



With two decades of valuable consulting experience in the areas of process integration, utility system modelling and water minimisation, our skills and insights can take your process efficiency up a step. Our simulation models will help you adapt your assets to changing operating conditions, whilst our dashboarding service can throw new light onto your complex data sets. You'll be preparing for a more sustainable future.

Heat and Power System Modelling

Anyone operating an intricate and integrated utility system knows the challenge of running this at optimal efficiency, under ever-changing circumstances; changing prices or availability of imported fuel and power, changing process demands, changing availability of equipment like steam and power generators, and even changing emissions targets. A good simulation model makes this much easier.

We have extensive experience with building powerful simulation models of utility systems of any size. As we develop these in close cooperation, you will gain a fresh understanding of the flexibilities and constraints in your plant.

A good model will allow analysis of future scenarios, to help you prepare for events like equipment outage, new production rates or emissions caps. Of course, it must be easy to use and maintain, and not contain unnecessary detail or embellishment – it should be fit for purpose.

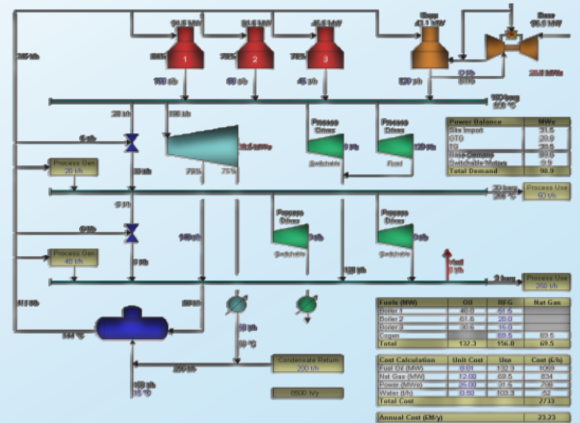


Image of model using ProSteam™ add-in for MS Excel

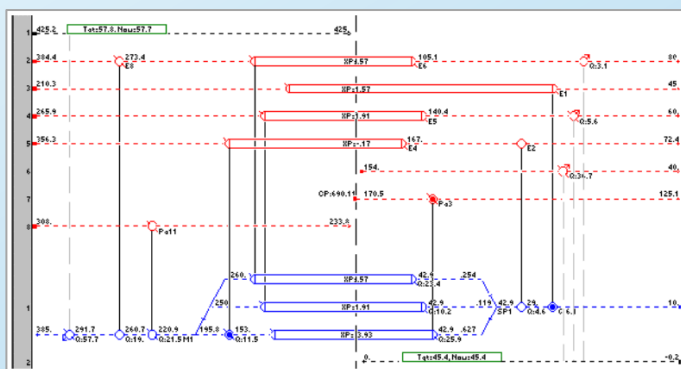


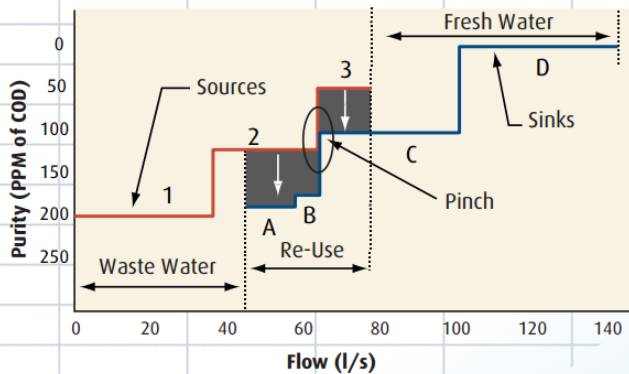
Image from SuperTarget™ software

Process Integration

If you are concerned about your bills for energy or water – and especially if your steam or water network suffers from “spaghetti syndrome” – then do consider us for a specialist analysis. You'll be amazed at what a fresh pair of experienced eyes can do for you.

