

**Memories**

# Desert Oasis – the Medina Haram Piazza Project 2010

*by Leo Rasmussen, Co-Founder of ML System*

In 1998, Leo Rasmussen and his wife Marianne Jager founded **ML System a/s** in the Danish town of Ry. M stood for Marianne and L for Leo. Marianne was the managing manager and Leo was the technical director. ML System a/s grew steadily from a garage production site into a medium sized business with 50 employees. They continued to redesign and improve their high-pressure nozzle system until 2011 when Walter Meier Group purchased the company. Today, the company, now Condair A/S, continues to grow steadily with 60 employees and 15 million euros in annual sales. Leo Rasmussen remains active for Condair as an advisor.

***'Of course, we'll find a solution,'***

I said. But when I got off the phone with the project manager of the German Liebherr Gruppe, I had to breathe deeply. I looked at my notes again: an area as large as 20 soccer fields with up to 250,000 pilgrims daily, at up to 50 degrees Celsius; 250 sun umbrellas for shade and UV protection, each 25 meters high and wide;



the location in Medina, Saudi Arabia. It was clear what they were asking of me: the world's largest outdoor evaporative cooling system!

My entire life, I've had just one purpose: to find solutions. I nearly frittered away my electrical engineering studies at Aarhus, because I was so preoccupied with my projects for the *Dansk Forening til Fremme af Opfindelser*, an inventor club. One of the projects included the design in 1983 of the first automated ordering system for restaurants.

The greater the problem complexity, the greater was my determination. And that's exactly how ML System a/s, the company that I founded with my wife Marianne in 1988, grew. We designed and manufactured the first humidification systems for greenhouses in the garage of our home. Our test laboratory was the bathroom. Quickly we moved on from pressurized air to the more efficient high-pressure technology.

It wasn't until 1993 that we could afford to hire our first salesperson. In the ensuing years, we quickly developed new markets. First the lumber industry, followed by the paper industry and electronics manufacturing and even

the vegetable sections of grocery stores. The requirements became increasingly difficult and to meet them we had to advance our high-pressure nozzle system's design continuously. The importance of hygiene grew, the aerosol spray had to be finer, the water purer. Eventually to meet demands, we had to engineer a reverse osmosis water purification system. In 2001, we were the first manufacturer of humidifiers to receive ISO 22000 certification for food safety.

The Medina project request came in 2010. At the time, we were a solid medium sized company with about 50 employees in Denmark



and the USA. Several years back, we had provided a Koran printshop in Medina with one of our systems, but the place of worship in front of the Prophet's Mosque dwarfed everything we'd previously done, pushing us to the limit. We had to design and build an extremely powerful pump, and a failsafe system compliant with the strictest hygiene standards. The complete system, with the exception of the two fans, had to integrate into the giant sun umbrellas. Multiply by the factor 250. As if that wasn't enough, we also had to train Arab installers, because as Christians we were prohibited from entering the place of worship. In the summer of 2010, our little factory in Ry was bursting at the seams. Every square meter you saw a pump.

It was thanks to the enormous media coverage of this unique project that we received a call at the beginning of 2011 from Silvan Meier. Walter Meier Group thought our technology complemented Condair's and wished to buy our company. For 23 years, my wife and I had passionately nourished and cared for our company ML System a/s. Our 'baby' had reached adulthood. It was time for us to let go.

