

Kaj Levin comments on Cactus

One could hardly wish for better surroundings.

Nestled in the midst of a leafy park area, surrounded by tall chestnut trees, is the Bulltofta Water Treatment Works. From here Kaj Levin and his colleagues control the supply of water to the whole of Malmö, Sweden's third-largest city.

Kaj Levin, Operations Manager, takes us on a guided tour of the remodelled control room.

"It is little over 400 years since the citizens of Malmö first gained a municipal water supply. The system used hollowed-out tree-trunks connected to a lined well on one of the main squares. Today we believe we have the most modern control room of all the water supply/sewerage plants in Sweden."

What new technology do you have?

"In the control room there are three workstations. Two of them are occupied by engineers involved with system maintenance, databases and image structuring. The conventional operator's tasks are performed at the third workstation, which has twin 19" monitors.

We have really been won over to using multiple monitors - we'd like to see triple monitors in the future!"

What does the new Cactus system actually do?

"The Bulltofta works provide around 15 per cent of the mains water supply to the Malmö region. The rest comes from the plant at Vomb. The main function of the Cactus system is to monitor, but also to control, the entire water supply to the city of Malmö. This includes water from the water works here and also water sourced from the Vomb works."



"For many years now we have been very actively engaged in bringing new technology into our industry. We were amongst the first in the water supply/sewerage sector to introduce mini computers. But those systems have now been replaced - scrapped."

What is the system made up of?

"The first stage of the Cactus system consisted of 25 substations with a total of 2,200 input and output signals. We have only just started a new expansion, and are increasing the control functions in the network by installing 11 Cactus 10 substations.

In the future we will be adding a further 20 or so substations."

Is this the first time you have computerised your systems here at Bulltofta?

"Oh no, far from it! For many years now we have been very actively engaged in bringing new technology into our industry. We were amongst the first in the water supply/sewerage sector to introduce mini computers. But those systems have now been replaced - scrapped."

How much of your own program development and so on do you do yourselves?

"Instead of buying in expertise, we have a policy of developing our



"For conventional operator's tasks, the control room has a workstation with twin 19" monitors. We have really been won over by multiple monitors - we'd like to see triple monitors in the future!"

own monitoring and control systems for water supply and sewerage. This means, for example, that we ourselves develop and commission our own new monitoring and control functions.

It may sound big-headed, but our goal is to create the most modern water industry monitoring system in the whole of Scandinavia."

Tell me about the LIC water-on-line program.

"The new Cactus system interacts with a so-called LIC water-on-line program. This arrangement is ideal for allowing Malmö Municipal Services Department to plan its maintenance and operational work well

ahead. But, more important still, we can read off the consumption and levels at various points in the network - water towers, for instance - and this lets us control flow rates and pressure more efficiently.

The Cactus system sends raw data and calculated parameters to the LIC water program at regular intervals. This means that the program is always kept updated with the latest data from the network."

Has Cactus lived up to your expectations and requirements?

"Well, when you've been using equipment from Satt, Siemens, ASEA and others like that for a number of years, your expectations

are rather high. Over the years we've built up quite a reserve of experience which enables us to define our requirements accurately and get results faster. The standard we expected - required - of Cactus was maybe higher than they are used to.

I can say without any hesitation that Cactus has the most competent people we have worked with. They have sound experience of water supply/sewerage installations. But above all they are first-class at developing software and computer solutions. Together I think we have well and truly matched up to expectations."

CACTUS

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