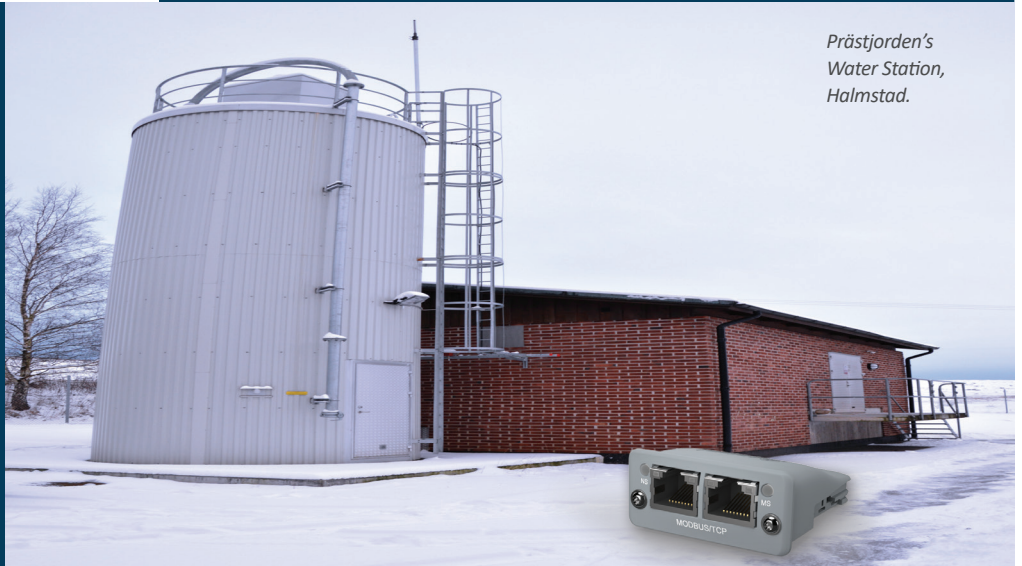


Solution: Anybus CompactCom

Country: Sweden

Company: CG Drives AB

Prästjorden's  
Water Station,  
Halmstad.



### Effects:

- One implementation project — access to many networks.
- Easy to adjust to new networks.
- Easy for system integrators to install the products.

### Clean water, the easy way

Producing drinking water can be a complicated process, but in Halmstad on the Swedish west coast, it is surprisingly easy. In fact, the groundwater from the eskers of Halmstad is so clean that it is possible to use it directly as drinking water. To control the pumps transporting the water from the eskers, Halmstad Municipality uses drives and soft starters from CG Drives. These use Anybus CompactCom in order to communicate with different networks in the water stations' electrical cabinets.

Prästjorden's Water Station in Halmstad is one of the 17 water stations supplying Halmstad with drinking water. The water station pumps up 80 cubic meters of water every hour from a depth of 40 meters. The water goes directly into Halmstad's drinking water without any cleaning at all. All that is added is some sodium in order to raise the water's pH. However, given the large amounts of water, the sodium adding can be a time-consuming task. Magnus Winberg, coordinator at Halmstad Municipality explains: "Previously, we had to manually add nine bags of sodium each day. The new pump system handles this automatically which saves us a lot of work."

### CG Drives' products control the pumps

Halmstad's water system use approximately 200 soft starters from CG Drives, making the pumps accelerate and decelerate smoothly to minimize wear. In addition, 60 drives are used to set the exact engine speed for the pumps. The drives generate substantial power savings since it is possible to set the pump's revolutions per minute (RPM) instead of running the engine at full speed and throttle the water flow.

### Easy networking as well

The 17 pump stations in Halmstad are controlled by different industrial networks. To communicate with these, CG Drives use Anybus CompactCom — a "pluggable" communication module enabling the drives and soft starters to communicate with many different networks. Prästjorden's Water Station, for example, use both



*"Anybus modules enable us to connect our products to several different networks."*

**Lars-Olof Pejner**  
CG Drives

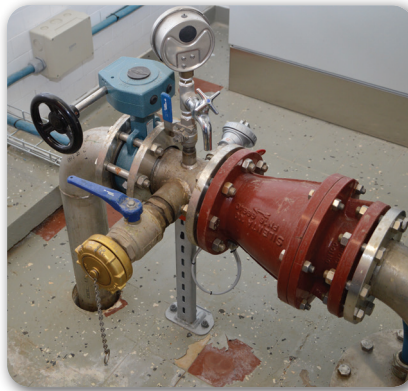
Modbus- TCP and PROFIBUS to control the different pumps.

With Anybus CompactCom, CG Drives can sell their soft starters and drives, not being dependent of the industrial network of the end customer. "We do not have any Anybus modules in stock at all," says Dan Hägg at CG Drives Technical Documentation. "When we get an order for a product that needs network compatibility, we simply order the Anybus CompactCom which corresponds to the customer's network, we plug it in and ship our product to the customer."

"Anybus modules enable us to connect our products to several different networks," says Lars-Olof Pejner, who is CG Drives' account manager for Halmstad Municipality. "The communication modules also make it easier for the system integrators when installing the products in the electrical cabinets."

### An integrated part – also in future products

Anybus CompactCom has become an integrated part of CG Drives' offering. When they now design their new soft starter, the Emotron TSA, Anybus CompactCom is the natural choice for network connectivity. The Emotron TSA is the first product in a new series of high-performance soft starters from CG Drives. New technology such as 3-phase torque control and built-in braking mechanisms ensure that starting and stopping an engine is as smooth as possible. Anybus CompactCom enables CG Drives to focus on developing the functionality of the soft starter without worrying about network compatibility.



Through this pipe in Prästjorden's Water Station, 80 cubic meters are pumped up every hour.



Inside the water station, sodium is added to raise the water's pH.



CG Drives' new soft starter, the Emotron TSA, is the first in a new series of soft starters from CG Drives. With Anybus CompactCom, customers can access exactly the network they need.



Anybus CompactCom converts the signals from the network in the water station (in this case, Modbus-TCP) and make these signals understandable for the drives and soft starters used to control the pumps.

## Read more at [www.anybus.com](http://www.anybus.com) or [www.cgglobal.com](http://www.cgglobal.com) Anybus CompactCom



Anybus CompactCom is a range of embedded communication modules allowing communication with a specific industrial network. The modules are interchangeable which means that users can easily connect to any desired network. Anybus CompactCom works with all major fieldbus and Industrial Ethernet networks such as PROFIBUS, DeviceNet, CC-Link, CANopen, PROFINET, EtherNet/IP, EtherCAT and Modbus-TCP.

Anybus CompactCom modules are used as communication interfaces in intelligent automation devices such as Drives, HMIs, Robots, Inverters, Instruments, Valves, Weighscales etc. By embedding Anybus CompactCom into a device, manufacturers get quicker time to market, decreased development costs by as much as 70%, and also the possibility to easily connect to another industrial network by simply switching Anybus module.