now be missing?

Rudolph: We are constantly updating our products and developing new products to provide better fit, form, and function in the respiratory marketplace. We are designing new, softer, better sealing masks for CPAP/bi-level therapy and NIV home and hospital care and PFT; and the masks are now being made from disposable and reusable materials, so a whole new world is opening up for us and our customers. We have new flow measurement devices and instrumentation, new lung simulators, and new quality control devices. New breathing valves are always coming out because an RT will call us and want some new feature on an existing valve, or some new geometry to mate to his restrictive environment, or some new flow path. So we make it, and then it becomes part of our product line because there is always another RT who wants the same thing. This is how our product lines have evolved. ■