Large amounts of wastewater accumulate on a day to day basis in the manufacturing industry. This water usually contains contaminants preventing disposal into public sewer systems or watercourses without prior treatment.

To meet disposal limits, reduce amount of waste water or even realise zero discharge production a wide range of different process technologies are available on the market.

- Chemical physical acid cleavage systems (CPACS)
- Membrane systems
- Disposal by wastewater management company
- Vacuum distillation

The below five points outline why UK manufacturers, small and large, should reevaluate their current solution.

1. **Sustainability** – The excellent quality of treated water that VACUDEST systems output enables 100% of the wastewater to be recycled back into the production process; resulting in a zero liquid discharge production process. Recycling industrial waste water with 0% discharge is not possible with chemical physical acid cleavage or membrane systems.

2. **Cost** – Initial capital expenditure, ongoing operating and maintenance, fresh water and disposal costs must all be considered when analysing wastewater treatment systems. VACUDEST has an energy efficiency of 95% due to an innovative process that recycles the hot steam generated back into the evaporation process. The removal of wastewater management and disposal costs, together with low operating costs, mean that the typical payback period for a VACUDEST system is circa 1.9 years. Other options cost significantly more when analysed over the 10 year lifecycle of a VACUDEST system due to their higher energy, consumables, repair, maintenance and staffing costs.

Organisations that outsource waste water disposal to a specialist company will save around 60% per year if using a VACUDEST system for the comparative volume of waste water.
3. **Integration** – Each manufacturer faces unique wastewater challenges. Such variability requires customised treatment systems, which is why we don’t offer VACUDEST vacuum distillation systems off the shelf. The VACUDEST Modular-System ensures that customised solutions are affordable for manufacturers of all sizes. Based on a cost efficient variant management, NHE will work with you to ensure the right configuration is chosen for your individual requirements, from over 3.5 million variants – fast and flexible - with the highest quality.

4. **Reliability** – VACUDEST is a proven system that operates in many industries and for a variety of applications. A product of German Engineering, the VACUDEST system has evolved through more than 25 years of continuous development. This has resulted in many improvements, including a reduction in average energy consumption by 27%.

5. **Efficiency** – The optimum wastewater management system runs automatically and requires minimal input, meaning you can focus more on your core business. While CPACS and membrane systems require ongoing cleaning and monitoring, VACUDEST provides a 24 hour fully automated operation. A maintenance friendly construction that reduces downtime, provides a product file for tailor-made parts supply, and series of user-friendly features:

- Touch screen control
- An on-screen manual for standard procedures
- Error message notification via email or SMS
- 12 month storage of process data

NHE is the exclusive distributor of VACUDEST systems in the UK. For more information on the VACUDEST system and how we can integrate a solution into your manufacturing process contact us now via info@nhe.uk.com or visit stand 5286 at MACH 2014 to speak to one of our water recycling experts.