



AS FEATURED IN BUSINESS IN FOCUS  
DECEMBER 2015

# Water and Energy Solutions

that **Make Economic** and  
Environmental Sense

*What began as an industrial water systems company focused on energy, heat recovery, and efficient water heating, Kemco Systems has come a long way since its inception. Today, the company provides innovative and efficient solutions which include wastewater treatment and reuse systems to over 5000 projects in a range of industries, such as industrial laundry, food processing, textile, and automotive industries.*





**"Many government incentives exist as a means to encourage companies to adopt more sustainable practices, such as those being offered by Kemco Systems."**

**Written by Jessica Ferlaino**

**K**emco Systems was "green" before it was trendy, serving as an industry leader despite its relatively small size when compared with its huge corporate competition. Kemco Systems offers clients sustainable, customizable, low cost solutions, and presents them with a means to improve their processes and operations in a way that makes smart economic and environmental sense.

"Everything in our world is driven by the economic imperative. We espouse the sustainability and the green philosophy but the bottom line for our business development is that the companies that we talk to won't do it unless it makes economic sense," explained Gerard Van Gils, Vice President of Kemco Systems.

The company embarked on its growth path in 1969, and as energy costs continued to rise into the 1970s, Kemco's systems and services became even more relevant and applicable, as plants and facilities that were highly dependent on water for their processes were able to reduce operating costs by adopting more sustainable, low cost approaches. Though in the past, ▶



---

## **“Kemco Systems won Water and Wastes Digest’s 2013 Top Project of the Year Award for its work.”**

---

- ▶ Kemco Systems had to explain the benefits and educate clients in its sales pitch, now clients are approaching Kemco, beginning to comprehend the benefits associated with reducing both energy and water consumption and doing so at a relatively low cost with impressive financial and environmental results.

As the cost of sewer disposal increased, paired with rising energy and water costs, interest in Kemco Systems was piqued. Kemco’s primary business in the early years was the industrial laundry, a big market for water and heat recovery systems, and the company later grew its market reach to encompass textiles, an industry that declined in the 1980s and 1990s as it was increasingly outsourced. At that point, the company’s main focus shifted to an industry that continues to show great promise and longevity in the United States, especially as it becomes more sustainable in operation – the food processing sector. Given the tight regulatory environments in which the food processing industry operates, Kemco Systems can have a significant impact in this regard.

Indeed, Kemco Systems won Water and Wastes Digest’s 2013 Top Project of the Year Award for its work at a bacon processing plant, where the team was able to take wastewater with a high concentration of fats, oils and grease, in addition to sanitation chemicals, and treat it to standards deemed suitable for re-use in other areas of the facility.

“Though we don’t advise people to drink the water that we produce, it was in fact drinkable, that’s how clean it was,” shared Van Gils. Kemco Systems designed and installed a Ceramic Microfiltration (CMF) System and a Reverse Osmosis (RO) Component to treat the water to achieve drinking water standards, being recognized for these important efforts.

Growing its system and service offerings with client needs in mind, the Kemco team custom designs solutions and builds them out to the highest standards, satisfying industry specific

needs and providing the necessary follow up support for service and maintenance.

“[Customers] are going to save money by saving water costs and sewer disposal costs. Also, more and more in the future – even more than now – they are going to be able to recover materials that they take out of the wastewater,” Van Gils described. “Having something recoverable is a significant savings as well.”

Kemco’s mission is to provide the world with the most efficient, long-lasting, and effective systems, at the lowest possible operating cost. This mission is reinforced with a continued commitment to 24/7 support, where Kemco’s highly trained and knowledgeable service department is ready to address all client needs, offering support by all channels – phone, online, or in person.

Speaking to the company’s evolution, Van Gils shared, “It’s sort of a building block approach. First and historically it was the hot water efficient systems, utilizing waste heat sources or actually being able to make hot water very efficiently – Instead of having to use boilers which are inefficient, using things like direct contact heaters, which are very efficient.” From there, Kemco Systems grew into the wastewater treatment and reclamation business, serving the same industries that required the hot water, converting that used water in order to safely distribute it to the sewer system, and finding new uses for that water. The team is always looking for new industries and new applications for which to integrate its efficient systems.

“When we have a new application, a new industry type that we haven’t addressed before, we will do the testing in-house, and that’s a combination of doing it in our lab here in Florida or on site using pilot test equipment,” Van Gils shared. Kemco Systems operates out of its headquarters in Clearwater, Florida, with regional locations for sales, while continuing to expand its geographic reach.