Combining advanced Pinch Analysis with a healthy dose of real-life experience will contribute significantly to best-practice process design and retrofit improvements. By matching utility supplies with demands in the most cost-effective and practical manner, costly imports and wastage of the respective utility are minimised.

The Pinch approach is well established and has proven track records not only for process heating and cooling, but also for industrial water management. By doing this work alongside client staff, we achieve knowledge transfer and a high implementation rate.



Inlet Sensitivity [cost saving]/[conc change]

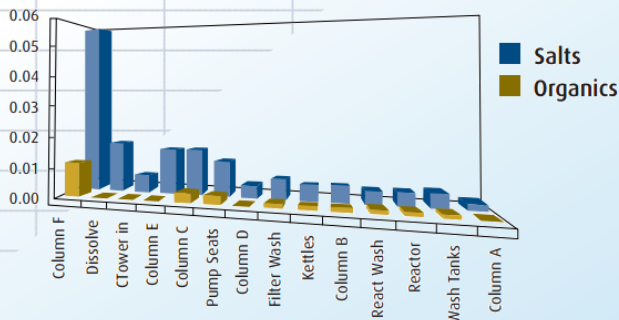


Image from WaterPinch™ software

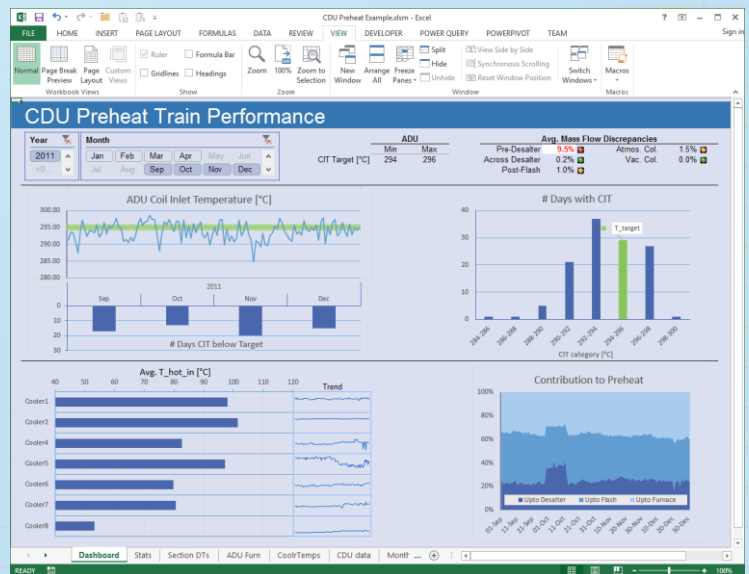
Water Minimisation

For a wide range of industries – from food & drink to pulp & paper and from oil refining to electronics – water has gradually become a notable concern in many parts of the world. A significant reduction in process water consumption has rightfully become something to shout about. Apart from the obvious impact on profit margin, due to lower costs for import, treatment and disposal, there are the benefits of requiring smaller equipment, reducing leakage and spillage and – not to forget – a positive impact on your regional environment, your relationships with local authorities and your public image. It is also worth noting that wastage of water and energy often go hand in hand. Investigating both simultaneously carries important synergies!

Water “footprinting” has become a familiar term; it covers the accounting for water usage in a product’s supply chain and life cycle. However, it doesn’t necessarily tell you how to make improvements in what is often the most complex part of that life cycle: the production process. This is where we can help.

Dashboards

We are advanced users of MS Excel® and have enormous experience developing top-of-the range spreadsheet models for data collection, simulation and reporting. We have the skills and the dedication to find out what your organisation requires. With these, we provide bespoke Excel dashboards that capture all the key information you and your colleagues require. You'll gain one of the most powerful management tools without the need for expensive new software.



Fien Consulting Ltd.

M: +44 (0)7415 909280

E: FienConsulting@gmail.com

Registered in England no. 9591064

Except for Microsoft Excel, the softwares referenced above are by KBC Advanced Technologies plc.