"It's through that reiterative process of designing, and building, and installing and evaluating those results; continuing to learn from that cycle of testing, and implementing, and observing; that's our R & D. That's how we gain the knowledge that we have in order to do what we do."

"In the world that Kemco works in, the industrial world, we deal with customer plants that typically use 100,000 to a million gallons of water per day," Van Gils explained, speaking to the range in size and usage Kemco is equipped to deal with.

Though located in North America, Kemco is developing a global reach. A featured project, South Pacific Laundry in Australia, processes upwards of 350,000 kilograms of linen per week and enlisted the help of Kemco Systems to reduce energy and water usage and related costs. Using the same two stage filtration that was used in the bacon processing facility, CMF and RO processes customized for this particular application, South Pacific Laundry got the results they were looking for, having reduced their water and energy usage significantly, and receiving an award of \$185,000 (20 percent of the project's overall cost) as part of the Laundry Water Efficiency Program 2011.

"We think it's the direction that all industry needs to go in, where they are no longer able to just discharge their wastewater and they may not be able to just buy all the water that they need. Instead they can treat the wastewater in a way that makes it reusable," said Van Gils.

Clients are offered a free, no obligation Energy and Utility Audit to determine the best system to meet their industrial needs. Many government incentives exist as a means to encourage companies to adopt more sustainable practices, such as those being offered by Kemco Systems. In some water districts, industries are offered money for every gallons of water saved in order to curb usage.

In California where the water situation is dire, an incentive is being offered to districts to conserve water, as industrial, rather than residential conservation efforts will make the biggest impact on the environment. "You can tell everybody not to water their lawns. You can tell everyone not to flush their toilets every time, but you could have more of an impact from industrial plants conserving water," stated Van Gils.

Crediting the move by California's Governor to mandate a 25 percent reduction in usage, Van Gils argues that more needs to be done, citing unusually low prices for water in California given the drought conditions and water concerns, using the example of Long Beach and L.A. County where the cost of water and sewer disposal is \$4 per 1,000 gallons, whereas in Florida it costs over \$20 per 1,000 gallons.

"If the situation is so dire then you'd think the cost of water would be higher and if it were higher people would be more incentivized to save, whether it's buying one of our systems or just not wasting water. It is a real disconnect that needs to be addressed." He also identified the need for better measurement tools, because without these tools consumption cannot be monitored.

Companies can greatly benefit from the integration of Kemco Systems into their industrial operations to reduce usage, improve recycling initiatives, and prevent waste from occurring. "We would like people to do it because of the philosophical and community benefits but the fact is, they do it. They typically are attracted to it because of that reason or a corporate mission, but they will usually only do it because it pencils out for them," Van Gils added.

Kemco Systems offers outstanding quality, exceptional reliability, and top value for your energy dollar, helping to improve your operational efficiency in the process, essentially making clients an offer that they cannot refuse; it just makes good economic and environmental sense. ■

atech innovations gmbh, based in Gladbeck, has been active since 1989 in the distribution and since 1992, the development and production of high quality ceramic membranes for a wide variety of industrial applications in the chemical, biotechnological, food and beverage industries and in the waste water treatment/ recycling industry.

atech's range of products includes membranes in various geometrics and channel diameters as well as pressure vessels made from stainless steel and plastics used to arrange the membranes in modules. In addition, the qualified staff and the technical facilities of atech are available for services such as filtering test or tests on a pilot installation.

Depending on the requirements of each particular application, atech offers a wide range of different membrane geometries: single-channel and multi-channel membranes with various channel diameters suitable for ultrafiltration (starting at 1kD) and microfiltration ( up to 1.2 um). For applications involving highly abrasive media, atech has developed Duratech®, a ceramic membrane made of titanium oxide. Thanks to a innovative coating process, the abrasive resistance of this membrane exceeds even that of the already very rugged standard membrane.

**atech**  
**innovations**  
gmbh

Am Wiesenbusch 26  
45966 Gladbeck Deutschland/ Germany  
Tel. +49(0) 20 43 | 94 34-0  
[www.atech-innovations.com](http://www.atech-innovations.com)  
[info@atech-innovations.com](mailto:info@atech-innovations.com)

**Quality matters.**



*Kemco Systems*

11500 47th Street N | Clearwater, FL 33762 | **P:** 727-573-2323 | **F:** 727-513-2346

[www.kemcosystems.com](http://www.kemcosystems.com)

PROJECT SUPPORTERS



[www.atech-innovations.com](http://www.atech-innovations.com)